# Public documents of the state of Wisconsin for the fiscal term ending June 30, 1912. Volume 10 1910/1912 

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## PUBLIC DOCUMENTS

OF THE

## STATE OF WISCONSIN

## BEING THE REPORTS OF THE VARIOUS

## STATE OFFICERS, DEPARTMENTS AND INSTITUTIONS

For the Fiscal Term Ending June 30, 1912

## ROATHERN WISCONSIN COLONY AND TRAINHE SCHOOL 



MADISON
Democrat Printing Company, State Printer 1914

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# FIFTEENTH BIENNIAL REPORT 

## OF THE

# Department of Public Instruction 

or qum

STATE OF WISCONSIN
C. P. CARY, State Superintendent.

July 1, 1910, to June 30, 1912.


MADISON, WIS.
Democrat Printing Company, State Printer 1912

# LETTER OF TRANSMITTAL. 

## Department of Public Instruction,

 Madison, Wis., December 31, 1912.Hon. Francis E. McGovern,
Governor of Wisconsin.
SIR:-I have the honor to submit herewith, as required by law, the Fifteenth Biennial Report of the Department of Public Instruction.

> I am, Very respectfully yours, $$
\text { C. P. CARY, }
$$

State Superintendent.

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## FIFTEENTH BIENNIAL REPORT

OF THE

## Department of Public Instruction

Madison, Wis., December 31, 1912.
To the Legislature of Wisconsin:-
The close of the biennial period in the administration of state affairs, is made by law, the occasion of submitting to your honorable body a report by the State Superintendent of Public Instruction, setting forth the general condition of the public school system of the state during that period. I have the honor to submit herewith, my report for the biennial period ending June 30, 1912, through His Excellency, the Governor of the State.

C. P. Cary,

State Superintendent.

## STATE OF WISCONSIN.

## Department of Public Instruction.

| C. P. Cary | . State Superintendent. |
| :---: | :---: |
| J. B. Bordei | Asst. State Superintendent. |
| Warren E. Hicks. | Asst. for Industrial Education |
| Chas. L. Harpe | . .Chiel Clerk. |
| O. S Rice. | Library Clerk. |
| Winona Merrick | Diploma and Certificate Clerk. |
| Dora E. Casey | ....Stenographer. |
| Mary Messerschm | .Stenographer. |
| Ormel Schlosser | Stenographer |
| Mrs. Mabel | Stenographer |

## Inspectors.

H. L. Terry......................................................
A. J. Winnie................................... Inspector of Schools for Deaf.

Geo. H. Drewry........................................ State School Inspector
Walter H. Hunt........................................ . . State School Inspector.
W. E. Larson..... ........................ State Inspector of Rural Schools

Board of Examiners.
C. F. Viebahn. ........................................................... . Watertown

W. A. Scottr.

Madison

Committee on Institutes, Board of Regents, State Normal schools.
C. P. Cary.................................................. . State Superintendent.

Duncan McGregor........................................................... . . Platteville
John Harrington............................................................. . . .

A word of explanation may be in place at this point with reference to the contents of this Bien= nial Report. Somewhat lengthy statements were prepared for this volume by members of the depart= ment, showing the growth and conditions of edu= cation in its various departments in the state, to $=$ gether with suggestions for development and im= provement. It became necessary, under the law, however, to eliminate such statements in order to reduce the volume to two hundred pages, that being the maximum amount permitted under a recent en= actment of the legislature. It was deemed best to eliminate discussion rather than statistics. This fact will account for the absence of such discus= sions as have heretofore occupied a considerable portion of the printed Biennial Report.

## Part II.

## Statistical Tables.

CENSUS STATISTICS, 1910-1911.

| Counties-- <br> Exclusive of cities under city superintendents. | Chilldren Between 4 and 20. |  |  | Children Between 7 and 14. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female. | Total. | :No. of such . children. $\therefore 3$ | No. between 7 and 14 not in city who attended public school 24 weeks or more. | No. between 7 and 14 in city who attended sublic school 3: weeks or more. | No. between 7 and 14 not in city who attended private or parochial school 24 weeks or more. | No. between 7 and 14 in city who attended private or parochial school 3) weeks or more. |
| Totals ................... | 238,445 | 227,407 | 465,852 | 212,976 | 133,426 | 19,192 | 16,539 | 4,242 |
| Adams | 1,562 | 1,408 | 2,970 | 1,334 | 1,081 | 3 | 1 | 1 |
| Ashland ................ | 1,342 | 1,235 | 2,577 | 2,335 | 776 | 437 | 98 | 102 |
| Barron | 5,190 | 4,792 | 9,982 | 4,469 | 2,779 | 359 | 156 | ................... |
| Bayfield | 2,311 | 2,018 | 4,329 | 2,137 | 1,726 | …...... | 138 | . $\cdot$......... |
| Brown | 4,900 | 4,833 | 9,733 | 4,860 | 2,098 | 246 | 710 | 330 |
| Buffalo .................. | 2,918 | 2,873 | 5,791 | 1,908 | 1,510 | 572 | 100 | ................... |
| Burnett . | 1,797 | 1,641 | 3,438 | 1,565 | 1,038 | -... |  | 115 |
| Calumet | 2,963 | 2,863 | 5,826 | 2,764 | 1,526 | 102 | 594 | 115 |
| Chippewa | 3,715 | 3,387 | 7,102 | 3,672 | 2,163 | 62 | 408 | 4 |
| Clark .... | 5,929 | 5,730 | 11,659 | 5,995 | 3,863 | 425 | 194 | 130 |
| Columbia | 3,667 | 3,659 | 7,326 | 3,018 | 2,777 | 83 | 144 | 25 |
| Crawford | 2,426 | 2,201 | 4,627 | 1,440 | 928 | 34 | 249 | 10 |
| Dane ..... | 7,987 | 7,531 | 15,518 | 7,118 | 3,889 | 831 | 611 | 283 |
| Dodge | 5,952 | 5,792 | 11,744 | 5,062 | 2,673 | 526 | 925 | 216 |
| Door | 2,758 | 2,628 | 5,386 | 2,499 | 1,767 | 17 | 83 | 3 |
| Douglas | 1,291 | 1,217 | 2,508 | 1,107 | 1,040 |  |  | .................... |
| Dunn .... | 3,709 | 3,626 | 7,335 | 2,872 | 931..... | 317 |  | 168 |
| Eau Claire | 2,576 | 2,429 | 5,005 | 2,348 | 931 | 317 | ... | 168 |
| Florence ... | 656 | 575 | 1,231 | 609 | 580 | 67 | 2 | . |
| Fond du Lac. | 4,672 | 4,426 | 9,098 | 3,659 | 2,712 | 23 | 760 | 67 |
| Forest | 1,209 | 1,138 | 2,347 | 822 | 606 | 300 | ......... | 38 |
| Grant | 6,093 | 5,994 | 12,087 | 4,781 | 2,617 | 1,231 | 452 | 38 |
| Green ... | 2,596 | 2,377 | 4,973 | 1,926 | 1,739 | 216 | 1 318 | ................... |
| Green Lake | 1,931 | 1,903 | 3,834 | 1,842 | 1,387 | $302{ }^{1}$ | 318 39 | 58 |
| Iowa | 3,215 | 3,005 | 6,220 | 2,264 | 1,189 | 302 | 39 114 | ¢............... |
| Iron | 1,416 | 1,370 | 2,786 | 1,431 | 1,267 |  | 114 153 |  |
| Jackson .................. | 3,079 | 2,808 | 5,887 | 1,893 | 1,427 | - 1232 | 153 174 | $\begin{array}{r} 11 \\ 264 \end{array}$ |
| Jefferson ................... | 3,598 | 3,595 | 7,193 | 3,736 | 1,817 | 1,228 | 174 | 264 |



ENROLLMENT AND ATTENDANCE, 1910-1911.

| Countirs- <br> Exclusive of cities under city superintenaents. | Enrollment in Public Schools. |  |  | Attendance at Public Schools. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number between 4 and 20. | Under 4. | Over 20. | Total number who have attended public school. |  | Average daily attendance. | Whole number ot days attendance of different pupils. |
|  |  |  |  | Male. | Female. |  |  |
| Totals | 301,754 | 164 | 223 | 153,898 | 148,649 | 203,157 | 35,346,477 |
| Adams ........................... | 2,212 |  |  | 1,122 | 1,090 | 1,307 | 215,860 |
| Ashland ............................ | 1,774 |  |  | 918 |  | 1,368 |  |
| Barron ${ }_{\text {Bayfield }}$.............................................. | 6,917 2,557 | 10 | 2 | 3,616 1,419 | 3,311 1,138 | 5,613 2,030 | 728,582 343,955 |
|  | 4,641 | 3 | 26 | 2,329 | 2,341 | 2,773 | 482,117 |
| Buffalo ................................ | 4,072 |  | 4 | 2,072 | 2,004 | 2,636 | 468,691 |
| Burnett ............................. | 2,285 |  | 1 | 899 1,451 | 805 1,371 | 1,302 | 228,517 |
| Calumet . .......................... | 2,821 4,458 | - ${ }^{\text {a }}$ | 1 | 1,451 2,342 | 1,371 2,125 | $\stackrel{2,024}{2,867}$ | 491,714 |
| Chippewa .... | 4,458 $\mathbf{7 , 4 0 2}$ | 3 | 1 | 3, 314 | 3,692 | 5,102 | 992,774 |
| Columbia ............. | 5,807 |  | 3 | 2,942 | 2,868 | 3,602 | 637,144 |
| Craw̃ford ..... | 3,386 | 3 | 3 | 1,699 | 1,693 | 1,948 | 308,837 $1,004,887$ |
| Dane ........ | 9,357 |  | 6 4 | 4,768 3,342 | 4,595 3,265 | 6,160 4,091 | $1,004,887$ 723,033 |
| Dodge .............. | 6,599 3,502 |  | 4 | 3,342 1,799 | 1,704 | 2,235 | 401,263 |
| Door ${ }_{\text {Douglas }}$ | 3,502 1,897 | 1 |  | 1,799 | 1,901 | 1,229 | 224,959 |
| Dunn Dua ............................... | 5,355 | 1 | 1 | 2,676 | 2,681 | 3,287 | 543,343 |
| Eau Claire.. | 3,467 |  |  | 1,782 | 1,685 | 2,390 | 398,080 |
| Florence ...... | 896 5,169 | 2 |  | 432 | 264 | ${ }^{674}$ | 128,476 |
| Fond du Lac.. | $\mathbf{5 , 1 6 9}$ 1,875 | 2 | 1 | 2,643 | 2,529 | 3,905 1,212 | 580,228 214,541 |
| Forest ..... | 1,875 8,956 |  | 4 | , 4,462 | 4,498 | 6,035 | 1,085,233 |
| Grant . | 8,926 | $\underline{5}$ |  | 2,053 | 1,878 | 2,546 | 427,405 |
| Green Lake | 2,343 | 1 |  | 1,188 | 1,157 | 1,547 | 280,034 |
| Iowa .. | 4,801 | 15 | 6 | 2,352 | 2,470 | 3,151 | 545,944 |
| Iron ... | 2,053 4 |  |  | 1,038 | 1,015 | 1,555 | 305,865 464,568 |
| Jackson . | 4,137 4,622 | 2 | 4 | 2,103 2,300 | 2,322 | 3,806 | 569,780 |
|  | 5,007 | 3 | 3 | 2,462 | 2.551 | 3,387 | 562,564 |



TEACHERS' CERTIFICATES. 1910-1911.



TEACHERS AND KINDERGARTENS, 1910-1911.



TEACHERS' WAGES CLASSIFIED. 1910-1911.

| Countirs-Exclusive of cities under city superintendents. | Less than \$20 per month. |  | No. teachers who receive not less than than $\$ 25$ per month. |  | Not less than $\$ 20$ nor more month. |  | Not less than $\$ 31$ nor more month. |  | Not less than $\$ 36$ nor more month. |  | Not less than $\$ 41$ nor more than 345 per month. |  | Not less than $\$ 46$ nor more month. |  | More than $\$ 50$ per month. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Fem. | Male. | Fem. | Male. | Fem. | Male. | Fem. | Male. | Fem. | Male. | Fem. | Male. | Fem. | Male. | Fem. |
| Totals | 0 | 1 | 5 | 43 | 17 | 685 | 87 | 2,066 | 134 | 2,478 | 108 | 1,364 | 150 | 1,042 | 574 | 1,124 |
| Adams |  |  |  | 4 | 1 | 36 | 2 | 39 | 2 | ${ }_{34}^{18}$ | 1 | 12 |  | 15 | ${ }_{4}^{1}$ | 2 |
| Ashland | , |  |  |  |  |  | i. |  | i. | ${ }_{67}$ | 7 | ${ }_{24}^{12}$ |  | 12 |  |  |
| Bayfield. |  |  |  |  |  | 1 |  | 6 | 1 | 35 | 1 | 18 | 1 | 28 | 4 | 9 |
| Brown .... |  |  |  |  |  | 11 |  | 16 29 |  | ${ }_{8}^{22}$ | 1 | ${ }_{20}^{19}$ | ${ }_{8}^{3}$ | $\stackrel{9}{22}$ | 10 | 11 |
| Buffalo |  |  |  |  |  | 14 | 2 |  |  |  |  |  |  |  |  |  |
| Burnett |  |  |  |  |  | i. | 1 |  |  |  |  |  |  |  |  |  |
| Chippewa |  |  |  |  |  | 4 |  |  | 4 |  | 1 | 17 | ${ }_{3}^{1}$ |  | ${ }_{3}^{3}$ | 3 |
| Clark |  | 1 |  | 1 |  | 15 19 | 3 | 54 <br> 29 | 3 <br> 1 | 53 75 |  |  |  | $\stackrel{24}{24}$ |  |  |
| Columbia |  |  |  | 4 |  | ${ }_{41}^{19}$ | 2 | ${ }_{34}^{29}$ | 4 | 12 |  | 6 | 2 | 11 | 5 | 11 |
| Dane ...... |  |  |  | 3 | 1 | ${ }_{2}^{22}$ | ${ }_{3}^{3}$ | ${ }_{73}^{89}$ | ${ }^{6}$ | 76 |  | ${ }_{3}^{40}$ | 4 | ${ }^{33}$ | 17 | 33 |
| Dodge . |  |  |  |  |  |  |  |  |  |  | 3 | ${ }_{9}^{35}$ | 1 |  | [13 | ${ }_{16}^{14}$ |
| Door.. |  |  |  |  |  |  |  |  | 2 | ${ }_{32}^{15}$ |  | 9 |  |  |  |  |
| Douglas |  |  |  |  |  | 10 |  |  | i | ${ }_{51}^{32}$ | 2 | 22 |  | 9 | $\dddot{6}$ |  |
| Eau Ciaire |  |  |  |  |  |  |  | ${ }_{4}^{44}$ |  |  |  | ${ }_{6}^{10}$ |  | ${ }_{2}^{11}$ | 5 |  |
| Fond du Lac |  |  |  |  |  | 16 | 3 | 51 | 5 | 51 | 1 | ${ }_{24}^{6}$ |  | 20 | $\stackrel{2}{9}$ |  |
| Forest |  |  |  |  |  |  | 2 |  |  |  |  | 9 | 1 | 10 | 4 | ${ }_{38}^{28}$ |
| Grant ..... |  |  |  | 1 | 3 |  |  |  |  |  | ${ }_{1}^{2}$ | ${ }_{24}^{25}$ | 4 | 49 15 | $\stackrel{22}{8}$ |  |
| Green Lă. |  |  |  |  |  | 17 | 2 | 22 | ${ }_{2}^{2}$ | 15 | 1 | ${ }_{3}^{24}$ | 1 | 12 | 4 | 7 |
| Iowa . |  |  |  |  |  |  | 1 | 38 | 3 | 48 | 1 | ${ }_{16}^{13}$ | 1 | ${ }_{13}^{16}$ |  |  |
| Iron .... |  |  |  |  |  | 5 | 5 | 49 |  | ${ }_{33}^{17}$ | 1 | 7 | i* | ${ }_{21}^{13}$ | 6. | 12 |
| Jefferson |  |  |  |  | ....... | $3$ |  | 64 |  | 46 |  | 23 |  | 12 | 4 | 41 |



ENROLLMENT OF PUPILS CLASSIFIED IN COUNTIES,'1910-1911.

| Countirs- <br> Exclusive of cities under city superintendents. | No. of schools in county enrolling 5 or less than 5 pupils. | More than 5 and less than 11 | More <br> than 10 <br> and less <br> than 16 | More than 15 ind less than 21. | $\begin{gathered} \text { More } \\ \text { than } 20 \\ \text { than less } \\ \text { than } 26 . \end{gathered}$ | More than 25 and less than 31 | More than 30 and less than 36 | More than 35 and less than 41. | More <br> than 40 <br> and less <br> than 46. | More than 45 and less than 51. | More than 50 and less than 56 | More than 55 and less than 61. | More than 60. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Totals | 90 | 381 | 668 | 933 | 1,163 | 1,168 | 1,143 | 988 | 711 | 447 | 276 | 208 | 218 |
| Adams | 1 | 5 | 9 | 18 | 16 | 10 | 14 | 5 | 4 | 3 |  | 1 |  |
| Ashland | 2 | 7 | 10 | 8 | 7 | 5 | 8 | 4 | 7 | 4 | 2 |  |  |
| Barron. |  | 4 | 5 | 9 | 13 | 24 | 26 | 18 | 29 | 17 | 11 | 9 | 8 |
| Bayfield | 2 | 9 | 17 | 12 | 19 | 7 | 11 | 7 | 10 | 4 | 2 | 5... | $\begin{array}{r}3 \\ 19 \\ \hline\end{array}$ |
| Brown |  | 3 | $\stackrel{2}{9}$ |  | 20 | 25 | 17 | 11 | 10 | 9 | 6 | 2 | 1 |
| Burnett ...... |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Calumet |  | 6 | 8 | 10 | 7 | 8 | 15 | ${ }^{7}$ | 8 | 3 | 4 | 3 | 3 |
| Chippewa | 3 | 6 | 11 | 16 | 20 | 33 | 20 | 15 | 19 | ${ }^{6}$ | 4 | 4 | 6 |
| Clark |  | 4 | 6 | 13 | 27 | 32 | 45 | 22 | 35 | 14 | 3 | 5 | 6 |
| Columbia |  | 3 | 13 | 31 | 30 | 36 | 30 | 23 | 12 | 10 | 1 |  | 1 |
| Crawford |  | 2 | 12 | 11 | 18 | 26 | 15 | 10 | ${ }^{6}$ | 3 13 | 3 |  | 1 |
| Dane ${ }^{\text {Dodge }}$. | 2 | 10 9 | $\stackrel{23}{21}$ | 39 44 | 44 31 | 57 25 | 44 | $\stackrel{42}{31}$ | 21 12 | 13 | 7 | 3 2 | 7 |
| Door |  |  | 1 | 2 | $\stackrel{3}{2}$ | 11 | 2 | 7 | 3 | 14 | 11 | 7 | 14 |
| Douglas | 1 | 9 | 25 | 22 | 8 | 6 | 6 | 8 | 3 | 1 | . | 1 | ....... |
| Dunn ...... |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Florence Claire ... | 2 | 2 | 3 3 | 8 | 12 1 | 16 | 24 2 | 6 | 2 | 2 | 3 1 | .......... | 1 |
| Fond du Lac | 1 | 8 | 23 | 28 | 32 | 22 | 30 | 17 | 10 | 10 | 2 | 2 | 1 |
| Forest . | 1 | 5 | 3 | 5 | 5 |  |  | 4 | 12 | 7 | 3 | 4 | 1 |
| Grant | 2 | 9 | 28 | 44 | 46 | 43 | 67 | 40 | 15 | 4 | 1 |  | 7 |
| Green | 3 | 18 | 29 | 20 | 22 | 17 | 13 | 6 | 8 |  |  |  | ........ |
| Green Lake | 1 | 8 | 7 | 14 | 16 | 10 | 9 | 9 | 8 | 5 | 2 |  | ........ |
| Iowa Iron | 8 3 | 30 3 | 22 | 26 2 | 25 7 | $\stackrel{2}{6}$ | 2 <br> 4 | 8 | 1 | 3 | 2 |  | $\ddot{\square}$ |
| Jackscn | 2 | 7 | 7 | 16 | 15 | 19 | 11 | 10 | 13 |  | 4 | 2 |  |
| Jefferson |  | 2 | 19 | 34 | 42 | 38 | 17 | 18 | 3 | 3 | 4 | 7 | 1 |
| Juneau ................. | 4 | - 4 | 11 | 14 | 23 | 21 | 19 | 18 | 9 | 11 | 6 | 7 | ......... |



HIG H AND GRADED SCHOOLS, TEACHERS, DISTRICT INDEBTEDNESS, ETC., 1910-1911.

| Counties Exclusive of cities under city superintendents. | No. free high schools. | No. State Graded nehools. |  | No. school districts. | No. schools in county with one department. | Two de-partments. | Three departments. | $\begin{gathered} \text { Four or } \\ \text { more de- } \\ \text { part- } \\ \text { ments. } \end{gathered}$ | No. districts furnishing free textbooks. | No.teach-ers re-quired.when alschoulsare insession | Bonded indebtedness of school districts. | General indebtedness of school districts. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { 1st } \\ \text { class. } \end{gathered}$ | $\stackrel{2 \mathrm{~d}}{\text { class. }}$ |  |  |  |  |  |  |  |  |  |
| Totals | 245 | 183 | 303 | 7,318 | 6,494 | 350 | 112 | 290 | 3,014 | 10,091 | \$974,543 21 | \$663,725 94 |
| Adams. |  |  |  | 87 | 85 |  | 1 |  | 11 | 87 | \$643 16 | \$163 13 |
| Ashland | ${ }_{3}^{2}$ | 2 | 1 | 48 | 40 124 | 5 | 1 | 2 5 | 40 118 | 72 185 | 26,460 76 | 10,835 19 |
| Bayfield | 2 | 3 | 4 | 60 | 59 | 2 | 3 | 4 | 59 | 116 |  | 10,85 |
| Brown | 1 | 1 | 9 | 87 | 78 | 10 | 1 | 1 | 27 | 110 | 7,400 00 | 3,574 97 . |
| Buffalo | 3 |  | 6 | 91 | 79 | 7 |  | 3 | 30 | 123 | 10,082 00 | 8,990 14 |
| Burnett. | 1 | 1 | 5 | 77 | 75 | 5 |  | 1 | 76 | 90 |  |  |
| Calumet | 4 | 1 | 1 | 67 | 61 | 3 |  | 4 | 11 | 95 | - 9,600 00 | 37,433 34 |
| Chippewa | 5 | 2 | 5 | 154 | 126 | 5 | 2 | 3 | 92 | 156 | 6,752 73 | 9,029 00 |
| Clark | 7 | 4 | 6 | 145 | 133 | 9 | 1 | 11 | 117 | 214 | 31,398 12 | 43,800 00 |
| Columbia | 8 | 8 | 4 | 146 | 127 | 6 | 1 | 8 | 42 | 197 | 60,000 00 | 27,632 56 |
| Orawford | 2 | 2 | 7 | 99 | 84 | 7 |  | 3 | 19 | 123 | 13,720 00 | 1,534 79 |
| Dane | 13 | 6 | 11 | 254 | 210 | 14 | 4 | 9 | 59 | 353 | 21,569 85 | 13,209 95 |
| Dodge | 5 | 3 | 4 | 191 | 182 | 4 | 3 | 5 | 25 | 236 | 27,356 67 | 34808 |
| Door ... |  | 1 | 8 | 67 | 64 | 8 | 1 |  | 13 | 77 | 6,667 50 | 8,878 29 |
| Douglas |  | 1 | 7 | 44 | 70 | 8 | 1 |  | 46 | 90 |  |  |
| Dunn | 1 | 5 | 4 | 136 | 116 | 6 | 2 | 4 | 81 | 161 | 4,180 00 | 6,212 35 |
| Eau Claire | 2 |  | 2 | 83 , | 71 | 2 |  | 2 | 83 | 112 | 2,200 00 | 21,158 34 |
| Florence ... | 1 | 2 | 1 | 11 | 14 | 2 |  | 2 | 15 | 32 | 40900 |  |
| Fond du Lac | 5 |  | 3 | 161 | 158 | 4 | 1 | 4 | 6 | 196 | 4,675 00 | 20,242 79 |
| Forest | 3 | 4 |  | 24 | 19 | 1 | 3 | 3 | 21 | 58 |  | 22,100 00 |
| Grant | 15 | 5 | 5 | 221 | 202 | 6 | 3 | 12 | 17 | 349 | 42,143 66 | 23,632 85 |
| Green | 5 | 1 | 2 | 121 | 120 | 2 |  | 4 | 10 | 150 |  | 6,331 83 |
| Green Lake | 3 |  | 3 | 71 | 65 | 3 |  | 8 | 4 | 95 |  |  |
| Iowa | 9 | 3 | 1 | 215 | 118 | 1 | . 2 | 8 | ${ }_{6}^{6}$ | 184 | 28,034 00 | 15,875 03 |
| Iron ... | 1 | 2 |  | 20 | $\stackrel{22}{97}$ |  | 1 | 5 | 18 | 64 | 10,666 66 | 2,000 00 |
| Jackson. | 5 | 3 1 | 4 | 104 125 | 97 108 | 4 3 | ${ }_{1}^{3}$ | 3 13 | 64 25 | 144 188 18 | 8,980 00 | 6,250 920 922 |
| Juneau. | 5 | 1 | 3 | 112 | 98 | 3 |  | 6 | 31 | 173 | 1,44000 | 31,958 44 |
| Kenosha | 1 | 1 | 6 | 64 | 54 | 6 | 1 |  | 5 | 78 | 4,690 47 |  |



FINANCIAL RECEIPTS, 1910-1911.

| CountiesExclusive of cities under city superintendents. | From money on hand June 30, 1910. | From taxes levied at district school meeting. | From taxes levied at annual town meeting. | From taxes levied by county board of supervisors. | From state school fund income. | From all other sources. | Total amount received during the sear. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Totals | \$1,887,315 37 | \$2,543,000 03 | \$430,459 30 | \$1,096,493 86 | \$1,107,018 65 | \$1,231,91 | 5 |
| Adams Ashland | \$7,575 54 | \$15,032 80 |  |  |  |  | ,296,205 |
| Barron | 19,993 57 | 17,741 18 | \$14,500000 | \$7,438 6,619 42 | $\$ 7,249$ 6,606 66 | \$4,757 23 | \$42,053 40 |
| Bayfield | 42,818 53 | 46,883 23 | 45208 | 22,089 40 | 6,606 24,317 08 | 2,062 00 | 67,522 83 |
| Brown . | 24,619 10 | 6,234 00 | 44,524 97 | 9,314 19 | 10,452 40 | 4,184 33 | 161,530 61 |
| Buffalo | 17,082 22 | 14,947 68 | 16691 | 22,139 46 | 22,260 91 | 14,523 76 | 111,660 98,490 91 |
| Burnett | 13,998 85 | 28,54378 18,614 | 16691 2,50000 | 17,585 00 | 12,199 47 | 14,061 23 | 98,490 89,638 61 |
| Calumet | 13,998 85 | 18,614 45 | 2,500 00 | 9,918 03 | 8,238 31 | 8,17102 | 89,638 61,440 66 |
| Chippewa | 32,824 14 | 24,338 11 | 6,902 77 | 13,04115 <br> 16,597 <br> 13 | 14,21137 | 18,011 80 | 91,4408 74 |
| Clark ${ }_{\text {Columbia }}$ | 69,305 17 | 69,882 40 | 1,397 06 | 16,597 23 | 16,751 39 | 11,557 10 | 116,153 74 |
| Crawford | 26,941 06 | 58,950 57 |  | 18,292 51 | 26,393 22 | 51,690 77 | 245,087 78 |
| Dane ... | 8,91856 51,72865 | 23,113 62 |  | 10,890 50 | 10,337 92 | 38,303 62 | 160,646 95 |
| Dodge | 51,728 65 33,96092 | 80,624 91 | 8,576 30 | 35,841 22 | 34,759 61 | 10,271 06 | 63,531 66 |
| Door | 17,373 05 | 56,516 01 |  | 27,173 84 | 28,525 64 | 23,355 48 | 261,666 <br> 169,531 <br> 9 |
| Douglas ................................... | 13,324 28 | 16,309 5,575 00 |  | 12,916 85 | 12,912 56 | 13,017 82 | 169,53189 72,529 49 |
| Dunn .... | 23,324 28 | -53,957 62 | 45,15400 350 | 6,78707 | 5,580 29 | 13,017 82 | 72,529 <br> 90,254 <br> 19 |
| Eau Claire | 23,807 46 | 33,95762 | 35000 | 17,342 40 | 17,223 04 | 15,210 35 | -121,198 22 |
| Florence ... | 11,926 51 | 29,027 93 |  | 13,221 88 | 12,221 60 | 15,210 85 | 121,489 62 |
| Fond du Lac. | 11,346 47 | 48,28105 | 12,500 300 000 | ${ }^{564} 49$ | 4,153 75 | 1,901 40 | 40,489 20 |
| Forest | 31,346 24,547 97 | 48,569 3,980 00 | 30000 39,56900 | 20,576 66 | 22,087 21 | 15,711 01 | 13,327 138590 |
| Grant | 64,028 89 | 3,980 103,636 | 39,569 00 | 3,51706 28,90646 | 6,019 61 | 12,167 33 | 138,800 89 |
| Green | 20,142 52 | 103,636 40,585 59 |  | 28,906 46 | 28,622 57 | 41,390 42 | 266,584 70 |
| Green Lake | 12,003 22 | 40,585 25,436 | 72407 30000 | 11,600 62 | 10,688 64 | 7,633 93 | 260,584 91,375 37 |
| Iowa | 17,231 82 | 53,661 66 | 69488 | 8,947 14,998 67 | 8,819 98 | 5,944 56 | 61,451 57 |
| Iron .. | 22,958 34 | 17,680 79 | 13,525 08 | 14,998 5,961 08 | 15,096 85 | 30,197 95 | 131,881 83 |
| Jackson | 23,359 99 | 31,761 10 | 13,52500 27051 | 5,96103 14,41969 | 5,83124 14,11652 | 3,224 79 | 69,181 19 |
| Jefferson | 27,245 95 | 53,119 78 | 58666 | 14,41969 18,01452 | 14,116 52 | 22,376 14 | 106,303 95 |
| Juneau | 20,568 65 | 50,903 48 | 2,083 60 | 18,014 52 | 18,034 51 | 16,833 92 | 133,835 34 |
| Kenosha | 11,705 34 | 24,811 67 | 2,263 00 | 15,495 29 | $\begin{array}{r}16,314 \\ 8,550 \\ \hline 1\end{array}$ | 18,695 00 | 124,060 03 |
| La Crosse | 15,120 03 | 25,525 77 | 1,785 75 | 14,500 49 | 15,091 06 | 18,051 7,892 17 | 68,593 68 |
| Lafayette .................................. | 15,215 18,527 | 18,878 77 |  | 10,344 97 | 9,154 93 | 8,892 17 | 79,915 61,849 19 |
| : 1 1 | 18,527 71 | 64,021 91 | 2,100 00 | 17,836 48 | 14,748 75 | 15,828 55 | $\begin{array}{r} 61,84919 \\ 133,06340 \end{array}$ |



FINANCIAL DISBURSEMENTS, 1910-1911.



CITIES UNDER CITY SUPERINTENDENTS. 1910-1911.



CITIES UNDER CITY SUPERINTENDENTS, 1910-1911.

| Cities. | Teachers Employmd. |  |  | Teachers' Salaries. |  | Certificates Granted by City Superintendent. |  |  |  |  |  |  | Public Kindergartens. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female. | Total. | Average to males per month. | Average to $\mathrm{fe}-$ males per month. | 1st Grade. |  | 2d Grade, |  | 3d Grade. |  | Total. | $\underset{\substack{\text { main- } \\ \text { tained in } \\ \text { city. }}}{\text { No. }}$ | $\begin{array}{\|c\|} \text { No. } \\ \text { teach- } \\ \text { ers } \\ \text { em- } \\ \text { ployed. } \end{array}$ | Total <br> No, pupils enrolled. |
|  |  |  |  |  |  | $\stackrel{T}{\mathrm{To}}$ males | To females. | $\begin{gathered} \text { To } \\ \text { males. } \end{gathered}$ | To females. | To | To females. |  |  |  |  |
| Totals | 532 | 4,176 | 4,708 | \$11700 | \$57 71 | 21 | 178 | 3 | 81 | 4 | 99 | 407 | 240 | 383 | 15,827 |
| Antigo . | 7 | 42 | 49 | \$120 23 | \$61 63 |  | 2 |  |  |  |  |  |  |  |  |
| Appleton Ashland . | 11 | ${ }_{9}^{93}$ | 104 | 14610 | 6188 |  | 2 |  | 3 | ......... | 1 | 6 | 8 | 15 | ${ }_{581}$ |
| Baraboo | 4 | 67 31 | 78 35 | $\begin{array}{r}11741 \\ 88 \\ \hline 15\end{array}$ |  | 1 | 1 | 1 | 5 |  |  | 7 | 3 | 4 | ........ |
| Beaver Dam | 3 | 30 | 33 | 11228 | 5315 |  |  |  | 1 |  | 1. | 10 | 1 | 2 | 65 |
| Berloit . | 9 | 79 | 88 | 11544 | 5864 |  |  |  |  |  |  | 10 | 6 | 10 |  |
| Brodhead | 2 | 20 | 22 | 13442 | 4994 |  | 2 |  |  |  |  | 2 | 2 | 2 | 114 |
| Chippewa Falls | 12 | 38 | 50 | 10722 | 6242 |  | 4 |  |  |  |  | 4 |  |  |  |
| De Pelumbus | $\stackrel{2}{2}$ | 16 9 | 18 | 13900 10868 | 6062 |  |  |  |  |  |  | 4 | 1 | 2 | 66 |
| Eau Claire | 17 | 9 100 | 117 | $\begin{array}{r}10868 \\ 97 \\ \hline 0\end{array}$ | 5850 6210 |  |  |  |  |  |  |  | 1 | 1 | 38 |
| Fond du Lac.. | 6 | 89 | -95 | 11769 | 6210 588 | 1 |  |  | 1 | 2 $\ldots . .$. | 28 7 |  | 11 | 11 | 6 |
| Fort Atkinson | 4 | 23 | 27 | 11450 | 5355 |  | 3 | ......... | 2 |  | 1 | $\stackrel{9}{6}$ | 8 | 15 | 626 |
| Grand Rapids | 12 | 37 92 | 44 | 11341 97 | ${ }_{59}^{6122}$ |  |  |  | 1 |  |  | 1 | 4 | ${ }^{\circ}$ | 128 |
| Hudson .. | 2 | 20 | - 22 | 15300 | ${ }_{58}^{59} 53$ |  | 2 |  | 7 |  | 2 | 11 |  |  |  |
| Janesville | 8 | 66 | 74 | 11265 | 5454 | 1 | 3 | ........ | 4 |  |  | 8 | 1 | 1 | . 62 |
| Kaukauna | 4 | 21 | 25 | 11800 | 6100 |  | 2 |  |  |  |  | 2 | $\stackrel{4}{2}$ | 8 | 227 90 |
| La Crosse | 18 | 116 | ${ }^{83}$ | 12448 | 6411 |  |  |  | 1 |  |  | 1 | 7 | 6 | 533 |
| Ladysmith | 4. | 15 | 19 | 10444 | 69 59 | 15 | 74 | 2 | 5 | 1 | 37 | 134 | 4 | 4 | 193 |
| Lake Geneva | 5 | 26 | 31 | 7846 | 62,21 |  |  |  | 4 |  |  | 5 | $\stackrel{2}{2}$ | $\stackrel{2}{2}$ | 89 |
| Lake Mills | 2 | 15 | 17 | 13138 | 5775 |  |  |  |  |  |  | 5 | 2 | 2 | 89 |
| $\xrightarrow[\text { Madison }]{\text { Manitowoc }}$ | 11 | 123 57 | 135 68 | 109 <br> 107 <br> 1 | 6894 |  |  |  | 7 |  | 3 | $14 *$ |  |  | 23.1 |
| Manitowoc | 11 | 57 | 68 | 10771 | 6081 | . | 1 |  |  |  |  | 1 | 5 | 6 | 300 |



CITIES UNDER CITY SUPERINTEND ENTS--FINANCIAL RECEIPTS-1910_1911.

| Cities. | Mones on hand June 30, 1910. | From taxes for building and repairs. | From taxes for teachers' wages. | From general tax for school purposes. | From tax levied by county supervisors. | From income of school fund. | Money borrowed. | From all other sources. | Total <br> amount received during the year. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Totals | \$1,710,573 52 | \$356,878 45 | \$33,600 00 | \$2,985,975 46 | \$744,967 96 | \$725,894 85 | \$421,232 82 | \$228,162 35 | \$7,207,285 41 |
| Antigo | \$578 48 |  |  | \$25,500 00 | \$5,946 40 | \$7,191 46 |  |  |  |
| Appleton Ashland | 9,322 47 |  |  | \$21,400 00 | 12,325 54 | 15,551 14 | $\dddot{\$ 29,500} 00$ | $\$ 6,19436$ 5,541 36 | $\begin{aligned} & \$ 45,41070 \\ & 143,64051 \end{aligned}$ |
| Ashland | 7,73415 20,86114 |  |  | 46,500 <br> 24,450 <br> 1500 | 11,997 3,47454 | 12,451 80 | \$20,500 00 | 12,506 16 | 143,640 91,189 36 |
| Beaver Dam | 10,917 61 |  |  | 24,450 17,400 | 3,474 4,843 93 | 3,590 89 |  | 35674 | 52,733 31 |
| Beloit | 3,374 92 |  |  | 75,185 06 | 1,843 93 10,06792 | 5,12707 10,91049 | 4,80000 3,000 | 88313 3,90290 | 43,97174 1064419 |
| Berlin ... | 33,285 14 | ..... |  | 9,00000 | 10,067 3,34176 | $\begin{array}{r}10,91049 \\ 3,075 \\ \hline 15\end{array}$ | 3,000 00 | 3,902 90 <br> 2,883 <br> 63 | $\begin{array}{r} 106,44129 \\ 51,58618 \end{array}$ |
| Brodhead .. | 74638 27.92576 |  |  | 11,597 15 | 97592 | 1,127 25 |  | 2,883 2564 | $\begin{aligned} & 51,58618 \\ & 14,70364 \end{aligned}$ |
| Columbus ... | $\begin{array}{r}27,92576 \\ 6,915 \\ \hline 8\end{array}$ |  |  | 27,000 00 | 7,900 00 | 8,007 38 |  | 2,383 02 | 73,216 16 |
| De Pere | 5,459 18 |  |  | 11,000 5,550 00 | 1,594 1,933 39 | 35674 2,45194 |  | 2,554 73 | 22,421 78 |
| Eau Claire | 16,279 52 | \$10,000 00 |  | 5,550 00 81,700 | $\begin{array}{r}1,933 \\ 14,905 \\ \hline 150\end{array}$ | 2,45194 14,80453 | 20,00000 | 37304 9,31441 | $\begin{array}{r}15,767 \\ 165 \\ \hline 17003\end{array}$ |
| Fond du Lac. | 63,636 95 | \$10,000 |  | 49,881 59 | 15,601 76 |  | 20,00000 82,52668 | $9,31441$ | $167,00346$ |
| Fort Atkinson |  |  |  | 20,415 84 | 13,029 20 | 17,925 06 |  | $\begin{aligned} & 4,46668 \\ & 1,27909 \end{aligned}$ | $\begin{array}{r} 233,29758 \\ 27,64919 \end{array}$ |
| Grand Rapids | 9741 |  |  | 35,000 00 | 10,389 22 | 10,364 68 | …............... | 1,27909 1,79030 | $\begin{aligned} & 27,64919 \\ & 57,64161 \end{aligned}$ |
| Green Bay | 52,708 36 |  |  | 61,112 31 | 18,407 85 | 19,410 65 | 28,055 02 | 1,467 42 | $\begin{array}{r} 57,64161 \\ 185,16161 \end{array}$ |
| Jancsville | 6,187 12 12923 |  |  | 11,425 50 | 2,088 90 | 2,144 36 |  | 1,949 24 | 23,795 49 |
| Kaukauna | 12,323 3,717 |  |  | 110,000 5,604 43 | $9,462,72$ 4,78245 | 9,696 85 | $\cdots$ | 3,590 49 | 75,673 59 |
| Kenosha | 30,444 73 |  |  | 55,365 00 | 29,472 81 | 4,875 42 | 2,400 00 | 1,846 64 | 23,226 07 |
| La Crosse | 56,049 38 |  |  | 54,365 94 | 22,987 18 | 22,592 $0 \cdot \underline{5}$ | 17,500 00 | 5,864 94 3,09884 | $138,64748$ |
| Ladysmith | 5,017 10 |  |  | 10,377 28 | 22,382 25 | 22,582 1,688 82 |  | $\begin{array}{r}3,09384 \\ 247 \\ \hline\end{array}$ | $\begin{array}{r} 198,84718 \\ 16,663 \quad 20 \end{array}$ |
| Lake Geneva | 3,550 15 |  |  | 27,205 00 | 4,452 45 | 1,686 74 | ........................ | 1,21100 | $\begin{aligned} & 16,66320 \\ & 2,775 \end{aligned}$ |
| Lake Mills | 3,020 31 |  |  | 11,681 09 | 1,263 42 | 1,274 37 |  | 1,21100 | $\begin{aligned} & 36,77534 \\ & 22 \\ & 2998 \end{aligned}$ |
| Madison | 39,138 30 |  |  | 100,000 00 | 14,320 57 | 16,268 02 | 47,000 00 | 1,35464 10,56633 | $\begin{array}{r} 22,59383 \\ 227,29322 \end{array}$ |
| Manitowoc | 10,189 04 |  |  | 67,273 64 | 9,530 62 | 9,907 65 |  | 10,562 82 | $97,76337$ |
| Marinette | 80279 |  |  | 30,000 00 | 14,441 26 | 16,300 86 | 19,000 00 | 77942 | 91,324 33 |
| Marshfield | 14,815 80 |  |  | 16.50000 | 5,16190 | 5,419 56 |  | 56974 | 42,467 00 |
| Menasha | 15,653 60 | 20,600 00 |  | 10,000 00 | 1,348 50 | 2,268 49 • | 34,600 00 | 2,164 48 | 86,635 07 |
| Menomonie | 14,76598 |  |  | 11,000 0) | 5,475 24 | 5,526 42 | ............... | 74474 | 32,767 98 |
| Merrill | 14,765 38 |  |  | 24,41588 21,750 | $\begin{array}{r}\text { 4,272 } 96 \\ 10,000 \\ \hline\end{array}$ | 4,157 87 | -.............. | 2,280 43 | 49,893 12 |
| Milwaukee | 868,705 85 | 235,00000 |  | 983,656 96 | 10,000 260,10519 | $\begin{array}{r}6,994 \\ 300,313 \\ \hline 14\end{array}$ |  | 53974 21,34821 | $\begin{array}{r} 39,28429 \\ 2,669,12935 \end{array}$ |



| Cities. | For building and repairing | $\begin{gathered} \text { For } \\ \text { apparatus } \end{gathered}$ | For <br> wages of male teachers. | For wages of female teachers. | For old indebtedness. | For school furniture. | For salary clerk of board of education. | For all other purposes. | Total. | Balance on hand June 30, 1911. | $\begin{gathered} \text { Deficit } \\ \text { June } 3 \cup \\ 1911 \text {. } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Totals | \$921,003 18 | \$32,349 78 | \$432,300 86 | \$2,720,861 99 | \$183,363 82 | \$35,819 96 | \$73,963 04 | \$1,129 65522 | \$5,529,317 85 | \$1,680,686 14 | \$2,718 58 |
| Antigo | \$1,844 86 | \$300 00 | \$7,075 00 | \$24,090 63 |  | \$107 35 | \$150 00 | \$12,707 19 | \$46,275 03 |  | \$864 33 |
| Appleton | 6,849 03 | 70982 | 13,559 73 | 51,541 74 | \$23,356 69 | 1,258 87 | 35000 | 41,077 08 | 138,702 96 | \$4,937 55 | ........... . |
| Ashland | 3,362 31 | 15204 | 14,80000 | 40,2ヶ200 |  |  | 18000 | 26,438 06 | 85,204 41 | 5,984 95 |  |
| Baraboo | 52377 | 8170 | 3,180 00 | 17,379 00 |  | 5616 | 30000 | 10,695 05 | 32,215 68 | 20,517 63 |  |
| Beaver Dam | 6,483 41 | 76900 | 3,200 00 | 14,434 82 |  |  |  | 7,684 72 | 32,571 95 | 11,399 79 |  |
| Beloit | 7,260 16 | 75050 | 9,870 00 | 44,014 00 | 22,787 00 | 52728 | 40000 | 19,010 86 | 104,619 80 | 1,821 49 |  |
| Berlin | 21,364 17 |  | 3,276 89 | 13,645 12 |  | 35000 | 12500 | 7,671 12 | 46,432 30 | 5,153 88 |  |
| Brodhead | 26267 |  | 1,807 50 | 5,181 25 | 3,50000 | 150 | 10000 | 2,768 48 | 13,621 40 | 1,082 24 |  |
| Chippewa Falls... | 2,082 65 |  | 11,578 78 | 21,347 47 |  |  | 19992 | 8,885 48 | 44,094 30 | 29,121 86 | ............. |
| Columbus ........ | 43000 | 26000 | 2,65500 | 9,215 00 |  | 9000 |  | 3,004 02 | 15,654 02 | 6,767 76 |  |
| De Pere | 13636 | 4244 | 1,785 00 | 4,725 00 |  | 12222 | 7500 | 4,616 72 | 11,502 74 | 4,264 81 |  |
| Eau Claire | 10,495 62 | 35577 | 14,876 00 | 55,892 62 | 5,209 17 | 25000 | 1,080 00 | 501,90112 | 139,060 30 | 27,943 16 |  |
| Fond du Lac. | 84,470 73 | 26500 | 7,061 10 | 52,332 50 | 21,855 34 | 2,112 10 |  | 10,549 30 | 178,646 07 | 54,651 51 |  |
| Fort Atkinson | 2,575 82 |  | 4,120 00 | 11,091 16 | 1,000 00 |  | 35000 | 7,153 85 | 26,290 83 | 1,358 36 | . . . . . . . . . . . |
| Grand Rapids | 2,785 96 | 27552 | 7,044 83 | 20,084 00 | 9,116 41 | 1,542 82 | 10000 | 16,646 40 | 57,595 94 | 4567 |  |
| Green Bay ... | 44,49136 | 18000 | 11,650 00 | 54,410 00 |  | 43731 |  | 49,238 01 | 160,406 68 | 24,754 93 | .............. |
| Hudson | 75774 | 176,10 | 2,767 50 | 10,008 50 |  |  | $\begin{array}{r}10000 \\ 1,00000 \\ \hline\end{array}$ | 4,10010 12,927 | 17,909 94 | 5,885 13,738 81 |  |
| Janesville | 3,000 00 |  | 9,012 50 | 35,994 37 |  |  | 1,000 00 | 12,927 91 | 61,934 78 | 13,738 81 |  |
| Kaukauna | 90831 | 2,428 29 | 1,957 59 | 8,282 09 | 1,425 00 | 13990 | 22500 | 5,247 35 | 20,613 35 | 2,612 72 |  |
| Kenosha | 18,793 08 | 74379 | 10,643 75 | 45,074 02 |  | 66297 | 75.00 1 | 35,516 95 | 111,509 56 | 27,137 92 | ............. |
| La Crosse | 5,776 19 | 1,484 15 | 21,044 44 | 71,615 62 |  | 81930 | 1,200 00 | 33,066 62 | 135,006 32 | 63,840 86 |  |
| Ladysmith | 62032 | -789 82 | 3,994 60 | 8,083 29 |  | 35700 | 12000 | 2,698 17 | 16,663 20 |  |  |
| Lake Geneva | 2,171 44 | 29460 | 3,21700 | 14,247 13 |  | 10000 | 20000 | 12,909 92 | 33,140 07 | 3,635 25 |  |
| Lake Mills | 54073 | 89565 | 2,365 00 | 7,002 50 | 88000 |  | 5000 | 7,736 25 | 19,470 13 | 3,123 70 |  |
| Madison | 47,612 17 | 37487 | 18,199 33 | 80,264 99 | 42,000 00 | 1,340 46 | 20000 | 35,843 91 | 225,835 73 | 1,457 49 |  |
| Manitowoc | 12,217 99 | 13676 | 11,848 25 | 35,861 00 |  | 8659 | 55000 | $25 \quad 29964$ | 86,774 54 | 10,988 83 |  |
| Marinette | 20,483 35 | 3,758 43 | 5,857 27 | 35,047 27 |  | 50270 | 20000 | 14,236 24 | 80,085 26 | 1,239 07 |  |
| Marshfield | 6,269 02 | 9146 | 2,157 50 | 14,48750 | 4,455 00 | 30978 | 30000 | 6,104 26 | 34,174 52 | 8,292 48 |  |
| Mellen | 74,476 95 | 1,723 35 | 2,54C00 | 5,432 50 | ............ | 28695 | 5000 | 1,856 39 | 86,396 14 | 23893 |  |
| Menasha | 46607 | 75093 | 3,796 25 | 11,734 10 |  | 22396 | 7500 | 5,340 69 | 22,387 00 | 10,380 98 |  |
| Menomonie | 95642 | 12505 | 3,625 00 | 19,626 53 |  | 14019 |  | 10,320 10 | 34,793 29 | 15,099 83 |  |
| Merrill ............ | 2,419 52 |  | 7,905 00 | 20,991 59 |  |  |  | 9,777 37 | 41,093 48 |  | 1,809 19 |


| Milwaukee | 381,163 08 | 6,551 16 |  | 1,113 78650 |  | 1,769 08 | 60,814 26 | 301,19600 | 1,865,280 08 | 803,849 27 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mineral Point | 1,887 35 | 5715 | 2,600 00 | 8,485 00 | 30975 | 290 |  | 3,500 37 | 16,842 52 | 3,246 98 | ............... |
| Monroe | 2,830 57 | 20000 | 3,100 00 | 13,690 09 | 15,000 00 | 76 ล̄ 12 | 10000 | 11,389 92 | 47,075 70 | 1,148 67 |  |
| Neenah | 4,245 43 |  | 5,050 00 | 18,295 00 |  | 2165 | 1500 | 9,666 10 | 37,353 18 |  |  |
| New London | 83802 | 7862 | 2,245 00 | 7,184 13 | 1,630 00 | 22652 |  | 5,307 02 | 17,509 31 | 37538 |  |
| Oconomowoc | 62848 | 5655 | 2,312 50 | 11,633 75 | 3,182 50 |  | 20000 | 5,142 50 | 23,156 28 | 10,535 $] 6$ |  |
| Oconto | 25000 | 25000 | 5,192 00 | 11,410 00 | 5,200 00 | 10000 | 10000 | 2,853 31 | 25,355 31 | 1,776 93 |  |
| Onalaska | 30174 | 22736 | 1,100 00 | 3,600 00 |  |  |  | 2,269 88 | 7,498 98 | 1,834 46 |  |
| Peshtigo | 67001 |  | 1,200 00 | 6,975 00 |  | 81756 |  | 24,43888 | 153,196 23 | 14,856 67 |  |
| Portage | 1,085 09 | 44242 | 2,600 00 | 12,000 00 |  | 13 2i | 10000 | 1,965 86 | 10,924 12 |  | 4506 |
| Oshkosh | 29,795 63 | 21660 | 22,265 50 | 75,662 03 |  | 5646 | 16500 | 3,922 33 | 20,271 30 |  |  |
| Prairie du Chien.. | 35000 | 12679 | 1,500 00 | 6,860 00 | 1,000 00 | 7500 | 12000 | 2,651 77 | 12,683 56 | 3,575 69 |  |
| Racine | 10,550 82 | 13981 | 24,391 75 | 96,612 44 | 3,250 00 | 89046 | 1,041 66 | 31,567 43 | 168,444 37 | 90,769 38 |  |
| Reedsburg | 1,160 27 | 88965 | 2,365 00 | 8,750 64 |  | 27439 | 10000 | 3,607 98 | 17,147 93 | 7,750 94 |  |
| Rhinelander | 3,853 18 |  | 3,236 00 | 15,654 31 |  |  |  | 6,825 27 | 29,568 76 | 4,886 77 |  |
| Rice Lake | 87693 | 6578 | 3,840 00 | 13,095 36 |  | 30500 | 12500 | 5,037 50 | 23,345 57 | 17,107 97 |  |
| Ripon | 1,350 32 | 7078 | 2,217 50 | 9,394 75 | 6,000 00 | 27730 | 15000 | 4,877 93 | 24,33858 | 6,332 75 |  |
| Sheboygan | 2,202 83 | 67586 | 19,769 00 | 58,015 14 |  | 86957 |  | 21,131 21 | 102,663 61 | 48,972 00 |  |
| So. Milwauk |  | 5000 | 2,450 00 | 12,855 00 |  | 1300 | 12000 | 4,567 83 | 20,172 83 | 13,139 88 |  |
| Stanley | 8930 | 41784 |  | 14,015 80 |  | 27535 |  | 3,503 87 | 18,302 16 | 4,814 49 |  |
| Stevens Poin | 6,740 52 | 10000 | 2,660 00 | 22,895 00 |  | 30009 | 17220 | 12,156 47 | 45,024 19 | 14,745 96 |  |
| Stoughton | 58651 | 15569 | 3,970 00 | 15,380 25 | 4,570 00 | 26191 | 10000 | 9,624 60 | 34,648 96 | 29843 |  |
| Sturgeon Bay | 16785 |  | 1,800 00 | 13,031 87 |  | 10222 |  | 4,003 31 | 19,105 25 | 5,769 49 |  |
| Superior | 10,830 17 | 34604 | 31,229 64 | 109,412 22 |  | 12,250 07 | 1,700 00 | 59,07158 | 224,839 72 | 102,980 04 |  |
| Tomahawk | 40000 | 20000 | 2,260 00 | 10,027 50 |  | 15000 | 10000 | 5,208 18 | 18,345 68 | 10,694 68 |  |
| Two Rivers | 1,76791 | 83068 | 2,77500 | 10,311 75 | 3,100 00 | 569.75 |  | 4,589 91 | 23,945 00 | 10,301 11 |  |
| Viroqua | 89126 | 7500 | 3,142 50 | 8,077 50 | 2,443 50 | 15188 | 7500 | 5,230 91 | 20,087 55 | 40047 |  |
| Washburn | 54614 | 38736 | 3,220 00 | 11,474 88 | 2,000 00 | 10347 |  | 4,469 00 | 22,200 85 | 4,826 91 |  |
| Watertown | 2,790 69 | 10100 | 6,000 00 | 15,716 08 | ............ | 27867 | 30000 | 8,091 85 | 33,278 29 | 22,657 00 |  |
| Waukesha | 8,303 28 | 12859 | 6,590 00 | 19,030 02 |  | 5273 | 25000 | 7,312 09 | 41,666 71 | 13,435 23 |  |
| Waupaca | 99031 | 6235 | 2,763 75 | 8,072 77 |  | $\varepsilon 850$ | 15000 | 3,253 28 | 15,380 96 | 53,824 18 |  |
| Waupun | 70000 | 10000 | 3,04750 | 9,057 50 | ............. | 10000 | 5000 | 3,363 06 | 16,418 06 | 3,795 73 |  |
| Wausau.. | 47,10896 | 40000 | 13,685 00 | 49,541 87 |  | 78940 |  | 27,909 06 | 139,434 29 |  |  |
| Wauwatosa | 46936 | 6000 | 3,805 00 | 11,379 12 |  | $\begin{array}{r}570 \\ \hline 163\end{array}$ | 10000 | 4,594 01 | 20.41319 | 10,421 95 |  |
| West Allis | 53558 | 26312 | 5,517 50 | 15,769 50 |  | 1,146 33 |  | 9,459 93 | 32,691 96 | 17,649 79 |  |
| Whitewater | 1,157 38 | 70854 | 3,900 00 | 10,300 00 | 9346 |  |  | 3,865 69 | 20,025 07 | 6,433 77 |  |


| Location | Principal. | Legal Qualification of Principal. | Salary OF THE PrinciPal. | $\begin{gathered} \text { No. } \\ \text { TEACHERS } \\ \text { EM- } \\ \text { PLOYED. } \end{gathered}$ |  | Enrollment in High SCHOOL. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Pupils under 20 years of age. |  |  | $\mathrm{Pu}-$ pils over 20. |
|  |  |  |  | $\stackrel{\dot{\Xi}}{\underset{\sim}{5}}$ | $\underset{\sim}{\underset{\sim}{E}}$ | $\stackrel{\dot{0}}{\sum_{\Sigma}^{\pi}}$ | $\underset{\underset{y}{\mid}}{\underset{y}{\mid}}$ | $\begin{aligned} & \text { ت } \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |
| Totals and averages. |  |  | \$1,210 31 | 509 | 923 | 12,613 | 15,620 | 28,405 | 177 |
| Abbotsford | R. M. Blackmun..... | Milwaukee N. S. diploma. | \$1,100 00 | 1 | 2 | 19 | 31 | 50 |  |
| Albany | Fred F. Householder. | Milwaukee N. S. diploma.. | 1,10000 | 1 | 2 | 19 | 22 | 41 | ....... |
| Algoma | John L. Dahl. ... | River Falls N. S. diploma | 1,400 00 | 2 | 2 | 65 | 55 | 120 | ...... |
| Alma | C. D. Donaldson.. | Superior N. S. diploma.. | 1,050 00 | 1 | 2 | 18 | 35 | 53 | $\cdots$ |
| Alma Center | J. H. McCormick. | La Crosse N. S. diploma.... | $\begin{array}{r}1,810 \\ \hline 120\end{array}$ | 1 | 1 | 21 | 25 | 46 | 2 |
| Almend | A. G. Brown... | Stevens Point N. S. diploma | 72000 | 1 | 1 | 14 | 22 | 36 |  |
| Amery Amherst | Geo. De Guire. | Oshkosh N. S. diploma... | 1,200 00 | 2 | 1 | 26 | 34 | 60 |  |
| Antigo . | W. E. H. Hickok. | Platteville N. S. diploma. | $\begin{array}{r}190000 \\ 2,000 \\ \hline\end{array}$ | 1 | 1 | 22 155 | 23 | 45 |  |
| Appleton | Paul G. W. Keller. | Milwaukee N. S. diploma. | 2,00000 2,10000 | 4 7 | 10 | 155 | 155 | 310 370 | 2 |
| Arcadia ............... | Robert F. Lohrie. | Unlimited state certificate | 1,400 00 | 1 | 14 3 | 168 -44 | 202 39 | 370 83 | 2 3 |
| Arena ${ }_{\text {Argyle }}$.................... | E. K. Lightcap... | Platteville N. S. diploma.. | 1,000 00 | 1 | 1 | - 44 | 27 | 53 | 3 - |
| Argyland | C. E. Tredinnick. | Platteville N. S. diploma. | 1,100 00 | 1 | 2 | 41. | 32 | 73 |  |
| Athens . | S. G. Corey.. | Whitewater N. S. diploma. | 2,000 00 | 7 | 13 | 179 | 220 | 399 |  |
| Augusta | L. O. Hatch. | Rlatteville N. S. diploma | 90000 1.60000 | 1 | 2 | 24 | 14 | . 38 | ...... |
| Avoca Baldwin | Peter Peterson | Milwauke N. S. diploma. | $\begin{array}{r}1,600 \\ 72500 \\ \hline 900\end{array}$ | 2 | 2 | 40 16 | 65 12 | 105 | ...... |
| Baldwin | G. M. Appleman | Stevens Point N. S. diploma. | 90000 | 1 | 2 | 16 | 12 | 98 | $\cdots \cdots$ |
| Bangor Baraboo | W. H. Eller..... | University of Wisconsin diploma. | 90000 | 1 | 2 | 4 | 48 30 | 54 | 1 |
| Barron | A. C. Kingsford..... | University of Wisconsin diploma. | 1,800 00 | 3 | 7 | 98 | 145 | 243 | 2 |
| Bayfield | Margaret J. Kennedy | University of Wisconsin diploma. | 1,100 00 | 2 | 3 | 40 | 80 | 120 |  |
| Beaver Dam. | T. G. Gronert. | University of Wisconsin diploma. | 1,700 00 | 3 | 3 | 39 | 44 | 83 | ...... |
| Belleville ... | J. A. Mortimer. | University of Wisconsin diploma. Oshkosh N. S. diploma........... | 1,500 1,000 1,00 | 3 | 7 | 52 6 | 67 | 119 | ...... |
| Belmont | P. P. Patterson. | Milwaukee N. S. diploma. | 1,00000 | 1 | 2 | 6 19 | 21 | 47 |  |
| Beloit Bent | John C'. Pierson | Northwestern University diploma | 2,000 00 | 11 | 8 | 212 | 257 | 469 | 4 |
|  | Jas. R. Wallin... | Platteville N. S. diploma. . | 90000 | 1 | 2 | 17 | 24 | 41 |  |
| Berlin | W. T. Anderson. | Milwaukee N. S. diploma | 1,600 00 | 2 | 4 | 49 | 64 | 113 | 6 |



FREE HIGH SCHOOLS HAVING FOUR YEAR COURSES, 1910-1911-Continued.

| LOCATION. | Principal. | Legal Qualification of Principal. | SALARY OF THE PrinclPal. | $\begin{gathered} \text { No. } \\ \text { TEACHERS } \\ \text { EM- } \\ \text { PLOYED. } \end{gathered}$ |  | Enrollment in High |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Pupils under 20 years of age. |  |  | Pupils over 20. |
|  |  |  |  |  | $\underset{\text { E. }}{\substack{\text { E }}}$ | $\underset{\sim}{\text { ® }}$ | $\underset{\text { E. }}{\substack{\text { E. } \\ \hline}}$ | $\begin{aligned} & \text { 玉゙ } \\ & \text { से } \\ & \text { Hen } \end{aligned}$ |  |
|  | W. F. Weisend. | Milwaukee N. S. diploma | 90000 | 1 | 2 | 26 | 46 | 72 |  |
| Eau Claire. | M. S. Frawley.. | University of Wisconsin diploma | 1,900 00 | 6 | 18 | 308 | 360 | 668 | 7 |
| Edgar ..... | J. E. Giessel. . | Unlimited state certificate...... | 81000 | 1 | 1 | 17 | 24 | 41 | 4 |
| Edgerton | E. L. Roethe. | University of Wisconsin diploma | 1,44000 | 2 | 4 | 59 | 92 | 151 |  |
| Elkhorn | John Dixon . | Unlimited state certificate. | 1,500 00 | 1 | 6 | 69 | 71 | 140 | ...... |
| Elmwood | W. C. White. | Superior N. S. diploma.......... | 1,100 00 | 3 | 3 |  |  | 172 | ...... |
| Elroy | Geo. R. Ray. | University of Wisconsin diploma | 1,250 00 | 2 | 3 | 34 | 69 | 103 | . |
| Ellsworth | W. D. Sansum | Stevens Point N. S. diploma. | 1,500 00 | 2 | 4 | 56 | 79 | 135 |  |
| Evansville | Frank J. Lowth | Whitewater N. S. diploma. . | 1,40000 | 2 | 3 | 38 | 70 | 108 | ...... |
| Fairchild | F. G. Jones. . | Oshkosh N. S. diploma... | 1,200 00 | 1 | 2 | 19 | 27 | 46 | 1 |
| Fennimore | F. E. Drescher. | University of Wisconsin diploma | 1,25000 | 1 | 4 | 46 | 72 | 118 |  |
| Fifield .. | E. N. Daane... | Oshkosh N. S. diploma........... | 1,90000 | 1 | 1 | 8 | 15 | 23 | . |
| Florence | Lewis A. Jones. | University of Wisconsin diploma. | 1,40000 | 1 | 3 | 33 | 44 | 77 | ...... |
| Fort Atkinson | J. A. Hagemann | University of Wisconsin diploma. | 1,800 00 | 4 | 4 | 92 | 89 | 181 | 1 |
| Fountain City. | B. W. Weenink. | Oshkosh N. S. diploma........ | 1,050 00 | 1 | 2 | 24 | 16 | 40 |  |
| Fox Lake | Larne F. Smith. | Edinboro N. S. diploma... | 95000 | 1 | 2 | 14 | 23 | 37 | 1 |
| Frederic | Martin Stenerson | River Falls N. S. diploma. | 85500 | 1 | 1 | 5 | 8 | 13 | 1 |
| Galesville | H. C. Almy. | River Falls N. S. diploma. | 1,500 00 | 2 | 4 | 36 | 66 | 102 | ...... |
| Genoa Junction | Leonard Kreiege | Whitewater N. S. diploma. | 81000 | 1 | 1 | 14 | 17 | 31. | ....... |
| Gillett .... | C. E. Hughes. | Platteville N. S. diploma. | 1,000 00 | 1 | 2 | 15 | 7 | 22 | 1 |
| Glenbeulah | Elizabeth A. Hoskins | Platteville N. S. diploma. | 84500 |  | 2 | 13 | 15 | 28 |  |
| Glenwood | W. J. Arnold'.. | Oshkosh N. S. diploma... | 1,100 00 | 2 | 2 | 40 | 63 | 103 |  |
| Glidden | I. W. Mundhenke | Platteville N. S. diploma. |  | 1 |  | 4 | 19 | 23 |  |
| Grand Rapids | C. W. Schwede. | Oshkosh N. S. diploma.. | 1,050 00 | 7 | 9 | 129 | 132 | 261 | - 2 |
| Gratiot . . | E. L. Geach. | Platteville N. S. diploma. | 67500 | 1 | 1 | 10 | 10 | 20 |  |
| Grantsburg . | Jno. M. Hammer. | River Falls N. S. diploma. | 94500 | 1 | 2 | 27 | 56 | 83 |  |
| Green Bay, East.. | W. O. Brown. | Oshkosh N. S. diploma..... | 1,700 00 | 3 | 10 | 154 | 139 | 293 |  |
| Green Bay, West. | C. F. Cole. . . | Lawrence University diploma | 1,500 00 | 5 | 8 | 118 | 160 | 278 |  |
| Green Lake .... | G. B. Mortimer. | Oshkosh N. S. diploma..... | 1,00000 | 1 | 2 | 18 | 21 | 39 | . $\cdot$.... |


| Greenwood | G．A．Benedict． | Oshkosh N．S．diploma．．． | 1，080 00 | 1 | 2 | 31 | 35 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hammond | S．P．Norstrom． | River Falls N．S．diploma． | 81000 | 1 | 2 | 33 | 30 | 63 | 1 |  |
| Hancock | W．R．Bussewit | Milwaukee N．S．diploma． | 85500 | 1 | 1 | 15 | 12 | 27 |  |  |
| Hartford | W．E．Elmer． | University of Wisconsin diplo | $\begin{aligned} & 1,80000 \\ & 1,62104 \end{aligned}$ | $\begin{aligned} & \mathbf{1} \end{aligned}$ | 6 3 | 70 38 | $\begin{aligned} & 80 \\ & 39 \end{aligned}$ | $\begin{array}{r} 150 \\ 77 \end{array}$ |  |  |
| Hayward | W．O．Hall． | Milwaukee N．S．diploma． | $\begin{array}{r} 1,62104 \\ 90000 \end{array}$ | $\begin{aligned} & 3 \\ & 1 \end{aligned}$ | 3 2 2 | 38 19 | $\begin{aligned} & 39 \\ & 21 \end{aligned}$ | 77 40 | 1 |  |
| Hazel Green | S．S．Wilson．． | Platteville N．S．diploma．．．．．．．．．．．． | 1，200 00 | 1 | 1 | 14 | 26 | 40 | 1 |  |
| Hillsboro | C．J．Coates． | Whitewater N．S．diploma．．．．．．．．．．．． | 1，000 00 | 1 | 2 | 23 | 27 | 50 |  |  |
| Hixton | F．A．Buechel． | University of Wisconsin diploma． | 1，035 00 | 1 | 1 | 26 43 | 4 | ${ }_{83}^{48}$ | i | $\xrightarrow{2}$ |
| Horicon Hortonville | T．L．Bewick． | River Falls N．S．diploma． | 1，40000 | 1 | 1 | 38 | 23 | 61 |  |  |
| Hortonville | F．R．Hamilton | Oshkosh N．S．diploma． | 1，800 00 | 2 | 6 | 108 | 118 | 226 |  |  |
| Humbird | F．R．Van Keuren | Lawrence University diploma．．． | 76500 | 1 | 1 | 9 | 17 | 26 |  | 哿 |
| Hurley ．．．．．． | J．E．Murphy．． | University of Michigan diploma． | 1，550 00 | 3 | 2 | 37 | ${ }^{62}$ | ${ }_{23}^{99}$ | i |  |
| Independence | Glen P．G Junkma | Osher Fash N．S．diploma．．． | 94500 | 1 | 2 | 30 | 24 | 54 |  | O |
| Iron R iver | W．R．Rood． | Milton College diploma． | 1，305 00 | 2 | 1 | 15 | 30 | 45 |  |  |
| Janesville | H．C．Buell． | Milwaukee N．S．diploma． | 2，500 00 | 8 | 8 | 184 | 241 | 425 |  | 込 |
| Jefferson ．．．．． | E．W．Waite．． | River Falls N．S．diploma | 1，400 00 | 2 | 1 | 16 | 5 | 119 |  | 2 |
| Johnson Creek | Oscar H．Bauer | University of Wisconsin diploma． | 1，150 00 | 1 | 3 | 35 | 37 | 72 |  | $\underset{H}{ }$ |
| Kaukauna | L．P．Bunker | Beloit College diploma．． | 1，600 00 | 2 | 5 | 50 | $\begin{array}{r}75 \\ 24 \\ \hline\end{array}$ | 125 |  |  |
| Kendall | Oscar Klang．．． O．S．Thompso | River Fake Forest University diploma． | 1，500 00 | 6 | 7 | 131 | 172 | 303 | 1 | 國 |
| Kewaskum | J．F．Cavanaugh | Milwaukee N．S．diploma．． | 1，200 00 | 1 | 2 | 30 | 24 | 54 | 1 |  |
| Kewaunee | M．McMahon． | Unlimited state certificate．． | 1，500 00 | 2 | $\stackrel{2}{2}$ | 71 | 47 | 118 | 1 |  |
| Kiel Kilbourn | T．M．Risk． | University of（ Point N．S．diploma．．．．．．．．．．．． | 1，100 00 | 1 | 2 | 24 | 39 | 63 |  |  |
| Ladysmith | E．C．Gotham． | Oshkosh N．S．diploma． | 1，60000 | 3 | 2 | 44 | 56 | 100 |  | 0 |
| La Farge ．．． | B．B．Schroeder． | Oshkosh N．S．diploma．．．．．．．．．．． | 1,000 81000 | 1 | 2 | ${ }_{7}^{23}$ | 32 100 | 55 | 7 | \％ |
| Lake Geneva Lake Mills ．． | Mrs．Marietta | Platteville N．S．diploma．．．．．．． |  | 2 | 3 | 49 | 72 | 121 |  | 조 |
| Lancaster | F．W．Traner | Beloit College diploma． | 1，500 00 | 3 | 4 | 32 | 90 | 122 |  | 4 |
| Linden | Chas．E．Lamb | University of Wisconsin diploma． | 94500 | 1 | 2 | 17 | 14 | 31 |  | 2 |
| Little Chute | P．A．Klumb．．． | Milwaukee N．S．diploma． |  | 1 | 1 | 16 | 9 | 25 |  | 边 |
| Lodi | O．D．Witherbee | Lawrence University diploma．．．． | 1，85500 | 1 | 1 | $\stackrel{43}{2}$ | 19 | ${ }_{41}$ | 1 |  |
| Loyal． | E．C．Hirsch． | Oshkosh N．S．diploma．．．．．．．．．．． | 90000 | 1 | 2 | 23 | 39 | 62 |  |  |
| Manawa | J．H．Hardgrove | Oshkosh N．S．diploma．．． | 1，10000 | 1 | $\stackrel{3}{9}$ | ＋39 | 31 | 70 |  |  |
| Manitowoc | L．W．Brooks．．． | Lawrence College diploma．．． | 1，80000 | 5 | 8 | 181 | ${ }_{2} 22$ | 405 |  |  |
| Marinette | F．W．Hanft | Oshkosh N．S．diploma．．． | 1,90000 | 1 | 2 | 22 | 31 | 53 | 1 |  |
| Marion ． Markesan | M．M．Cox | Whitewater N．S．diploma．．．．．．．．．．．．．．． | 1，100 00 | 1 | 2 | 18 | 26 | 44 |  |  |
| Marshall | C．H．Eldred | River Falls N．S．diploma．．．．．．．．．．．．．．． | 1,08000 | 1 | 2 | 21 | 33 | 54 |  | O－ |
| Marshfield ． | C．W．Otto． | Lawrence College diploma． | 1，350 00 | 2 | 7 | 63 | 135 | 198 |  |  |


| Location. | Principal. | Legal Qualification of Principal. | SALARY OF THE PrinciPal. | $\begin{gathered} \text { No. } \\ \text { TEACHERS } \\ \text { EM- } \\ \text { PLOYED. } \end{gathered}$ |  | Enrollment in High SCHOOL. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Pupils under 20 years of age. |  |  | $\mathrm{Pu}-$ pils over 20. |
|  |  |  |  |  | घ̇ | $\stackrel{\dot{\Phi}}{\underset{\Sigma}{5}}$ | $\underset{\sim}{\dot{E}}$ | $\begin{aligned} & \text { デ } \\ & \stackrel{0}{0} \\ & \text { Hi } \end{aligned}$ |  |
| Mattoon | W. A. McLaughlin. | Unlimited state certificate. | 81000 | 1 | 1 | 7 | 10 | 17 | 2 |
| Mauston | C. W. McNown...... | University of Wisconsin diploma. | 1,350 00 | 1 | 5 | 46 | 83 | 129 | 2 |
| Mayville .. | L. S. Keeley... | Platteville N. S. diploma........ | 1,425 00 | 1 | 3 | 35 | 45 | 80 |  |
| Mazomanie | H. G. Parkinson | University of Wisconsin diploma | 1,250 00 | 1 | 3 | 29 | 40 | 69 | . |
| Medford | J. E. Phillips.... | Stevens Point N. S. diploma..... | 1,600 00 | 1 | 7 | 54 | 78 | 132 | - |
| Mellen | W. P. Hagman. | Oshkosh N. S. diploma....... | 1,500 00 | 2 | 2 | 22 | 41 | 63 | ...... |
| Meirose..... | L. A. Wills.... | Platteville N. S. diploma. | 76500 | 1 | 1 | 13 | 26 | 39 |  |
| Menasha .......... | John Callahan... | Unlimited state certificate. | 2,000 00 | 3 | 6 | 55 | 65 | 120 |  |
| Menomonee Falls | Fred L. Witter. | Beloit College diploma... | 1,050 00 | 2 | 2 | 52 | 52 | 104 | $\cdots 1$ |
| Merrill .. | E. W. McCrary. | Lawrence College diploma....... | 1,400 00 | 4. | 7 | 104 | 136 | 240 | ...... |
| Merrillan . | Karl Evert ... | University of Wisconsin diploma | 1,000 00 | 1 | 1 | 14 | 17 | 31 | ...... |
| Middleton . | Charles A. Jahr | Milwaukee N. S. diploma......... | 1,20000 | 1. | 2 | 32 | 33 | 65 | . |
| Milton $\qquad$ Milton Junction | J. F. Whitford.... | University of Wisconsin diplom | 1,100 00 | 1 | 3 | 40 | 54 | 94 | . 2 |
| Milton Junction Mineral Point . | John M. Gahagan | Milwaukee N. S. diploma....... | 1,000 00 | 1 | 3 | 29 | 31 | 60 |  |
| Mineral Point | R. E. Loveland | Oberlin College diploma...... | 1,700 00 | 2 | 5 | 67 | 99 | 166 | 3 |
| Mondovi | R. E. Brasure. | Stevens Point N. S. diploma. | 1,000 00 | 1 | 2 | 12 | 25 | 37 | 1. |
| Monroe . | Geo. H. Haverson | Beloit College diploma.......... University of Minnesota diplom | 1,600 1,750 00 | 2 | 3 | 68 | 69 | 137 | 1 |
| Montello | L. U. ${ }^{\text {Geo St. Peter... }}$ | University of Minnesota diploma | 1,750 1,200 1,000 | 2 | 6 3 | 55 | 109 36 | 164 60 | 12 |
| Montfort | J. Earl Rohr... | Whitewater N. S. diploma. | 1,20000 | 1 | 3 3 | 24 40 | 36 50 | 60 90 | $\ldots$ |
| Monticello | Chas. Reddy . | Platteville N. S. diploma. | 1,850 00 | 1 | 1 | 14 | $\stackrel{50}{22}$ | 36 |  |
| Mosinee . . | G. M. Goggins. | Oshkosh N. S. diploma... | 81000 | 1 | 1 | 11 | 14 | 25 |  |
| Mt. Hope . | Emily Corlett. | Platteville N. S. diploma. | 76500 | 1 | 2 | 17 | 14 | 42 |  |
| Mt. Horeb | M. V. Boyce... | Stevens Point N. S. diploma. | 1,150 00 | 2 | 3 | 49 | 69 | 118 |  |
| Mukwonago | T. T. Cronin. | Milwaukee N. S. diploma.... | 1,100 00 | 1 | 3 | 33 | 35 | . 68 | $\cdots$ |
| Muscoda.... | E. H. Clarke. | Milton College diploma.. | 1,000 00 | 1 | 1 | 14 | 23 | 37 | 1 |
| Necedah | C. C. Aller... | Lawrence College diploma | 1,90000 | 1 | 2 | 19 | 33 | 52 |  |
| Neenah | E. M. Beeman.. | University of Wisconsin diploma. | 2,200 00 | 4 | 7 | 98 | 33 109 | 207 | 2 |
| Neillsville | Geo. M. Snodgrass. | Hamline University diploma..... | 1,500 00 | 4 | 12 | 61 | 109 92 | 153 | 1 |



|  | Platteville N. S. diploma.................. |
| :---: | :---: |
|  | Platteville N. S. diploma |
|  | Lawrence College diploma |
|  | Unlimited state certificate |
|  | Oshkosh N. S. diploma |
|  | University of Wisconsin |
|  | Platteville N. S. diploma. |
|  | Oshkosh N. S. diploma |
|  | Oshkosh N. S. diploma |
|  | University of Wisconsin dip |
|  | University of Wisconsin diploma |
|  | University of Wisconsin diploma. |
|  | Illinois College diploma.. |
|  | Whftewater N. S. diploma |
|  | University of Wisconsin diplon |
|  | Whitewater N. S. diploma |
|  | River Falls N. S. diploma. |
|  | Unlimited state certificate |
|  | Whitewater N. S. diploma |
|  | River Falls N. S. diploma |
|  | Platteville N. S. diploma. |
|  | Milwaukee N. S. diploma |
|  | Oshkosh N. S. diploma |
|  | Oshkosh N. S. diploma. |
|  | Univers.ty of Michigan diplo |
|  | Stevens Point N. S. diploma |
|  | Milwaukee N. S. diploma |
|  | Platteville N. S. diploma. |
|  | River Falls N. S. diploma |
|  | University of Wisconsiń diplom |
|  | University of Wisconsin diplom |
|  | University of Wisconsin diploma |
|  | Missouri S. N. S. diploma. |
|  | Oshkosh N. S. diploma. |
|  | Oshkosh N. S. diploma. |
|  | Whitewater N. S. diplom |
|  | Stevens Point N. S. diplom |
|  | Superior N. S. diploma. |
|  | Platteville N. S. diploma |
|  | University of Wisconsin diploma....... |
|  | Whitewater N. S. diploma............... |
|  | Whitewater N. S. diploma............... |
|  | Oshkosh N. S. diploma.................. |
|  | University of Wisconsin diplo |


| 1,100 00 | 1 | 2 | 19 | 18 | 37 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,350 00 | 1 | 3 | 29 | 54 | 83 | 1 |
| 1,20000 | 2 | 4 | 56 | 70 | 126 | 1 |
| 2,000 00 | 2 | 8 | 112 | 142 | 254 | 3 |
| 1,200 00 |  | 1 | 4 | 4 | 8 |  |
| 90000 | 1 | 1 | 14 | 17 | 31 | ...... |
| 76500 | 1 | 1 | 19 | 19 | 38 |  |
| 80000 | 1 | 2 | 22 | 23 | 45 | 1 |
| 72000 | 1 | 1 | 15 | 14 | 29 | ...... |
| 1,600 00 | 2 | 6 | 83 | 105 | 188 | ..... |
| 1,70000 | 4 | 4 | 86 | 117 | 203 | 4 |
| 1,250 00 | 1 | 2 | 25 | 35 | 60 | ...... |
| 1,200 00 | 2 | 2 | 46 | 78 | 124 | ..... |
| 1,100 00 | 1 | 2 | 20 | 37 | 57 |  |
| 72000 | 1 | 1 | 18 | 21 | 39 | 2 |
| 1,035 00 | 1 | 2 | 25 | 36 | 61 | $\cdots$ |
| 1,000 00 | 1 | 3 | 27 | 33 | 60 | 2 |
| 96000 | 1 | 3 | 36 | 43 | 79 | 1 |
| 90000 | 1 | 2 | 23 | 26 | 49 | 1 |
| 1,200 00 | 1 | 3 | 27 | 28 | 55 | ..... |
| -765 00 | 1 | 1 | 12 | 15 | 27 |  |
| 81000 | 1 | 1 | 29 | 21 | 50 | ..... |
| 1,200 00 | 1 | 3 | 28 | 51 | 79 |  |
| 1,000 00 | 1 | 2 | 18 | 29 | 47 |  |
| 1,500 00 | 1 | 3 | 23 | 37 | 60 | 2 |
| 76500 | 1 | 1 | 16 | 18 | 34 | ...... |
| 1,200 00 | 1 | 4 | 25 | 27 | 52 | 2 |
| 1,700 00 | 2 | 5 | 49 | 85 | 134 | 2 |
| 85500 | 1 | 1 | 15 | 17 | 32 | , |
| 1,700 00 | 3 | 6 | 105 | 129 | 234 | 3 |
| 1,700 00 | 2 | 7 | 73 | 141 | 214 | ...... |
| 1,300 00 | 1 | 3 | 24 | 34 | 58 | ...... |
| 1,000 00 | 1 | 1 | 9 | 32 | 41 | 1 |
| 1,100 00 | 1 | 2 | 28 | 37 | 65 | 1 |
| 1,500 00 | 1 | 3 | 36 | 51 | 87 | ...... |
| 1,100 00 | 1 | 3 | 31 | 41. | 72 | ...... |
| $900 \cdot 00$ | 1 | 1 | 19 | 25 | 44 |  |
| 1,100 00 | 2 | 2 | 29 | 20 | 49 |  |
| 1,200 00 | 2 | 7 | 32 | 23 | 55 | 1 |
| 1,200 00 | 1 | 2 | 32 | 22 | 54 | ...... |
| 1,600 00 | 2 | 5 | 80 | 71. | 151 | 1 |
| - 76500 | 1 | 1 | 11 | 13 | 24 | 9 |
| 72000 | 1 | 1 | 27 | 19 | 46 | 2 |
| 1,800 00 | 3 | 5 | 64 | 110 | 174 |  |

FREE HIGH SCHOOLS HAVING FOUR YEAR COURSES, 1910-1911—Concluded.

romah .....................
Tremahawk ............
F. M. Bray.
L. C. Johnson
P. L. Lynch.

Harry E. Snyder.
F. E. Jaastad.
H. T. Emmett
C. E. Fawcett.
W. P. Colburn
D. M. Ryan..

Howard Maule
S. A. Oscar.
W. O. Blanchard
L. G. Curtis.
W. P. Roseman
G. F. Loomis.

Benj. B. Tighe.
John W. Steenis
F. R. Nash.
G. R. Nash.
C. J. Kreilkamp
G. E. Dafoe.
P. A. Kolb
T. J. Jones.
D. E. McLane.
C. E. McLane.. Steinfeldt
C. R. Steinfeld
A. E. Buresh
D. L. Swartz....
C. W. Collmann
E. H. Miles.
R. C. Winger....
C. W. Rittenburg

Charles Anspach
T. J. Hughill.

Nels A. Anderson
Milton V. Jones.
Fred G. Bishop.

University of Wisconsin diploma. Lawrence College diploma. Whitewater N. S. diploma.
Milwaukee N. S. diploma.
Milwaukee N. S. diploma.
Stevens Point N. S. diploma. Oshkosh N. S. diploma. Platteville N. S. diploma. University of Wisconsin diploma Superior N. S. diploma. Stevens Point N. S. diploma Carroll College diploma
University of Wisconsin diplom
University of Wisconsin diploma.
Milwaukee N. S. diploma...........
Milwaukee N. S. diploma
University of Wisconsin diploma........
Beloit College diploma.
Whitewater N. S. diploma........................
University of Wisconsin diploma River Falls N. S. diploma
University of Wisconsin diploma. University of Wisconsin diploma Unlimited state certificate
University of Wisconsin diploma University of Wisconsin diploma Whitewater N. S. diploma..
University of Wisconsin diploma
University of Wisconsin diploma.
Milwaukee N. S. diploma.
University of Wisconsin diploma
Stevens Point N. S. diploma.
River Fialls N. S. diploma.
Oberlin College diploma
Milwaukee N. S. diploma.
Platteville N. S. diploma
Superior N. S. diploma.
Oshkosh N. S. diploma.
Oshkosh N. S. diploma



$\qquad$
$\qquad$

FREE HIGH SCHOOL HAVING THREE YEAR COURSE OF STUDY, 1910-1911.

| Friendship ............ | J. J. Haass................................... | Oshkosh N. S. diploma.... | \$76500 . 1 ...... | 7 | 19 | 26 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

FREE HIGH SCHOOLS HAVING FOUR YEAR COURSES, 1910-1911—Continued.


| Black River Falls.................... |
| :---: |
| Blair |
| Blanchardville |
| Bloomer |
| Bloomington |
| Blue River . . |
| Boscobel |
| Boyd |
| Brandon |
| Brillion |
| Brodhead |
| Brooklyn |
| Bruce . . |
| Burlington |
| Cadott |
| Cambria |
| Cambridge |
| Campbellsport |
| Cashton . |
| Cassville |
| Cedarburg |
| Ohetek .... |
| Chilton . |
| Chippewa Falls |
| Clinton ........ |
| Clintonville |
| Cobb . |
| Colby |
| Colfax |
| Columbus |
| Crandon |
| Cuba City |
| Cumberland |
| Darien ... |
| Darlington |
| Deerfield .. |
| De 'Forest |
| Delavan. |
| De Pere |
| Dodgeville |
| Durand ... |
| Eagle River |
| East Troy |
| Eau Claire .. |

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32


FREE HIGH SCHOOLS HAVING FOUR YEAR COURSES, 1910-1911-Continued.

| Locathon. | $\begin{gathered} \text { Average } \\ \text { daily } \\ \text { attendance. } \end{gathered}$ | No, of days taught. | Pupils in English branches only. | Pupils in German. | Pupils in Latin. | Pupils in Greek. | Pupils in both Latin and German. | No. of Pupils in Manual Training. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | Woodwork. | Domestic science. |
| Edgar $\ldots$... | 35 |  |  |  |  |  |  |  |  |
| Edgerton .. | 35 136 | 180 180 | 45 92 |  |  | ............ |  |  |  |
| Elkhorn | 123 | 180 | 68 | 48 50 | 19 38 | .............. | (1.......... | . . . . . . . . | ............. |
| Elroy .... | 144 | 180 | .... |  |  | . . | 3 |  |  |
| Ellsworth | 98 116 | 180 | 44 | 36 | 31 |  | 10.... | . | .............. |
| Evansville | 116 | 180 | 21 | 21 | 11 | . ....... . . | 12 |  | .. ............ |
| Fairchild . | 102 34 | 180 | 45 | 35 | 40 | . . . . . . . . . . | 12 | . | ............... |
| Fennimore | - 107 | 180 180 | 47 | 19 |  | ............... | 12 |  | ............. |
| Fifield . . . . | 102 | 180 180 | 61 23 | 34 | 23 | . ........... | ${ }_{6}$ |  | . |
| Florence | 68 | 180 | 23 68 |  |  | . |  |  |  |
| Fort Atkinson | 160 | 190 180 | 68 | 8 | 2 | . .......... | $1{ }^{\text {l }}$ ' |  |  |
| Fountain City | 160 35 | 180 180 | ……..... | 60 | 34 | ............ | 16 |  | - |
| Fox Lake ..... | 35 35 | 190 | 29 38 | 11 |  | ........... |  |  |  |
| Frederic . | 10 | 180 | 38 14 | 27 | ............. | ........... |  |  | ... |
| Galesville ....... | 94 | 163 | 14 | 40 | 30 |  | $3{ }^{1}$ |  |  |
| Gillett .......... | 27 | 180 | 31 | 40 | 30 |  | 30 | 41 | 19 |
| Glenbeulah | 20 | 180 | 23 |  |  |  |  |  | .............. |
| Glenwood | 20 87 | 181 | 28 |  |  |  |  |  | ........... |
| Glidden ....... | 18 | 180 180 | 50 | 30 | 11 | ....... | $\cdots \cdots \cdots$ |  | . ............ |
| Grand Rapids | 227 | 180 | 23 |  |  |  |  |  |  |
| Gratiot ....... | 16 | 180 | 183 20 | 54 | 26 |  | "10" | 45 | 57 |
| Grantsburg | 73 | 180 | 20 50 | 5 |  |  |  | 4 | 57 |
| Green Bay, East. | 252 | 180 200 | 50 190 | 32 |  |  |  |  |  |
| Green Bay, West... | 255 | 200 | 190 | 41 47 | 69 86 |  | $7{ }^{7}$ |  |  |
| Green Lake .. | 32 | 180 | 154 39 | 47 | 86 | ........... | 9 | 47 | $70$ |
| Hammond | 59 | 180 | 41 | 25 |  |  |  |  |  |
| Hancock.. | 60 25 | 180 | 64 |  |  |  | . |  |  |
| Hartford | 143 | 180 | 27 |  |  |  |  |  |  |
| Hayward ...... | 143 62 | 180 | $\cdots{ }^{46}$ |  | 42 | ...... | ${ }_{10}{ }^{\text {a }}$ |  |  |
| Hazel Green ... | .36 | 180 | 46 20 | 22 16 |  |  |  | 25 | $21$ |

Highland
Hillsboro
Hixton
Horicon
$\qquad$ Hortonville
 Hudson Humbir
Hurley ......
Inda
Iron River
Iron River
Janesville
Johnson Creek
Juneau
Kaukauna
Kendall
Kenosha
Kewaskum
Kewaunee
Kiel
Kilbourn
Ladysmith
La Farge.
Lake Genev
Lake Mills
Lancast
Little Chute
Lodi
Lone Rock
Loyal .
Manawa
Manitowoc
Marinet
Marion
Markesan
Marshall
Marshfield
Mattoon
Mauston
Mayville
Mazomanie
Medford


FREE HIGH SCHOOLS HAVING FOUR YEAR COURSES, 1910-1911-Continued.

| LOCATION. | Average daily attendance. | No. of days taught. | Pupils in English lranches only. | Pupils in German. | Pupils in Latin. | Pupils in Greek. | Pupils in buth Latin and German. | No. of Pupils in Manual Thaining. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | Woodwurk. | Domestic science. |
| Mellen | 47 | 180 | 54 | 7 |  |  |  |  |  |
| Melrose | 33 | 180 | 39 |  | 18 |  | 11 | 31 | 33 |
| Menasha . ........ | 101 | 190 | 67 | 35 35 | 25 |  | 4 |  |  |
| Menomonee Falls .. | 97 225 | 176 180 | +31. | 35 63 | 33 |  | 12 |  | ........... |
| Merrill .......... | 225 28 | 178 | +31 |  |  |  |  |  |  |
| Merrillan ${ }_{\text {Middle on }}$...... | 68 | 180 | 41 | 24 | $\cdots$ |  |  |  |  |
| Middle on ..... Milton | 86 | 180 180 | $\stackrel{41}{57}$ | 38 | 23 |  | 17 |  | . . . . . . . . . |
| Milton Milton Junction | 68 | 180 | 30 | 8 | 16 | . . . . . . . . | 6 |  | ............. |
| Milton Junction Mineral Point . | 68 156 | 180 | 74 | 66 | 45 |  | 19 |  | . ........... |
| Mineral Point .. Minocqua | 35 | 178 | 31 | 7 |  |  |  |  | . . . . . . . . . . . |
| Minocqua .... | 127 | 180 | 80 | 47 | 22 |  | 11 |  | .............. |
| Monroe . . | 159 | 180 | 33 | 86 | 46 | .......... | 11 |  | . . . . |
| Montello . | 54 | 180 | $\stackrel{26}{7}$ | 17 | 17 |  |  |  |  |
| Montfort | 82 | 180 180 | 78 | 12 |  |  |  |  |  |
| Monticello | 28 | 180 180 | 21 | 15 |  |  |  |  |  |
| Mosinee . . | 21 | 180 | 20 42 |  |  |  |  |  |  |
| Mt. Hope . . . . . . . . . | 34 101 | 180 | 64 | 40 | 14 |  |  |  |  |
| Mt. Horeb .... | 101 58 | 180 190 | 64 4 | 37 | 10 |  |  |  |  |
| Muscoda .. | 34 | 180 | 37 |  |  |  |  |  |  |
| Necedah | 48 | 180 | 47 140 |  | $\stackrel{5}{26}$ |  | 7. | 49 | 54 |
| Neミnah .... | 180 | 185 180 | 140 | 43 36 | 35 |  | 2 | 30 | 34 |
| Neillsville $\cdot . .$. | 135 34 | 180 200 | 21 | 36 16 |  |  |  |  |  |
| New Holstein . | 34 73 | 200 179 | 53 | 24 | 15 |  | 8 |  |  |
| New Lisbon ... | 108 | 180 | 82 | 27 | 18 |  | 2 | .... | ............. |
| New London ...... | 108 | 180 | 163 | 55 | 52 |  | 16 |  | 8 |
| New Richmond .... | 227 7 | 180 | 163 3 | 2 | 1 |  |  |  | 8 |
| North Fond du Lac. | 27 | 180 | 31 |  |  |  |  |  |  |
| Norwalk ............ | 35 | 180 180 | 38 25 | ........... ${ }^{11}$ |  |  |  |  |  |


| Oakwood |
| :---: |
| Oconomowoc |
| Oconto |
| Oconto Fralls |
| Omro .... |
| Onalaska |
| Ontario . |
| Oregon |
| Osceola ... |
| Palmyra |
| Pardeeville |
| Park F'alls |
| Patch Grove |
| Pepin .. |
| Peshtigo |
| Pewaukee . |
| Phillips |
| Pittsville |
| Plainfield |
| Platteville |
| Plum City |
| Plymouth . |
| Portage .... |
| Port Washington |
| Potosi ... |
| Poynette .... |
| Prairie du Chien |
| Prairie du Sac |
| Prentice . |
| Prescott . |
| Princeton . |
| Randolph |
| Reedsburg |
| Reeseville . |
| Rewey |
| Rhinelander |
| Rib Lake. |
| Rice Lake ... |
| Richland Center |
| Ridgeway |
| Ripon |
| River Falls |
| Rosendale . |

[^1]
##  <br> 180



FREE HIGH SCHOOLS HAVING FOUR YEAR COURSES, 1910-1911—Continued.

| LOCATION. | Average daily attendance. | No. of days taught. | Pupils in English branches only. | Pupils in German. | Pupils in Latin. | Pupils in Greek, | Pupils in both Latin and German. | No. of Pupils in <br> Manual Training. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | Woodwork. | Domestic science. |
| Sauk City | 34 | 180 | 1 |  |  |  |  |  |  |
| Seneca .... | 29 | 180 | 20 | 42 13 | ... | . $\cdot$. | .............. |  | . . . . . . . . . . . |
| Sextonville | 33 | 180 | 39 |  |  |  |  |  | .............. |
| Shamour | 55 | 190 | 35 | $29$ |  |  |  |  | ...... |
| Sharon Shano | 59 117 | 180 | 10 | 23 | ............. |  | 5 |  | . |
| Sheboygan ..... | 117 370 | 180 200 | 88 | 23 | 20 |  | 5 8 |  | ............. |
| Sheboygan Falls | 370 74 | 200 200 | 231 28 | 123 49 | 93 |  | 39 | $\cdots{ }_{4}$ | $\cdots{ }^{\text {a }}$. ${ }^{\text {a }}$ |
| Shell Lake ...... | 46 | 200 180 | 28 | 49 10 | ............. | ......... |  |  |  |
| Shiocton | 46 24 | 180 | 1 | 10 | . . . . . . . ${ }^{25}$. |  |  |  |  |
| Shullsburg ..... | 74 | 190 | 4 42 | 12 | 25 |  |  |  |  |
| Soldiers Grove .... | 21 | 180 | 19 | 7 7 |  |  |  |  | .............. |
| South Milwaukee . | 83 | 200 | 35 | 33 |  | .......... | $7{ }^{\text {a }}$ |  | . |
| South Wayne ..... Sparta | 19 | 180 | 24 |  |  |  | 7 | ............ | . ............. |
| Sparta ${ }_{\text {Sponer }}$........ | 202 58 | 190 180 | 100 | 70 | 53 |  | $\cdots 16{ }^{\prime}$ | 29 | ............. |
| Spring Green . | 58 | 180 180 | 55 | 16 |  |  |  |  | -.............. |
| Spring Valley . | 38 | 180 | 42 32 | 12 | 3 |  | 1 |  | . |
| Stanley ......... | 132 | 180 | $\begin{array}{r}32 \\ 137 \\ \hline\end{array}$ |  | 8 14 | ..... |  |  |  |
| Stevens Point . | 215 | 190 | 174 | 14 | 14 |  | $4{ }^{4}$ | $32^{\cdots}$ | 50 |
| Stockbridge | 26 | 180 | 174 30 | 42 | 37 | , | 12 | 38 | 56 |
| Stoughton | 250 | 180 | 144 | 82 | 83 |  | $9{ }^{18}$ |  |  |
| Stratford | 22 | 180 | - 24 | 82 | 83 |  | 28 | 28 | ........... |
| Sturgeon Bay | 166 | 188 | 72 |  |  |  |  |  |  |
| 'Sun Prairie | 87 | 183 | - | 30 | 23 19 | ..... | 23 |  |  |
| Thorp ... | 47 | 180 | 54 | 30 7 | 19 | ...... | 6 |  | . . . . . . . . . . . . . . |
| Tigerton . Tomah | 31 | 180 | 38 | , | 7 |  |  |  |  |
| Tomahawk | 178 | 180 | 87 | 83 | $19^{\cdots}$ |  | $\square^{*}$ |  |  |
| Trempealeau | 133 20 | 180 | 114 |  | 4 |  | 21 | ...... | . ............ |
| Two Rivers . | 103 | 200 |  | 8 19 | 18... |  |  |  |  |
| Union Grove ... | 63 | 180 | 33 | 19 22 | 18 | .......... | 9 | ${ }_{46}$ | - ${ }^{44}$ |
| Writy ......... | 25 | 180 | 28 | 22 | 12 | ......... | 2 |  |  |



FREE HIGH SOH JoL HAVING A THREE YEAR COURSE, 1910-1911.

| Friendship ....................... | 22 | 180 | 26 | ............. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - |  |  |  |  |  |  |  |  |  |

FREE HIGH SCHOOLS HAVING FOUR YEAR COURSES.-1910-1911.



FREE HIGH SCHOOLS HAVING FOUR YEAR COURSES.-1910-1911.—Continued.



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| 23 | 42 |
| :---: | :---: |
| ........ | .......... |
| - ${ }^{193}{ }^{\text {a }}$ | $\underbrace{276}$ |
| 34 | 26 |
| $\cdots{ }^{12}{ }^{\text {......... }}$ | 15 |
| 30 | 32 |
| 378 | 797 |
| 14 | 8 |
| 63 | 77 |
| 125 | 143 |
| 9 | 21 |
| 170 | 427 |
| 33 | 42 |
| 124 | 120 |
| 75 | 58 |
| 92 | 197 |
| 17 | 41 |
| 25 | 18 |
| 157 | 191 |
| 124 | 206 |
| 147 | 270 |
| 42 | 75 |
| $161{ }^{\text {a }}$ | 245 |
| 26 | 76 |
| 55 | 91 |
| 23 | 26 |
| 225 | 382 |
| 27 | 32 |
| 16 | 20 |
| 112 | 182 |
| 2 | 5 |
| 113 | 180 |
| 109 | 108 |
| 110 | 175 |
| 82 | 125 |
| 7 | 25 |
| 5 | 11 |
| 79 | 189 |


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FREE HIGH SCHOOLS HAVING FOUR YEAR COURSES.-1910-1911._Continued.

| LOCATION. | Graduates, 1910. |  | No. Graddates, 1910, Who Have Taught Since. |  | Graduates This Year. |  | Graduates Since Organization of SCHOOL. |  | No. nonresident pupils during year. | Rate tuition nonresident; per month. | Total amount received for tuition. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. |  |  |  |
| Menomonee Falls.. | 9 | 12 |  | 2 | 8 | 13 |  |  | 67 | 200 | 1,16400 |
| Merriil ............ | 15 | 35 |  |  | 12 | 27 |  |  | 16 | 200 | 26800 |
| Merrillan | 2 | 2 | 1 | 1 | 3 | 3 | 55 | 93 | 6 | 200 | 10800 |
| Middleton | 4 | 5 |  | 2 | 4 | 5 | 18 | 31 | 2 | 50 | 2700 |
| Milton .... | 5 | 3 | ...... | 2 | 7 | 14 | 27 | 52 | 37 | 200 | 63200 |
| Milton Junction... | 3 | 10 |  |  | 3 | 8 | 43 | 118 | 8 | 200 | 11630 |
| Mineral Point ..... | 16 | 14 |  | 5 | 18 | 17 | 159 | 275 | 42 | 200 | 75350 |
| Minocqua ......... | 1 | 2 |  | 2 | 2 | 3 | 10 | 11 | $\cdots$ | 200 |  |
| Mondovi .......... | 5 | 10 |  | 3 | 10 | 10 | 73 | 120 | 45 | 200 | 78900 50700 |
| Monroe ............ | 8 | 19 |  | 9 | 10 | 30 | 254 | 434 | 30 | 200 | 50700 |
| Montello .......... | 3 | 5 |  | 4 | 2 | 3 | 49 | 112 | 16 | 200 | . . . . . . . . . |
| Montfort ......... | 5 | 9 | 1 | 3 | 4 | 7 | 61 | 130 | 22 | 200 200 | 31600 |
| Monticello ........ |  |  |  |  |  |  |  |  | 4 | 200 | $\begin{array}{r} 6500 \\ 13800 \end{array}$ |
| Mosinee . .......... | 6 | 2 |  | 1 | 1 | 1 | 13 | 13 50 | 10 | 200 160 | $\begin{aligned} & 13800 \\ & 10100 \end{aligned}$ |
| Mt. Hope . . . . . . . . | 1 | 3 |  | 1 | 3 9 | 5 9 | 26 45 | 50 48 | 9 62 | 160 200 | $\begin{array}{r} 10100 \\ 1,04400 \end{array}$ |
| Mt. Horeb ........ | 6 | 8 | . . . . . | 4 | 9 | 9 6 | 45 | 48 53 | 62 51 | 200 200 | $\begin{array}{r} 1,04406 \\ 87760 \end{array}$ |
| Mukwonago ...... | 4 | 8 | . ....... | 2 | 6 3 | 6 4 | 43 58 | 53 68 | 51 | 200 200 | $\begin{aligned} & 87760 \\ & 11375 \end{aligned}$ |
| Muscoda |  | 7 |  | 4 | 3 6 | 4 | 58 107 | 68 155 | 5 7 | 200 200 | $\begin{aligned} & 11375 \\ & 19400 \end{aligned}$ |
| Necedah |  | 7 |  | 5 | 6 13 | 6 18 | 107 119 | 155 | 32 | 200 200 |  |
| Neenah ............ | 8 | 14 |  |  | 13 | 18 | 119 32 | 155 53 | 32 | 200 200 | $\begin{aligned} & 49150 \\ & 86400 \end{aligned}$ |
| Neillsville .......... | 9 | - 15 |  | 6 | 10 | 14 | 32 16 | - 53 | 56 | 200 200 | $\begin{aligned} & 86400 \\ & 13600 \end{aligned}$ |
| New Holstein ..... | 9 | 5 |  | 1 | 2 5 | 7 8 | 16 84 | 19 137 | 8 41 | 200 200 | $\begin{aligned} & 13600 \\ & 67200 \end{aligned}$ |
| New Lisbon . . . . . . | 6 | 8 |  | 5 | 5 10 | 8 | 84 | 137 | 41 53 | 200 200 | $\begin{aligned} & 67200 \\ & 82700 \end{aligned}$ |
| New London ...... | 12 | 5 | 1 | 3 | 10 | 8 | 196 |  | 132 | 200 200 | 2,134 50 |
| New Richmond .... | 26 | 22 | 12 | 12 | , 19 | 27 | 196 | 298 5 | 132 | 200 | 2,134 50 |
| North Orandon ... |  |  |  |  |  |  | 4 | 5 |  |  |  |
| No. Fond du Lac. |  |  |  |  | 1 | 3 | 1 14 | 14 | 17 | 200 200 | 30600 12600 |
| Norwalk ........... | 2 | 2 | .......... | 1 | 4 | 3 | 14 | 118 | 17 | 200 | 127600 |
| Oakfield ........... | 4 | 3 | 1 | 2 | 3 | 9 | 75 52 | 118 | 20 | 200 | $\begin{aligned} & 27600 \\ & 22400 \end{aligned}$ |
| Oakwood .......... |  |  |  |  | 3 |  | 52 105 | 40 190 | 20 70 | 200 200 | $\begin{array}{r} 22400 \\ 1.25300 \end{array}$ |
| Oconomowoc ..... | 9 | 20 | 1 | 7 | 12 | 17 | 105 | 190 | 70 18 |  | 1,25300 43000 |
| Oconto .. | 14 | 26 | 1 | 12 | 11 | 22 | 137 | 218 | 18 | 200 200 | 43000 34100 |
| Oconto Falls ...... | 1 | 3 |  | 2 | 2 | 4 | 14 | 27 | 20 | 200 | 34100 |





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| 1,10070 35900 |
| :---: |
| 13300 |
| 77600 |
| 99750 |
| 85900 |
| 31350 |
| 11700 |
| 5400 |
| 46000 |
| 27800 |
| 21000 |
| 15300 |
| 11400 |
| 44500 |
| 38300 |
| 21600 |
| 1,72100 |
| 1,169 00 |
| 87200 |
| 31400 |
| 53600 |
| 42800 |
| 50000 |
| 14800 |
| 20800 |
| 15050 |
| 53580 |
| 94700 |
| 18000 |
| 30975 |
| 24150 |
| 30000 |
| 65000 |
| 1,040 00 |
| 21600 |
| 73200 |
| 92370 |
| 42900 |
| 62900 |
| 7200 |
| 30000 |
| 64700 |
| 34750 |



FREE HIGH SCHOOLS HAVING FOUR YEAR COURSES.—1910-1911._Continued.



FREE HIGH SCHOOLS HAVING FOUR YEAR COURSES, 1910-1911.

| Location. | Average yearly salary of assistants. | Total amount of salaries of principal and assistant. | Total Number Pupils Enrolled. |  |  |  | Does high school district furnish textbooks? <br> If so, free, rented or sold? | High school apportionment, November, 1910. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1st grade. | 2d grade. | 3d grade. | 4th grade. |  |  |
| Totals and averages........... | \$610 73 | \$1,050,399 90 | 10,131 | 7,640 | 5,790 | 4,585 | ..... | \$121,829 99 |
| Abbotsford . | \$49500 | \$2,090 00 | 16 | 18 | 4 | 12 | Free | \$35674 |
| Albany .... | 59625 | 2,092 50 | 12 | 11 | 8 | 10 | No ..... | ${ }_{356} 354$ |
| Algoma | 68300 | 3,450 00 | 50 | 26 19 | 30 8 | 14 | Free ... | ${ }^{356} 74$ |
| Alma | 49500 | 2,040 00 | 17 | 19 | 10 | 11 | Free | 35674 |
| Alma Oenter | 54000 | 1,350 00 | 14 | ${ }_{3}$ | 6 | 8 | No . | 35674 |
| Almond | 45000 | 1,17000 | $\stackrel{19}{27}$ | 14 | 14 | 5 | No . | 35674 |
| Amery | 66500 | 2,530 $\mathbf{1 , 4 4 0} 00$ | 18 | 5 | 10 | 12 | No | 35674 |
| Amherst | 54000 73857 | 1,44000 12,340 | 105 | 87 | 66 | 52 | Rented | 35674 |
| Antigo .... | 73857 <br> 80742 <br> 805 | 12,340 ${ }^{17,467} 23$ | 115 | 122 | 75 | 58 | No | 35674 |
| Arcadia | 66000 | 3,380 00 | 28 | $\stackrel{24}{21}$ | 20 7 | 14 4 | No | 72000 |
| Arena | ${ }_{6}^{630} 00$ | 1,630 00 | 19 22 | 13 | 19 | 19 | Rented | 35674 |
| Argyle | 56250 88263 | $\begin{array}{r}\text { 2,225 } \\ 15,635 \\ \hline 100\end{array}$ | 22 | 85 | 55 | 49 | Sold | 35674 |
| Ashland | 88263 540 00 | 15,635 1,980 | 16 | 9 | 8 | 5 | Free .................... | 35674 35674 |
| Augusta ..... | 60000 | 3,300 00 | 28 | 35 | 25 | 17 | Free | ${ }^{356} 74$ |
| Avoca. | 47500 | 1,20000 | 8 | 8 29 | 5 24 | 15 | Free | 35674 |
| Baldwin | 55125 | 2,56500 180000 | 25 14 | 17 | 16 | 7 | Free | 35674 |
| Bangor ..... | 49500 70600 | 1,800 <br> 7,554 <br> 100 | 74 | 72 | 62 | 37 | No . | ${ }^{356} 74$ |
| Baraboo .... | 70600 615 | 3,563 00 | 44 | 41 | 15 | 20 |  | $\begin{array}{r}356 \\ \hline 14 \\ 1.347 \\ \hline\end{array}$ |
| Bayfield ...... | 63000 | 4,850 00 | 37 | ${ }_{37}^{20}$ | 14 | 12 | Free . .................. | 1,347 356 |
| Beaver Dam | 71060 | 5,050 00 | ${ }_{6}^{41}$ | 37 12 | 20 6 | 21 3 | Nold | ${ }_{356} 74$ |
| Belleville ... | 51750 | 2,03500 2 2 | ${ }_{13}^{6}$ | ${ }_{9}$ | 10 | 8 | Rented | 35674 |
| Belmont.. | 58500 76333 | $\begin{array}{r}2.170 \\ 13,740 \\ \hline 100\end{array}$ | 215 | 112 | 107 | 39 | No | 35674 |
| ${ }_{\text {Beloit }}$ | $\begin{array}{r}\text { 1,021 } 50 \\ \hline 183\end{array}$ | 13,79150 1,921 | 13 | 10 | 8 | 10 |  | ${ }^{356} 74$ |
| Berlin | 10300 | 4,04833 | 30 | 43 | 26 | ${ }_{8}^{20}$ |  | 35674 35674 |
| Birnamwood |  | 1.26000 1.95500 | 20 13 | 10 8 |  | 14 |  | 35674 |
| Black Earth ...... | $\begin{array}{r} 54000 \\ 61875 \end{array}$ | 1,955 00 | ${ }_{33}^{13}$ | 42 | 31 | 22 | Free | 35674 |
| Black River Falls. Blair | 61875 517 50 | 1,925 2,035 | 19 | 18 | 26 | 26 | Sold .... | 35674 |


| Blanchardville |
| :---: |
| Bloomer ... |
| Bloomington |
| Blue River |
| Boscobel |
| Boyd |
| Brandon |
| Brillion. |
| Brodhead |
| Brooklyn |
| Bruce |
| Burlington |
| Cadott..... |
| Cambria |
| Cambridge |
| Campbellsport |
| Cashton .... |
| Cassville .. |
| Cedarburg |
| Chetek ... |
| Chilton ...... |
| Chippewa Falls |
| Clinton |
| Clintonville |
| Cobb |
| Colby |
| Colfax |
| Columbus |
| Crandon |
| Cuba City |
| Cumb:rland |
| Darien ... |
| Darlington |
| Deerfield |
| De Forest |
| Delavan |
| De Pere .. |
| Dodgeville |
| Durand ... |
| Eagle River |
| East Troy . |
| Eau Claire |
| Edgar ... |
| Edgerton ... |


| 63000 | 1,53000 |
| :---: | ---: |
| 49500 | 1,99000 |
| 55500 | 2,66500 |
| $\cdots \ldots \ldots \ldots$ | 93125 |
| 63593 | 3,94372 |
| 45000 | 1,21500 |
| 52250 | 1,97000 |
| 56250 | 1,70500 |
| 72000 | 3,36000 |
| 58500 | 1,26000 |
| 90000 | 1,75500 |
| 71250 | 5,97500 |
| 45000 | 1,30000 |
| 47250 | 1,84500 |
| 56250 | 2,07500 |
| 42750 | 1,28250 |
| 63000 | 2,67300 |
| 54000 | 2,08000 |
| 70000 | 3,37500 |
| 49500 | 1,35000 |
| 70000 | 4,25000 |
| 76550 | 9,86300 |
| 59250 | 2,97750 |
| 66750 | 3,20250 |
| 94500 | 1,66500 |
| 71750 | 2,38500 |
| 49500 | 1,30500 |
| 69553 | 6,66875 |
| 50250 | 3,16500 |
| 54000 | 2,64500 |
| 60750 | 3,93000 |
| 49500 | 1,39500 |
| 71250 | 4,15000 |
| 54000 | 2,08000 |
| 60750 | 4,03000 |
| 65700 | 4,83500 |
| 66500 | 3,40000 |
| 68900 | 6,30700 |
| 57000 | 2,91000 |
| 66600 | 2,59200 |
| 49500 | 1,89000 |
| 67545 | 17,88750 |
| 54000 | 1,35000 |
| 60300 | 4,45500 |
| 50 |  |

[^2]

| 10 7 17 | 8 7 16 |
| :---: | :---: |
| $24$ | ……...... |
| : 3 | 2 |
| -6 | 6 |
| 6 | 11 |
| 15 | 16 |
| 8 | 2 |
| 10 | 3 |
| 38 | 20 |
| 5 | 2 |
| 13 | 12 |
| 18 | 9 |
| 11 | 3 |
| 13 | 16 |
| 18 . | 7 |
| 15 | 18 |
| 16 | 7 |
| 24 | 18 |
| 61 | 43 |
| 8 | 11 |
| 13 | 13 |
| $\begin{array}{r}18 \\ \hline\end{array}$ | 7 |
| 10 | 17 |
| 7 | 2 |
| 38 | 18 |
| 15 | 8 |
| 19 | 7 |
| 26 | 14 |
| 8 | 2 |
| 26 | 14 |
| 7 | 8 |
| 31 | 16 |
| 21 | 15 |
| 13 | 11 |
| 39 | 30 |
| 16 | 14 |
| 9 | 12 |
| 13 | 11 |
| 136 | 116 |
| 7 | 6 |
| 33 | 22 |




[^3]FREE HIGH SCHOOLS HAVING FOUR YEAR COURSES, 1910-1911_Continued.



| 61750 | 3.29250 |
| :---: | :---: |
| 54000 | 1,440 00 |
| 66600 | 6.466 50 |
| 51750 | 1,282 50 |
| 73125 | 4,475 00 |
| 49500 | 1,39500 |
| 54000 | 2.02500 |
| 63000 | 2.16000 |
| 84017 | 15.10250 |
| 75200 | 4,085 00 |
| 49500 | 1,215 00 |
| 60000 | 2,950 00 |
| 71500 | 4.99063 |
| 54000 | 1,440 00 |
| 1,045 00 | 13,200 00 |
| 58500 | 1.88500 |
| 80000 | 3,600 00 |
| 62500 | 2,550 00 |
| 67500 | 2,450 00 |
| 69850 | 4,286 80 |
| 51750 | 2.03500 |
| 62250 | 4.54500 |
| 68625 | 4,335 00 |
| 70500 | 5,530 00 |
| 54000 | 2,025 00 |
| 55000 | 1,500 00 |
| 61875 | 3,775 00 |
| 49500 | 1.35000 |
| 56250 | 2.02500 |
| 55500 | 2,765 00 |
| 93500 | 15,825 00 |
| 80275 | 11,006 25 |
| 49500 | 1,890 00 |
| 54000 | 2,180 00 |
| 51750 | 2.11500 |
| 70127 | 6.96013 |
| 54000 | 1.35000 |
| 59400 | 3.87000 |
| 66500 | 3,420 00 |
| 60000 | 3.05000 |
| 60485 | 5,257 50 |
| 60000 | 3,200 00 |
| 54000 | 1,305 00 |
| 70300 | 7.00000 |



[^4]


FREE HIGH SCHOOLS HAVING FOUR YEAR COURSES, 1910-1911—Continued.



## 51750 49500 58500 60750 49200 50000 63000 54000 49500 60000 56250 559 472 40 50 50 697 00 450 700 70172 747 700 700 495 00






[^5]FREE HIGH SCHOOLS HAVING FOUR YEAR COURSES, 1910-1911-Concluded.

| LOCATION. | A verage | Total amount | Total Number Pupils Enrolled. |  |  |  | Does high school dis- <br> trict turnish textbooks: <br> If so, free, rented or sold? | High school apportionment, November, 1910 . |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ary of assistants. | principal and assistants. | 1st grade. | 2d grade. | 3d grade. | 4th grade. |  |  |
| Shawano . |  |  |  |  |  |  |  |  |
| Sheboygan ......... | 60300 86176 | $\begin{array}{r}4,520 \\ 16,300 \\ \hline 00\end{array}$ | 48 149 | 38 | 24 | 15 | No ...................... |  |
| Sheboygan Falls | 86176 783 | $\begin{array}{r}16,300 \\ 3,750 \\ \hline 100\end{array}$ | 149 27 | 110 13 | 80 | 64 |  | 35674 35674 |
| Shiocton . . | 56250 | 2,125 00 | 27 25 | 13 | 19 | 18 | Free . . . . . . . . . . . . . . . . | 35674 |
| Shullsburg | 45000 | 1,170 00 | 20 | 7 | 10 | 4 | Free . | 1,045 84 |
| Soldiers Grove | 68875 54000 | 3,11625 | 26 | 24 | 16 | 15 | No ....................... | 36000 |
| South Milwaukee | 540 780 00 | 2.080 3,94100 | 9 | 7 | 6 | 15 5 |  | 35674 |
| South Wayne ... | 54000 | 3,94100 1,440 | 38 | 23 | 25 | 16 |  | 35674 |
| Sparta . . . . . | 540 79928 | 1,440 7,39500 | 7 81 | 11 | 4 4 | 16 |  | 35674 |
| Spooner ..... | 55500 | 2,395 00 | 81 | 68 | 42 | 35 | Rented ......................... | 73500 |
| Spring Green .. | 59625 | 2,74500 2,34250 | 36 21 | 14 | 16 | 5 | Rree . . . . . . . . . . . . . . . . . . . . . . . | 35674 |
| Spring Yalley | 60750 | 2,34250 2,21500 | 21 | 19 | 22 | 5 |  | 35674 |
| Stanley ${ }_{\text {Stevens }}$ | 63963 | 2,215 5,9 | 6 55 | 14 | 10 | 8 | Free ................................ | 35674 35674 |
| Stevens Point | 71250 | 7,362 50 | 50 90 | 48 | 39 | 23 | Free ......................... | 35674 |
| Stockbridge . | 54000 | 1.26000 | 15 | 70 10 | 60 | 32 | No . . . . . . . . . . . . . . . . . . . . . . | 35674 35674 |
| Stratford | 65862 | 7,245 00 | 84 | 72 | 2 68 | 2 | Frree . . . . . . . . . . . . . . . . . | 35674 |
| Sturgeon Bäy | 58500 | 1,585 00 | 12 | 9 | 6 | 57 | Free . . . . . . . . . . . . . . . . . | 35674 |
| Sun Prairie. | 685 585 00 | 5,745 00 | 66 | 42 | 31 | 29 | No ........ | 60945 |
| Thorp ... | 58500 58500 | 3,255 00 | 26 | 34 | 18 | 29 | No . | 35674 |
| Tigerton. | 48500 | 1,44000 | 25 | 13 | 9 | 18 | No . | 35674 |
| Tomah | 49500 | 1,350 00 | 14 | 5 | 18 | 7 | Free . | 35674 |
| Tomahawk | 68400 | 5,445 00 | 63 | 46 | 18 | 5 | Sold . | 65250 |
| Trempealeau | 57792 49500 | 4.66750 | 51 | 40 | 26 | 36 22 | Free . . . . . . . . . . . . . . . . . | 35674 |
| Two Rivers . | 49500 745 | 1,49500 4,36250 | 7 | 4 | 8 | 22 3 | $\underset{\text { Free }}{\text { No }}$ | 35674 |
| Union Grove | 517 50 | 4,36250 1,83500 | 51 | 24 | 18 | 21 | No . . . . . . . . . . . . . . . . . . . | 35674 |
| Unity | 51700 | 1,83500 1,350 | 17 | 25 | +88 | 17 | Free . . . . . . . . . . . . . . . . . . | 35674 |
| Verona | 59500 | 1,350 2,140 | 15 | 5 | 6 | 17 |  | 35674 |
| Viola .. | 55494 | 2,140 2,24500 | 5 | 16 | 15 | 12 |  | + 32107 |
| Viroqua | 65494 63643 | 2,24500 6,15500 | 25 | 17 | 22 | 11 | No Free ........................... | 1,080 00 |
| Wabeno | 60000 | 6,15500 3,300 | 72 | 62 | 42 | 30 | Free ...................... | 35674 |
| Waldo ... | 600 787 50 | 3,30000 1,68750 | 22 | 20 | 10 | 8 | Free ....................... | 35674 |
| Walworth | 49500 | 1,68750 2,09300 | 30 19 | 11 | 19 | 18 | Free Sold . . . . . . . . . . . . . . . . . . . . . . | 1,200 00 |
|  |  | 2.09300 |  | 21 | 19 | 11 |  | 35674 35674 |



## INDEPENDENT HIGH SCHOOLS HAVING FOUR YEAR COURSES, 1910-1911.

| Location. | Principal. | $\begin{gathered} \text { Legal } \\ \text { qualitica- } \\ \text { tion } \\ \text { of the } \\ \text { principal. } \end{gathered}$ | Salar. of the principal. | No. teachers employed. |  | Enrollment in High School. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Pupils under 20 sears of age. |  |  | Pupils over 20. |
|  |  |  |  | Male. | Female. | Male. | Hemale. | Total. |  |
| Totals and Averages |  |  | \$26,850 00 | 111 | 204 | 3,995 | 4,021 | 8,016 | 36 |
| Fond du Lac | I. O. Hubbard ..................... |  | \$1,800 00 | 6 | 11 | 185 | 217 | 402615 | 114 |
| La Crosse ... | B. E. McCormick .... |  | 1,700 00 | $\stackrel{9}{12}$ | ${ }_{26}$ | ${ }_{357}$ | 406 |  |  |
| Madison .. | Thos. L. Jones .... |  | 2,500 00 |  |  |  |  | 763 | $\stackrel{2}{2}$ |
| Menomonie | Geo. A. Works..... | İgun | 1,8503,0003 | 210 | $\begin{array}{r}7 \\ 21 \\ \hline\end{array}$ | 110 | 121 | 231 |  |
| Milwaukee (East Div.). | G. A. Chamberlain |  |  |  |  | 320 627 | 681 | 1,308 | $\begin{aligned} & 2 \\ & 1 \\ & 1 \end{aligned}$ |
| Milwaukee (West Div.).. | A. C. Shong | 2 | 2,500 <br> 3,000 | 1614 | 30 22 | 627 |  |  | 1 4 |
| Milwaukee (North Div.) | R. E. Krug .... |  | 2,600 00 |  | ${ }_{18}^{22}$ |  |  | 815691 | 22 |
| Milwaukee (South Div.) | H. E. Coblentz | = | 2,600 <br> 1,900 <br> 00 | ${ }_{8}^{13}$ |  | 424 336 | 391 <br> 355 |  |  |
| Racine . | E. W. Blackhurst |  | $\begin{aligned} & 2,00000 \\ & 1,900 \\ & 2,100 \\ & 2,100 \end{aligned}$ | 844 | 4 | 31656 | 29582 | $\begin{aligned} & 611 \\ & 138 \end{aligned}$ | 4 |
| Superior (Dewey) | A. T. Conrad .... | 気 |  |  |  |  |  |  | $\cdots{ }_{3}$ |
| Superior (Blaine) | H. A. Schofield ... |  |  |  | 14 | 355 |  |  |  |

INDEPENDENT HIGH SCHOOLS HAVING FOUR YEAR COURSES, 1910-1911.


Independent free high schools having four year courses_1910-1911.

| Location. | $\begin{gathered} \text { Graduates } \\ 1910 . \end{gathered}$ |  | No. Gradutates 1910, WHO HAVE Tajght Since. |  | Graduates this Year. |  | Graduates since Organization of SCHOOL |  | No. nonresident pupils during year. | Rate tuition nonresi dents per month. | Total amouut received for tuition. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female. | Male. | Female. | Male. | Fem. | Male. | Fem. |  |  |  |
| Totals and averages. | 404 | 517 | 5 | 21 | 427 | 517 | 2,596 | 3,853 | 370 | \$4 31 | \$11,046 40 |
| Fond du Lac. |  |  |  |  |  |  |  |  |  |  |  |
| La Crosse . | 32 3 | 49 |  | 6 | 21 38 | 26 38 | 291 | 542 | 72 23 | $\$ 400$ 20 | \$3,884 20 |
| Menomonie | 47 | 62 |  |  | 43 | 54 |  | 542 | 23 42 | 240 400 | 30120 1680 |
| Milwaukee (East Division) | $\stackrel{21}{43}$ | 21 45 |  | 5 | 19 | 18 | 291 | $32.1{ }^{-1}$ | 40 | 400 300 | 1,680 1,09100 |
| Milwaukee (West Division). | 43 50 | 45 70 |  |  | 41 | 62 | - |  | 13 | 600 | 1,691 600 00 |
| Milwaukee (North Division) | 44 | 70 42 |  |  | 60 | 77 | 465 | 763 | 17 | 600 | 63000 |
| Milwaukee (South Division). | 45 | 60 | 1 | $1 .$. | 47 | 51 62 | 152 | 177 | 16 | 600 |  |
| Racine .... | 34 | 40 | 2 | 3 | 50 | 62 46 | 428 467 | 565 | 48 | 600 |  |
| Superior (Dewey). | 31 9 | $\stackrel{36}{9}$ | 1 | 2 | 22 | 31 | 411 | 555 772 | 46 45 | 400 | 1,061000 |
|  |  |  |  |  |  | 40 |  |  | 8 | 200 | 15200 |

INDEPENDENT HIGH SCHOOLS HAVING FOUR YEAR COURSES, 1910-1911.


STATE GRADED SCHOOLS, 1910-1911.
FIRST CLASS.






出必思出
 $\qquad$
$\qquad$











STATE GRADED SCHOOLS, 1910-1911—Continued.
FIRST CLASS.





|  |
| :---: |
|  |  |


| 1000 | 800 | 761 |  |
| :---: | :---: | :---: | :---: |
| 4424 | 10000 | 3890 |  |
|  | 4546 | 8637 | 48065 |
| 675 | 4705 |  | 11700 |
| 1,841 71 | 1303 | 30575 |  |
|  |  |  |  |
| 20009 | 8500 | 14500 |  |
| 31000 | 12500 | 12500 |  |
| 1655 | 2585 | 34942 |  |
| 3082 | 12795 | 13914 |  |
|  | 5466 | 3208 |  |
| 8401 | 563 | 11278 |  |
| 3567 |  | 9465 |  |
| 2980 |  | 1578 |  |
| 2161 | 7020 | 5589 |  |
|  | 3568 | 1470 |  |
|  |  | 29177 | 24900 |
|  |  | 26435 | 4000 |
| 12500 | 9000 | 36678 |  |
| 8416 |  | 4238 | 28150 |
| 6883 | 680 | 3818 |  |
| 3000 | 15000 |  |  |
|  | 7736 | 8018 | 79200 |
| 20000 | 16500 | 80000 |  |
| 4599 | 19550 | 16650 |  |
| 18842 | 5939 | 32915 |  |
|  | 1511 | 32313 |  |
|  | 15132 | 2,966 91 |  |
| 1311 | 2980 | 4559 |  |
| 4080 |  | 22697 |  |
|  | 8534 | 5463 |  |
| 10415 | 5969 | 4550 |  |
|  |  | 12800 |  |
| 7480 | 3001 | 31468 | 2,433 94 |
|  | 20000 |  |  |
| 11500 | 1340 | 1825 |  |
| 23121 | 4686 | 90186 |  |
| 4016 | 5191 | 775 |  |
| 2302 | 11978 | 7644 |  |
| 6145 | 11815 | 25743 | 50000 |
| 20418 | 8,00 | 34600 | 11000 |


| 56088 | 2,138 95 |
| :---: | :---: |
| 63446 | 2,680 60 |
| 72445 | 2,776 93 |
| 1,902 15 | 4,187 95 |
| 1,121 45 | 6,004 44 |
| 2,504 52 | 4,844 52 |
| 85261 | 2,785 70 |
| 75000 | 4,512 50 |
| 39168 | 2,281 00 |
| 55112 | 2,334 03 |
| 74947 | 2,231 21 |
| 53823 | 2,675 65 |
| 20402 | 1,504 34 |
| 41639 | 1,631 97 |
| 1,031 85 | 3,294 55 |
| 2,273 97 | 6,780 60 |
| 1,343 60 | 4,334 37 |
| 3,945 54 | 13,980 39 |
| 2,361 61 | 16,003 39 |
| 1,953 19 | 8,101 23 |
| 1,887 85 | 4,742 91 |
| 5000 | 2,210 00 |
| 47948 | 3,049 02 |
| 1,170 00 | 3,800 00 |
| 1,689 60 | 3,645 59 |
| 35595 | 2,837 91 |
| 81123 | 4,636 97 |
| 95155 | 7,774 78 |
| 30228 | 1,803 78 |
| 89522 | 2,662 99 |
| 38312 | 1,850 59 |
| 25011 | 1,719 45 |
| 1,307 17 | 4,327 67 |
| 1,329 35 | 9,575 28 |
| 3,889 37 | 5,384 37 |
| 91432 | 3,557 97 |
| 6,162 78 | 15,217 71 ${ }^{\text {c }}$ |
|  | 1,332 00 |
| 68045 | 2,265 27 |
| 31885 | 2,698 09 |
| 2,032 17 | 6,292 45 |
| 42074 | 2,888 92 |
| 98163 | 9,256 38 |

STATE GRADED SCHOOLS, 1910-1911-_Con inued.
FIRST ClASS.

| Location. | No. of departments. | Enrollment. |  |  | Average Attendance. |  |  | Graduaters This Year. |  |  |  | Financial Report. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{gathered} \stackrel{\rightharpoonup}{\dddot{5}} \\ \stackrel{0}{0} \end{gathered}$ |  |  |  | ¢ | 㥻 | 家 | Teachers' wages. | Apparatus. | Books. | Repairs. | New buildings. | All other purposes. | Tutal. |
| Patch Grove | 3 | 40 | 43 | 83 | 29 | 32 | 61 |  | 2 | 2 | 1,215 00 |  | 3412 | 3064 |  | 68446 | 1,964 22 |
| Pembine ... | 3 | 42 | 35 | 77 | 31 | 28 | 59 | 1 | 2 | 3 | 1,642 50 | 65 | 4522 | 16443 | . . . . . | 26758 | 2,120 38 |
| Pleasant Prairie | 3 | 62 | 43 | 105 | 52 | 31 | 83 | 3 | 2 | 5 | 1,350 00 | 7670 | .170... | 12645 | .......... | 29478 | 1,847 4,40868 |
| Port Edwards | 5 | 63 | 75 | 138 | 56 | 59 | 115 | 4 | 7 | 7 | 2,705 00 | 11500 | 11799 | 13150 |  | 1,33919 1,78704 | 4,40868 4,249 74 |
| Port Wing | 4 | 83 | 59 | 142 | 68 | 52 | 120 | 4 | 4 | 8 | 2,108 50 | 8121 | 21939 4869 | 5360 | .......... | 1,78704 23556 | 4,249 <br> 1,782 <br> 15 |
| Poysippi | 3 | 51 | 51 | 102 | ํ.. |  | 60 | 1 | 1 | $\stackrel{2}{9}$ | 1,413 000 | 8550 | 4869 3042 | 5606 |  | 23518 | 1,864 69 |
| Prairie Farm | 3 | 39 | 54 | 93 | 22 | 38 | 60 | 3 | 6 | 9 | 1,260 00 |  | 3042 | 560 |  |  |  |
| Racine ... | 4 |  |  | 166 | 63 |  | 124 |  | 5 | 5 7 | 2,470 1,260 | 6330 2099 | 2249 | 7821 |  | 2,83449 21810 | 5,367 79 |
| Racine | 3 | 82 | 74 | 156 | 63 | 60 | 123 | 2 | 5 | 7 | 1,260 00 | 2099 12834 | 2249 100 | 18982 149 | 1,385 85 | 53279 | 2,706 60 |
| Readstown | 4 | 65 | 76 | 141 | 38 | 50 | 88 | 1 | 3 | 4 | 1,7930 00 | 12834 | 10075 | 14982 |  | 4,38050 |  |
| Redgranite | 9 | 182 | 182 | 364 | 158 | 163 | 321 |  |  |  | 3,475 75 | 2481 |  |  | 12,267 07 | 4,380 50 | 20,148 13 |
| Reedsville . | 4 | 69 | 55 | 124 | 52 | 43 | 95 | 4 | 1 | 5 | 1,93500 | 315 | 1530 | 803 | 350 | 1,262 29 | 3,223 77 |
| Rio | 5 | 104 | 103 | 207 | 69 | 84 | 153 | 1 | 6 | 7 | 2,655 00 | 7401 | 9433 | $\begin{array}{r}1125 \\ 235 \\ \hline\end{array}$ | 6,350 00 | 1,211 13 | 10,32171 2,41186 |
| Roberts | 3 | 46 | 49 | 95 | 35 | 38 | 73 | 3 | 7 | 10 | 1,440 00 | 7491 | 8805 16230 | 23559 18370 | 21000 | 36331 1,03470 | 2,41186 2,719 |
| Rosholt | 3 | 46 | 57 | 103 | 34 | 45 | 79 | 2 | 2 | 4 | 1,339 00 | ........... | 16230 | $\begin{array}{r}18370 \\ 79 \\ \hline 1\end{array}$ |  | 1,034 16644 | 1,796 40 |
| Royalton | 3 | 46 | 41 | 87 | 29 | 29 | 58 | 1 | 2 | 3 | 1,530 00 |  | 2075 2500 | 15000 |  | 16644 | 2,438 75 |
| Saxon | 3 | 45 | 64 | 109 | 28 | 53 | 81 | 1 | 2 | 3 3 | 2,113 1,575 00 | 15000 2110 | 2500 2521 | 15000 |  | 83466 | 2,438 2,599 63 |
| Scandinavia | 3 | 38 | 58 | 96 | 28 | 52 | 80 82 | 1 | 2 | 3 3 | 1,575 1,21500 | 2110 4751 | 13 86 | 143 2104 | 7500 | 334664 | 1,709 05 |
| Schleisingerville | 3 | 51 | 61 | 112 | 38 98 | 44 101 | 82 193 | 1 | 2 8 | 3 12 | 1,21500 2,88250 | 47 51 . | 1386 <br> 57 <br> 18 | 2154 550 | 7500 | 30826 908 | 1,903 94 |
| Schofield | 6 | 141 | 135 | 276 | 92 | 101 | 193 | 4 | 8 | 12 | 2,88250 1,55250 |  | 5768 4119 | $\begin{array}{r}55 \\ 126 \\ \hline 61\end{array}$ | 3,537 31 | 46044 | 6,117 21 |
| Shiocton | 4 | 70 | 63 | 133 | 35 | 37 | 72 | 3 | 2 | 5 | 1,552 50 | 39916 | 4119 | 12661 20 | 3,537 31 | 50384 | 2,09865 |
| South Wayne | 3 | 37 | 34 | 71 | 27 | 29 | 56 | 1 | 5 | 6 | 1,530 00 | 4411 |  | 175 6 | .............. |  |  |
| Spencer | 3 | 36 | 67 | 103 | ..... |  |  | 1 | 1 | $\stackrel{ }{2}$ | 1,350 00 | 1940 | 7616 | 17506 | . . . . | 33158 | 1,95310 |
| Stockholm | 3 | 47 | 30 | 77 |  |  | 60 | 3 | 3 | 6 | -1,39300 | 1715 | 1067 | 5940 |  | 47320 1.49813 | 1,894 02 |
| Stratford | 3 | 51 | 54 | 105 | 32 | 43 | 75 | 3 | \% | 3 | 1,575 00 | 8825 20025 | 8737 | 5940 20025 |  | 1,49813 210 | 1,370 59 |
| Taylor .. | 3 | 47 | 48 | 95 | 34 | 39 | 73 | 4 | 2 | 6 | 1,260 00 | 20025 | .... | 20025 |  | 21009 | 1,870 59 |



STATE GRADED SCHOOLS, 1910-1911.
SECOND CLASS.


STATE GRADED SCHOOLS, 1910-1911—Continued.
SECOND CLASS-Continued.

| Location. |  | Enrollment. |  |  | Average attendance. |  |  | Graduates this Year. |  |  | Financial Refort. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\stackrel{ \pm}{\text { ® }}$ |  | ञّ ¢ E |  | 完 | - | $\stackrel{\dot{0}}{\underset{玉 E}{\Xi}}$ |  | - | Teachers' wages. | $\begin{aligned} & \text { Appara- } \\ & \text { tus. } \end{aligned}$ | Books. | Repairs, | New buildings. | All other purposes | Total. |
| Curtiss | 2 | 33 | 44 | 77 | 24 | 31 | 55 | 3 | 4 | 7 | 94500 | 2200 | 3082 |  | 66346 | 42107 | 2,082 35 |
| Cylon | 2 | 46 | 44 | 90 | 31 | 40 | 71 | 2 | 1 | 3 | 94500 |  | 3082 |  | 66346 | 20631 | 1,151 31 |
| Dale | 2 | 39 | 34 | 73 | 32 | 30 | 62 | 3 |  | 3 | 90000 | 5268 |  | 7137 |  | 4470 | 1,068 75 |
| Dallas | 2 | 43 | 39 | 82 | .... |  | 43 |  | 1 | 1 | 94500 |  |  | 300 |  | 26119 | 1,209 19 |
| Delton .. | 2 | 36 | 29 | 65 | 24 | 21 | 45 | 1 | 2 | 3 | 80750 | 3767 | 200 | 3267 |  | 19691 | 1,076 75 |
| Denmark ....... | 2 | 49 | 43 | 92 | 30 | 25 | 55 | 1 |  | 1 | 79200 | 26394 | 6993 | 1,546 82 |  | 58204 | 3,254 73 |
| Detroit Harbor | 2 | 47 | 32 | 79 | 38 | 27 | 65 | 5 | 2 | 7 | 88200 | 600 | 6337 | 7828 |  | 49553 | 1,525 18 |
| Disco ... Dousman | 2 | 27 | 34 | 61 | ..... |  | 43 | 1 |  | 1 | 76500 | 4336 | 2372 | 2955 |  | 25730 | 1,118 93 |
| Dousman ... | 2 | 32 | 29 | 61 | 32 | 29 | 61 | 6 | 6 | 12 | 1,14700 | 1706 | 4565 | ....... |  | 60518 | 1,814 89 |
| Doylestown ..... | 2 | 39 | 36 | 75 |  |  | 51 | 1 | 2 | 3 | 91000 |  |  |  |  | 41788. | 1,327 88 |
| Dresser Junction | 2 | 27 | 39 | 66 |  |  | 50 | 2 | 1 | 3 | 85500 |  | 8960 | 3882 |  | 35042 | 1,333 84 |
| Dresser Junction | 2 | 36 | 39 | 75 | 20 | 24 | 44 |  |  |  | 81000 | 2406 | ....... | 450 |  | 15622 | 1,994 78 |
| Eastman | 2 | 34 | 34 | 68 | . 24 | 24 | 48 | 1 | 2 | 3 | 94500 |  | 675 | 19155 | ........... | 7403 | 1,217 33 |
| Elcho . | 2 | 46 | 43 | 89 |  |  | 64 |  |  |  | 99000 | 1700 | 4910 | 2285 |  | 13299 | 1,21194 |
| Elderon | 2 | 44 | 58 | 102 | 30 | 32 | 62 |  | 3 | 3 | 96750 | 2500 | 10000 |  |  | 4296 | 1,135 46 |
| Eleva ...... | 2 | 42 | 41 | 83 | 27 | 31 | 58 | 1 | 3 | 4 | 73800 | 968 | 6940 | 7500 |  | 32338 | 1,215 46 |
| Elk Mound | 2 | 35 | 23 | 58 |  |  | 43 | 1 | 5 | 6 | 75500 | 3964 | , | ...... |  | 30698 | 1,101 62 |
| Ellison Bay | 2 | 30 | 38 | 68 | 20 | 26 | 46 | 1 | 2 | 3 | - 90000 |  |  | 35000 |  | 19880 | 1,448.80 |
| Elroy . | 2 | 27 | 39 | 66 | 24 | 19 | 43 | 2 | 3 | 5 | - 85500 | 7500 | 4000 | 15000 | 8000 | 52504 | 1,725 04 |
| Elton ${ }^{\text {Estella }}$ | 2 | 53 | 47 | 100 | 30 | 25 | 55 |  | 2 | 2 | 99000 | 1764 | 899 | 19410 |  | 12688 | 1,337 61 |
| Estella | 2 | 27 30 | 33 35 | 60 65 | 21 | 21 | 42 55 | 5 | 3 | 8 | 81000 | 4250 | 7500 | 10000 |  | 9187 | 1,119 37 |
| Fairwater | 2 | 30 26 | 35 42 | 65 | 19 | 33 | 55 | 1 | 2 | 2 | $\begin{array}{r}810 \\ 1 \\ \hline 000\end{array}$ |  |  | 321 |  | 34997 | 1,163 18 |
| Falun .. | 2 | 30 | 33 | 63 | 22 | 24 | 46 | 1 |  | 1 | 1,08000 78300 | 2426 5613 | 4274 4278 | 1000 | 6,971 00 | 25623 | 8,384 23 |
| Fenwood | 2 | 42 | 42 | 84 | 30 | 31 | 61 | 3 | 2 | 5 | 85500 | 5613 | 4278 4648 | 6088 5684 | . | 43773 | 1,380 52 |
| Ferryville ........ | 2 | 36 | 35 | 7 | 3 | 19 | 42 |  | 2 | 2 | 7200 |  |  | 8332. |  | 6670 $73 \quad 37$ | $\begin{array}{r} 1,02502 \\ 87669 \end{array}$ |

Report of the State Superintendent.


## 

 लึ




| 94500 |  | 3824 | 1125 |  |
| :---: | :---: | :---: | :---: | :---: |
| 1,039 50 | 6899 | 2400 | 4343 |  |
| 1,008 00 | $\ldots$ | 2000 | 2500 |  |
| 1,045 00 | 2000 | 2500 | 59.29 | 3,565 85 |
| 1,039 50 | 2934 |  | 5929 3600 |  |
| 81000 |  | 3508 3700 | 3600 18 70 |  |
| 81000 | 16000 | 3700 | 1870 4875 |  |
| 1,080 00 | 1457 |  | 4875 |  |
| 1,035 00 | 2382 | 2316 | 566 |  |
| 76500 | 1600 | 853 | 5715 |  |
| 90000 | 3719 |  | 3827 |  |
| 85500 | 1194 |  | 2856 |  |
| 74250 |  |  |  |  |
| 82800 |  |  |  |  |
| 76500 | 23760 | 2924 | 3125 | 86900 |
| 76500 |  | 5542 | 79923 |  |
| 81000 |  | 6500 |  |  |
| 81000 |  | 900 | 1805 |  |
| 81000 |  | 4916 | 525 |  |
| 64800 |  |  |  |  |
| 87750 | 600 | 2484 | 1528 |  |
| 85500 | 395 | 1430 | 3120 |  |
| 94500 |  | 3623 | 610 |  |
| 81000 | 4431 | 2440 |  |  |
| 77400 | .......... | 2239 | 3582 |  |
| 71125 | 1828 | 1973 |  | 58322 |
| 76500 | 1008 | 3720 | 2354 |  |
| 85500 |  | 2068 | 450 | 4669 |
| 78300 | 783 | 155 |  |  |
| 85500 | 2092 | 4893 | 11889 |  |
| 76500 |  |  | 770 |  |
| 81000 | 34820 | 7073 | 6575 | 6,251 45 |
| 90000 | 2000 | 950 | 2000 |  |
| 87750 | 3311 | 586 | 3505 |  |
| 73800 | 1547 | 5898 | 1342 | 20000 |
| 92700 | 5457 | 20000 | 4684 | 4500 |
| 78300 |  |  |  |  |
| 1,121 25 | 355 | 1985 | 25659 |  |
| 81000 | 545 5157 | 830 4602 |  |  |
| 85275 | 5157 | 4602 2585 | 3017 6414 | 13564 |
| 63000 | $\begin{array}{ll}1615 \\ 30 & 00\end{array}$ | 2585 4500 | 6414 3500 | ........ |
| 94500 61250 | 30160 1646 | 4500 7 | 23146 |  |

1,26038
1,23482
1,297500
1,29700
4,67585
4,67585
1,336 50
1,04760
1,644 04
1,380 44
1,798 18
1,05720
1,139 33
98985
84829 1,00590 2,384 48
1,985 39 87500 91257 1,473 22 99252 1,21759 1,144 23 1,174 58 1,299 66 1,558 82
1,58836
988
1,231 16
93434
1.33396
1,33396
$1,088 \quad 89$
1,086 51 1,658 11 1,063 64 1,601 90 1,390 13 1,10393
1,61540 1,61540
1,03732 1,03732
1,19729 1, 1975 11 1,015
1,13300
1,071 1,07103

Hayes

SECOND CLASS－Continued．

| Location． | 00000000000 | Enrollment． |  |  | Average attendance． |  |  | Graduates this Year． |  |  | Financial Report． |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\stackrel{\text { ¢ }}{\substack{\text { ® }}}$ |  | $\begin{gathered} \underset{\sim}{\dddot{y}} \\ \stackrel{\rightharpoonup}{0} \end{gathered}$ | 永 | 先 | ت゙ | $\frac{\dot{9}}{\underset{\sim}{\pi}}$ | 先 | \＃゙ E． | Teachers＇ wages． | $\begin{aligned} & \text { Appara- } \\ & \text { tus. } \end{aligned}$ | Books． | Repairs． | New build－ ings． | All other pur－ poses | Total． |
| Hebron． | 2 | 35 | 22 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Highland | 2 | 38 | 21 | 59 | 29 | 18 | 47 | 2 | 2 | ． | 90000 81000 |  |  | 2500 |  | 13305 | 1，058 05 |
| Hingham | 3 | 45 | 47 |  |  |  | 58 |  | 2 | － 2 | 810 1,48500 00 | 2000 | 1500 | 1300 18560 | ．．．．．．．． | 35850 | 1，216 50 |
| Hofa Park | 2 | 46 | 34 | 80 | 34 | 25 | 59 | 2 | 3 | 5 | 1，125 00 |  |  | 18560 | ．．．．．．．． | 1，354 69 | 3，025 29 |
| Holmen | $\stackrel{2}{2}$ | 55 | 42 | 97 | 27 | 29 | 56 |  | 4 | 4 | 90000 |  | 2513 | 73 25 89 |  | 53135 | 1，771 72 |
| Homestead | 2 | ${ }_{36}$ | 45 30 | ${ }_{66}^{93}$ | 32 26 | 32 24 | 64 50 | 2 | 2 | 4 | 81000 |  | 6168 | 258 |  | 29472 273 50 | 1，245 74 |
| Honey Oreek | 2 | 23 | 41 | 64 | 18 | $\stackrel{24}{28}$ | ${ }_{46} 4$ |  |  |  | 76500 | 5402 | 2559 | 22590 |  | 27350 17948 | 1，145 18 |
| Houlton | 2 | 41 | 38 | 79 | 29 | 31 | 60 | 1 | ${ }_{4}^{4}$ | 5 | 90000 | 6789 | 832 | 2503 | ．．．．．．．． | 14669 | 1，24999 |
| Hustler | 2 | 32 | 22 | 54 | 25 | 31 17 | 60 42 | 3 | 2 | 2 3 3 | 94500 | 2503 | 827 | 675 | ．．．．．．．． | 38690 | 1，147193． |
| Iron Ridge | 2 | 45 | 54 | 99 | 32 | 38 | 40 | $\stackrel{3}{2}$ |  | 3 4 4 | 90000 |  | 3872 |  | ．．．．．．．． | 36645 | 1，305 17 |
| Ironton | 2 | 32 | 43 | 75 |  |  | 49 | $\stackrel{2}{2}$ | 5 | 4 | 720 855 00 | 15730 |  |  |  | 28228 | 1，159 58 |
| Ives ${ }^{\text {Jackson }}$ | 2 | 42 | 40 | 82 | 33 | 30 | 63 | 3 | $\stackrel{5}{2}$ | 5 | 85500 94500 | 827 | 3549 | 810 | ．．．．．． | 19787 | 1，104 73 |
| Juda | 2 | 34 | 33 | 67 | 28 | 29 | 57 | 1 | 2 | 3 | 1，044 00 |  | 882 | 15.30 |  | 32138 | 1，290 50 |
| Kiel | $\stackrel{2}{2}$ | 25 | 281 | 53 71 | 24 20 | 24 | 48 | 1 | 2 | 3 | ${ }^{945} 00$ | 5500 | 1800 | 4475 |  | 14761 | 1，237 36 |
| Kewaunee | 2 | 39 | 41 | 80 | 20 | 17 | 37 58 | $\ldots$ | 1 | 1 | 90000 | 5520 | 1800 |  | ．．．．．．．． | 40573 <br> 347 | 1,46843 1,30299 |
| Kewaunee | 2 | 31 | 41 | 72 | － 23 | 27 | 50 | 4 | 7 |  | 83700 882 |  | 6865 |  |  | 13152 | 1，037 17 |
| Kimberly | 2 | 25 | 35 | 60 | 19 | 27 | 46 | 1 | 2 | ${ }_{3} 1$ | 88200 720 | $\begin{array}{r}26 \\ 69 \\ \hline 29\end{array}$ | 1055 | 9840 |  | 60912 | 1，626 36 |
| Kadyssmith | 2 | 51 | 28 | 79 |  |  | 40 | 2 |  | $\stackrel{3}{2}$ | 1，035 00 | 6932 | 1786 1190 | 7343 |  | 84448 | 1，725 09 |
| Lamberton | ${ }_{2}^{2}$ | 30 | 25 | 55 |  |  | 28 | 1 | 1 | 2 | 185500 |  | 1190 | 2445 |  | 15800 | 1，229 35 |
| Lena | 2 | 24 42 | 24 38 | 88 | 17 | ${ }_{26}^{20}$ | ${ }_{51}^{37}$ | 5 | 2 | 7 | 765.00 | 4216 |  | 10462 |  |  | 187400 |
| Lena ．．． | 2 | 39 | 38 49 | 80 88 |  | 26 | 51 57 | 1 | 1 | 2 | $765^{\circ} 00$ | 850 | 2653 | ＋1316 |  |  | 1,10543 94219 |
| Lenroot | 2 | 17 | 16 | 33 | 15 | 15 | 57 30 | 1 |  |  | 76500 81000 | ${ }_{4}^{21} 00$ | 6000 | 7500 | 1500 | 8564 | 1，021 64 |
| Leopolis | 2 | 47 | 47 | 94 | 28 | 35 | 63 | 1 | 2 | 4 |  | 4305 | 4103 3884 | 5395 375 |  | 10425 | 1，052 28 |







| O100 |  |  |
| :---: | :---: | :---: |
| *N | $\vdots \backsim \vdots \propto \vdots \infty \infty \sim+\infty$ |  |
| 10 mm |  |  |
| ¢ ¢ ¢ ¢ |  |  |
|  |  |  |
|  |  |  |


| 76500 | 1075 | 200 | 125 |  | 6230 | 84130 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 90000 | 537 | 372 | 3675 |  | 10846 | 1,054 30 |
| 72000 | 500 | 650 | 1112 |  | 17500 | 91762 |
| 94500 | 26380 |  |  |  | 25541 | 1,464 21 |
| 78000 | 2857 | 4476 | 10.00 |  | 11200 | 97533 |
| 81000 | 1400 | 2000 | 1200 |  | 10300 | 95900 |
| 76500 |  |  |  |  | 26500 | 1,030 00 |
| 76500 | 12417 | 5456 | 14310 |  | 13133 | 1,218 16 |
| 73800 |  | 1540 | 5425 |  | 34117 | 1,148 82 |
| 90000 | 10953 |  | 2500 |  | 18702 | 1,22155 |
| 90000 |  |  | 3000 |  | 5 | 1,065 50 |
| 85500 |  | 873 |  |  | 38608 | 1,249 81 |
| 81000 | 7965 |  | 3480 |  | 12795 | 1,052 40 |
| 99000 |  |  | 14179 | 1897 | 1,165 26 | 2,316 02 |
| 99900 |  |  |  |  | 17339 | 1,172 39 |
| 1,080 00 | 8360 |  |  |  | 1,014 05 | 2,177 65 |
| 82800 | 700 | 62 |  |  | 48060 | 1,316 22 |
| 90000 | 2064 | 3715 | 7931 |  | 11113 | 1,148 23 |
| 1,008 00 | 675 | 8755 | 13395 | 7900 | 23551 | 1,550 76 |
| 94500 | 12600 | 12420 | 2785 | 8146 | 10452 | 1,409 03 |
| 90000 | 15146 |  |  | 64646 | 8870 | 1,'86 62 |
| 67500 |  |  |  |  | 17690 | 85190 |
| 72000 | 2000 | 1500 | 5000 | 5500 | 2150 | 88150 |
| 1,05750 |  | 1819 | 11010 |  | 21079 | 1,396 58 |
| 94500 | 5000 | 800 | 4000 |  | 15707 | 1,200 07 |
| 81000 | 1320 | 2182 | 825 |  | 54928 | 1,402 55 |
| 1,300 00 |  |  | 13101 |  | 24718 | 1,678 19 |
| 1,500 00 | 7768 | 3836 | 14993 |  | 74861 | 2,514 58 |
| 1,220 00 |  |  | 10938 |  | 20590 | 1,535 28 |
| 1,080 00 | 12450 |  | 3567 |  | 42010 46836 | 1,660 27 |
| 1,32500 |  |  | 5500 1632 |  | 46836 7999 | 1,848 26 |
| 94500 |  | 3614 | 1632 |  | 79 407 40 | 1,868 95 |
| $\begin{array}{r}990 \\ \hline 1700\end{array}$ | 4564 |  |  | 42597 | 40734 31156 | 1,808 1,37542 |
| 1,01700 | 1354 | 1411 | 1921 308 |  | 19003 | 1,192 94 |
| 92250 | 1250 | 3703 | 3088 3576 |  | 190 93 37 | 1,012 38 |
| 87750 92250 |  | 575 | 3576 1500 |  | 9337 17965 | 1,137 15 |
| 92250 94500 | 2000 |  | 1500 500 |  | 12805 | 1,097 45 |
| 94500 76500 | .......... | 1940 3324 | 500 $\therefore 409$ |  | 120478 | 1,027 11 |
| 76500 83250 | 500 | 3324 1000 | +4000 |  | 12121 | 1,008 71 |
| 99000 |  |  |  |  | 28156 | 1,271 56 |
| 85500 | 518 | 390 |  | 3,300 00 | 1,528 85 | 5,739 62 |
| 92450 |  |  |  |  | 40184 | 1,326 34 |

SECOND CLASS-Continued.

| Location. | No. of departments. | Enrollment. |  |  | AVERAGE ATTENDANCE. |  |  | Graduates THIS YEAR. |  |  | Financial Report. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\frac{\text { gi }}{\sum_{z}^{5}}$ |  |  | ¢ | 家 | ¢ | ¢ | 官 | \% | Teachers' wages. | Appara- tus. | Books. | Repairs. | New buildings. | $\begin{gathered} \text { All other } \\ \text { pur- } \\ \text { poses. } \end{gathered}$ | Total. |
| Nelsonville | 2 | 25 | 32 | 57 | 19 | 25 | 44 | 3 | 1 | 4 | 85500 |  |  |  |  |  |  |
| Neosho | 2 | 38 | 26 | 64 | 21 | 14 | 35 | 2 | 1 | 3 | 85500 | 3345 | 3932 ..... | 6793 1813 | ........ | 31838 22652 | 1,280 63 |
| Neva | 2 | 40 | 27 | 67 | 28 | 20 | 48 | 2 | 1 | 3 | 82800 | . 334. | $\cdots 1143$ | 1813 640 | ....... | 22652 693 | 1,133 10 |
| New Lisbon | 2 | 31 | 26 | 57 | 21 | 16 | 37 | 1 |  | 1 | 72900 | 1243 | 1148 | 640 2000 | . | 69377 7695 | 1,539 60 |
| Norrie | 2 | 33 | 29 | 62 | 29 | 22 | 51 |  |  |  | 81000 | 963 | 230 | 20 | ........... | 20679 | 1,028 1,06 |
| North Hudson | 2 | 28 | 44 | 72 | 22 | 32 | 54 |  |  |  | 85500 | 625 | 2986 | $\cdots 350$ |  | 28925 | 1,028 86 |
| North Milwaukee | 2 | 38 | 35 | 73 | 27 | 25 | 52 |  | 1 | 1 | 1,102 50 | 5800 | 2986 600 | 350 | ........... | 28925 196 | $\begin{aligned} & 1,18386 \\ & 1,363 \end{aligned} 22$ |
| Northport ..... | 2 | 14 | 25 | 39 | 14 | 21 | 35 |  |  | 1 | 1,176500 | 5850 | 600 | 2747 |  | 19615 | 1,363 98152 9672 |
| Oconto Fialls | 2 | 32 | 26 | 58 | 21 | 16 | 37 |  |  | ...... | 75000 | 794 | 189 | 1700 |  | 1735 | 96723 |
| Ogema | 2 | 26 | 30 | 56 | 20 | 15 | 35 | 2 | 3 | $\cdots$ | 81000 | 4298 | 1800 | ......... | $\because 3,5780$ | 17371 | 4,867 4,812 |
| Olivet ... | 2 | 20 | 28 | 48 | 14 | 23 | 37 |  | ...... | ..... | 81000 | 2450 | 2131 | 2700 | .......... | 9969 | 982 50 |
| Oostburg | 2 | 45 | 55 | 100 | 34 | 38 | 72 |  | 6 | 6 | 94500 |  |  |  | . ${ }^{\text {c. }}$. | 18554 | 1,130 54 |
| Paoli . | 2 | 24 | 25 | 49 | 17 | 19 | 36 |  | 4 | 4 | 81000 | 1725 | 666 | 5309 |  | 18584 <br> 159 <br> 80 | 1,130 84 |
| Parrish | 2 | 25 | 29 | 54 | .... |  | 32 | . ${ }^{\text {c }}$ | 1 | 1 | 85500 | 714 | 3416 | 1200 | . . . . . . . . | 41168 | 1,319 98 |
| Peebles | 2 | 21 | 31 | 52 | 17 | 26 | 43 | $\cdots$ | 2 | 3 | 81000 |  |  | 5000 |  | 8191 | 1,94191 |
| Pella ... | 2 | 54 | 28 | 82 | 27 | 14 | 41 |  |  | 3 | 90000 | 10158 | 140 | ...... | $\dddot{4,47810}$ | 79796 | 6,279 04 |
| Peshtigo .. | 2 | 39 | 28 | 67 | … | .... | 45 |  |  |  | 85500 |  | 1888 | 13595 | 4,178 10 | 21872 | 1,228 55 |
| Pine River | 2 | 28 | 32 | 60 | 19 | 20 | 39 | 4 | 3 | 7 | 85500 |  |  | 135 ..... |  | 15993 | 1,214 93 |
| Plat .. | 2 | 33 | 33 | 66 | 19 | 26 | 45 | 1 | 4 | 5 | 1,080 00 | 1760 | 250 | 4420 |  | 15993 9210 | 1,014 1,235 40 |
| Pleasant Prairie | 2 | 13 | 33 | 46 | 12 | 25 | 37 | 3 | 4 | 7 | 94500 | 3685 |  | 620 |  | 9210 27220 | $\begin{aligned} & 1,23540 \\ & 1,26025 \end{aligned}$ |
| Plover | 2 | 40 | 37 | 77 | 23 | 24 | 47 | 2 | 5 | 7 | 87750 | 3905 |  |  |  | 27236 | $\begin{aligned} & 1,26025 \\ & 1,28691 \end{aligned}$ |
| Polar | 2 | 48 | 44 | 92 | ... | 2 |  |  |  | $\ldots$ | 85500 | 2880 | 11730 | 9967 |  | 37036 11352 | $\begin{aligned} & 1,28691 \\ & 1,21499 \end{aligned}$ |
| Poplar | 2 | 45 | 43 | 88 |  |  |  | 1 | 6 | 7 | 91500 |  | 2500 | 1000 | - | 25000 | $\begin{aligned} & 1,21429 \\ & 1,20000 \end{aligned}$ |
| Pound Poynette | 2 | 40 36 | 70 | 110 | 21 | 45 | 66 | 4 | 4 | 8 | 94500 | ........... | 4200 | 7356 |  | 23408 | 1,294 64 |
| Poynette | 2 | 36 | 24 | 60 | 17 | 20 | 37 | 2 | 3 | 5 | 81000 | ..... | 2015 | 200 | . | 35082 | 1,18297 |



SECOND CLASS．－Continued．

| Location． | No. of departments. | Enrollment． |  |  | Average Attendance． |  |  | Graduates this Year． |  |  | Financial Report． |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Amount expended from June 30， 1911 to June 30，1912， |  |  |  |
|  |  | $\stackrel{\text { ǵ }}{\stackrel{y}{\Sigma}}$ | 官 | $\begin{aligned} & \text { ت゙끋 } \end{aligned}$ |  |  |  |  | 守 | $\begin{aligned} & \text { స゙్ } \\ & \text { స్ } \end{aligned}$ |  |  | \＃ّ | Teachers＇ wases． | Appa－ ratus． | Books． | Repairs． | New build－ ings． | Allother pur－ poses． | Total． |
|  | 2 | 26 | 29 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Thorp ． | 2 | 50 | 49 | 99 |  |  | 65 | 1 | 1 | $\stackrel{2}{1}$ | 83250 <br> 76500 |  |  | 1185 | 50000 | 19894 | 1，547 54 |
| Tilleda | $\stackrel{2}{2}$ | 48 | 38 53 | ${ }_{97}^{86}$ | 31 | 24 | 55 |  |  |  | 72000 | 172 35 | 3747 1820 | 2955 2810 | ．．．．．．．．．． | 16532 | 1，170 09 |
| Trevor | 2 | 34 | 26 | 60 | ${ }_{23}$ | 29 | 52 |  |  |  | 81000 | 1415 | 1131 | 2067 |  | 16182 | ＋965 18 |
| Tripoli | 2 | ${ }_{30}$ | 26 | 60 56 | $\stackrel{23}{21}$ | 20 | 43 | 2 | 2 | 4 | 85500 | 2500 | 1000 | 2000 |  | 11646 | 1，617 99 |
| Troy Center | 2 | $30^{-}$ | 23 | ${ }_{53}^{56}$ | $\stackrel{21}{24}$ | 15 | 36 44 | 1 |  | 1 | 78300 |  | 5000 | 665 |  | 15073 | 1,02646 99038 |
| Two Creeks | 2 | 50 | 46 | ${ }_{96}$ | ${ }_{38}^{24}$ | ${ }_{33}$ | 44 71 | 3 | $1 \cdot$ | 3 1 | 76500 |  |  |  | ．．．．． | 25619 | 1，021 19 |
| Twin Lakes | 2 | 41 | 22 | 63 | 26 | 16 | 42 |  | 1 | 1 | 83730 | 11503 | ．．．．．． | 10151 |  | 70850 | 1，762 34 |
| Union Center | 2 | 44 | 52 | 96 |  |  | 63 | 3 |  | 3 | 76500 94500 | 60 160 00 | 10.7 | 27150 | 1，265 81 | 28487 | 2，637 28 |
| Valley | 2 | 38 | 40 | 78 | 18 | 20 | 38 | 4 | 4 | 8 | 94500 | 15500 | 105 | 7002 |  | 41249 | 1，59804 |
| Valley Junction | ${ }_{2}^{2}$ | 34 <br> 22 | $\stackrel{31}{22}$ | 65 | 19 | 19 | 38 | 3 |  | 3 | 90000 | 2250 | 1240 | 24 25 | ．．．．． | 43578 | 2，241 68 |
| Yerona | 2 | 39 | 22 39 | 44 78 | ${ }_{25}^{13}$ | 14 | 27 | 2 | 2 | 4 | 67200 | 350 | 1240 | 1285 | ． | 28915 | 1，248 30 |
| Vesper ．． | 2 | 47 | ${ }_{37}$ | 84 | 25 24 | 30 24 | 55 48 | 2 | 2 | 4 | 94500 | 4152 | 1040 | 450 |  | 23989 | ${ }^{915} 92$ |
| Waukesha | 2 | 30 | 36 | 66 | 18 | ${ }_{27}^{24}$ | 48 |  |  | ． | 86400 | 1225 | 660 | 16485 |  | 1，253 85 | － 2,34151 |
| Waunakee | 2 | 38 | 32 | 70 | 29 | 26 | $\stackrel{45}{55}$ | 1 |  | 4 | 92250 |  |  | 4160 |  | ＋340 02 |  |
| Wausau | 2 | 39 | ${ }_{3}^{32}$ | 72 | 23 | 20 | 43 | 1 | 3 | 4 | 1，350 00 | 2965 |  | 14616 |  | ${ }_{261}^{340} 8$ | 1，304 1,787 |
| West Allis ．．．．． | 2 | ． 28 | 33 | 61 | 15 | 25 | 40 |  |  |  | 76500 | 375 70 | 787 |  | 24740 | 10953 | 1，133 55 |
| West Kewaunee | 2 | 36 | 25 | 61 |  |  | 40 | 1 | 1 | $\stackrel{1}{2}$ | 79200 92200 | 7000 | 900 | 13855 | 55000 | 26656 | 1，826 11 |
| Weston | ${ }_{2}^{2}$ | 48 35 | 33 44 | 81 | 32 | 19 | ． 51 | 3 | 3 | ${ }_{6}^{2}$ | 92250 855 00 | ........ | ${ }_{11}^{1190}$ | 21286 |  | 34841 | 1，495 67 |
| Weyauwega | ${ }_{2}^{2}$ | ${ }_{31}^{35}$ | 44 | 79 | 22 | 22 | 44 | 2 | 6 | 8 | 94500 | $\cdots$ | 20 37 45 | 450 |  | 14597 | 1，025 67 |
| Willow Springs | 2 | ${ }_{27}$ | $\stackrel{35}{25}$ | 67 52 |  |  | 49 30 | 1 | 3 | 4 | 85500 |  | 1845 | 6585 2546 |  | 24402 | 1，292 32 |
| Wilson ．． | 2 | 41 | 29 | 70 | $\stackrel{15}{29}$ | 19 | 30 48 |  | $\stackrel{2}{2}$ | $\stackrel{2}{3}$ | 72000 81000 | 590 | 900 | 4565 |  | 1，158 71 | 2，057 62 |
|  |  |  |  |  |  |  |  | 1 |  |  | 81000 | 1746 |  | 3448 |  | 14380 | 87290 1,00574 |



COUNTY TRAINING SCHOOLS FOR TEACHERS. 1910-1911.

| Location. | $\underset{\text { TEACHERS. }}{\text { No. }}$ |  | No. Pepils Enrolled. |  |  | $\begin{gathered} \text { No. GRado- } \\ \text { ATES FOR } \\ \text { YEAR ENDING } \\ \text { JUNE } 30, \\ 1911 . \end{gathered}$ |  | No. Persons Enrolled Who Have Previously taught. |  | No. NonResident Pepils Enrulled. |  | Salary of principal. | Total salary of assistants. | Total amount expenuedfor support of school. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Fem. | Male | Fem. | Total. | Male. | Fem. | Male. | Fem. | Male. | Fem. |  |  |  |
| Totals | 28 | 51 | 158 | 1,421 | 1,579 | 47 | 456 | 6 | 240 | 1.2 | 209 | \$44,592 00 | \$44,718 85 |  |
| Algoma | 1 | 2 | 12 | 40 | 52 |  | 17 | 1 | 3 |  |  | $\xlongequal[\$ 1,70000]{ }$ | $\frac{-14,7880}{\$ 2,10000}$ | $\underbrace{124,380}_{\$ 4,55963}$ |
| Antigo | 1 | 1 | 7 | 39 43 | 46 | 3 | 18 |  | 3 |  | 7 | $\stackrel{1}{1,800} 00$ | $\begin{array}{r}\$ 2,100 \\ 1,100 \\ \hline\end{array}$ | $\$ 4,559$ 3,649 54 |
| Berlin | 3 | 1 |  | 43 90 | $\begin{array}{r}43 \\ 104 \\ \hline\end{array}$ |  | 17 |  | 4 |  | 3 | 2,070 00 | 1,49500 | 4,495 72 |
| Columbus | 2 | 4 | 17 | 90 243 | 104 | 3 | 19 | ${ }_{2}^{2}$ | 23 | 2 | 18 | 1,900 00 | 1,490 00 | 5,337 91 |
| Eau Claire | 1 | $\stackrel{4}{2}$ | ${ }_{4}$ | 243 56 | 260 60 | 1 | 21 22 | 2 | 124 | 6 | 80 | 2,070 00 | 2,702 00 | 6,189 80 |
| Gays Mills | 1 | 1 | ${ }_{2}^{4}$ | 42 | 60 44 | 1 | 22 9 |  | $\stackrel{2}{5}$ |  | 17 | 1,900 00 | 2,300 00 | 5,847 52 |
| Grand Rapids | 1 | 2 | 10 | 83 | 93 | 3 | 9 34 |  | 1 |  | +38 | 1,700 2,000 00 | 1,100 1,840 00 | 3,279 96 |
| Manitowoc | 1 | 3 |  | 38 | 38 |  | 15 |  |  |  | 4 | 1,867 50 | 1,722 50 | 5,930 51 |
| Marinette. | 1 | 2 | 19 | 35 42 | 54 50 | 8 | 19 |  |  |  |  | 1,900 00 | 1,925 00 | - 4,94746 |
| Menomonie | 1 | 3 | 10 | $\stackrel{42}{75}$ | 50 85 | 2 | 21 27 |  |  | 1 | 3 | 1,800 00 | 2,110 00 | 5,684 13 |
| Merrill | 1 | 2 | 10 | 63 | 85 63 | 4. | 27 15 |  |  |  | 2 | 2,000 00 | 3,550 00 | 7,616 08 |
| Monroe | 1 | 3 | 4 | 52 | 56 | 2 | ${ }_{24}^{15}$ | 1 | 24 4 |  | 19 19 | 1,900 1800 | 2,000 00 | 5,451 06 |
| New London | 1 | 2 | 6 | 62 | 68 | 4 | 23 | 1 | 1 | 2 | 19 | 1,800 00 | 2,300 00 | 5,885 12 |
| Phillips . ${ }_{\text {Redsburg }}$ | 1 | 1 |  | 41 | 41 |  | 11 |  | 15 |  | 13 4 4 | 1,955 1,72500 00 | 2,050 1,420 00 | 4,797 34 |
| Rhinelander | 1 | 3 | 2 | 45 | 47 25 | 1 | 17 |  | 2 |  | 4 | 1,742 50 | 2,490 50 | - 4,58349 |
| Rice Lake | 1 | 1 | 1 | 24 | 25 63 |  | 6 |  | 14 |  |  | 1,700 00 | 1,200 00 | 5,826 16 |
| Richland Oenter | 1 |  |  |  |  |  | 17 |  | 5 |  | 6 | 1,800 00 | 1,377 50 | 4,940 30 |
| St. Croix Falls | 1 | 6 | ${ }^{13}$ | 72 31 | 85 36 | ${ }_{3}^{6}$ | 33 |  | 4 |  | 7 | 2,000 00 | 2,090 00 | 7,215 09 |
| Viroqua | 1 | 2 | 5 4 | 50 | 36 54 | 1 | 15 |  |  |  | 2 | 1,600 00 | 1,280 00 | 3,787 15 |
| Wausau | 1 | 2 | 17 | 56 | $\stackrel{54}{73}$ | 1 | 19 |  | 1 |  |  | 2,01200 | 1,513 75 | 4,003 58 |
| Wautoma | 1 | 1 | 2 | ${ }_{37}^{56}$ | 39 | . | 11 |  | 1 |  | 4 | 2,000 00 | 2,500 00 | 5,583 06 |
| COUNTY SCHOOLS OF AGRICULTUF E AND DOMESTIC SCIENCE. 1910-1911. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

COUNTY SCHOOLS OF AGRICULTUI E AND DOMESTIC SCIENCE. 1910-1911.


## ENROLLMENT, DOMESTIC AND PROFESSIONAL STATISTICS OF

 DAY SCHOOLS FOR DEAF, 1910-1911.|  | Number enrolled. | No. congenitally deaf. | $\begin{aligned} & \text { No. of pu- } \\ & \text { pils to- } \\ & \text { tally deaf. } \end{aligned}$ | No. who read lips readily. | No. who read books readily. | No. taught speech. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 425 | 133 | 179 | 312 | 294 | 400 |
| Antigo ............ | 15 | 3 | 5 | 8 | 12 | 15 |
| Appleton .......... | 8 | 3 | 1 | 7 | 4 | 8 |
| Ashland ........... | 14 | 6 | 6 | 12 | 5 | 14 |
| Black River Falls. | 11 | 8 | 8 | 10 | 9 | 11 |
| Bloomington ..... | 8 | 2 | 1 | 5 | 4 | 8 |
| Eau Claire ........ | 33 | 11 | 22 | 33 | 33 | 33 |
| Fond du Lac...... | 12 | 4 | 1 | 8 | 11 | 23 |
| Green Bay . . ....... | 23 | 8 | 14 | 23 | 11 | 12 |
| Is Crosse | 8 | 4 | 4 | 5 |  | 6 |
| Madison ........... | 16 | 12 | 10 | 16 | 10 | 16 |
| Marinette ......... | 8 | 4 | 6 | 8 | 3 | 8 |
| Milwaukee ......... | 168 | 35 | 65 | 116 | 147 | 168 |
| New London | 9 | 4 | 3 | 6 | 7 | 4 |
| Oshkosh .......... | 16 | 5 | 3 | 11 | 10 | 11 |
| Platteville | 15 | 8 | 4 | . 8 | 1 | 9 |
| Racine ............. | 13 | 3 | 7 | 6 | 3 | 9 |
| Rice Lake ......... | 10 | 3 | 3 | 8 | 6 | 8 |
| Sheboygan ... | 9 | 3 | 3 |  |  | 9 |
| Stevens Point | 12 | 3 | 5 | 8 | 7 | 11 |
| Superior ........... | 8 |  | $\stackrel{3}{5}$ | 7 | 8 | 8 |
| Wausau ........... | 9 | 4 | 5 | 7 | 3 | 9 |

EXPENSES OF DAY SCHOOLS FOR DEAF, SHOWN BY ITEMIZED STATEMENTS FOR YEAR 1910-1911.

|  | Teachers' salaries. | Board of pupils. | Transportation of pupils, | Books, postage, and stationery. | Fuel. | Janitor. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | \$45,961 09 | \$8,884 71 | \$1,309 24 | \$144 71 | \$839 67 | \$1,440 81 |
| Antigo | \$1,650 00 | \$302 00 | \$408 00 |  |  |  |
| Appleton | 85000 | 9981 |  |  |  |  |
| Ashland | 1,834 10 | 1,091 62 |  | \$30 00 | \$40 00 | \$60 00 |
| Black River Falls. | 1,125 00 | 1,052 07 |  |  |  | 13500 |
| Bloomington ..... | 85000 | 11270 |  |  | 2500 | 5000 |
| Fau Claire | 3,741 50 | 2,191 29 | 7166 | 344 | 15000 | 15000 |
| Fond du Lac. | 1,400 00 | 1000 | 4788 |  | 525 |  |
| Green Bay | 2,900 00 | 81100 | 1350 | 1964 |  |  |
| La Crosse | 75000 | 11050 |  | 600 | 7500 | 140-00 |
| Madison | 1,650 00 | 55593 |  |  |  |  |
| Marinette | 85500 | 44775 |  |  | 6050 | 6050 |
| Milwaukee | 17,736 24 | 44641 | 58723 | 5008 | 40018 | 72031 |
| New London | 1,035 00 | 16250 |  | 903 |  |  |
| Oshkosh | 1,553 00 | 9000 | 3770 |  |  |  |
| Platteville | 1,518 75 |  |  | 1052 |  | 2500 |
| Racine | 85750 | 7750 | 13849 |  |  |  |
| Rice Lake | 97000 | 19800 |  |  |  |  |
| Sheboygan | 1,350 00 |  |  |  |  |  |
| Stevens Point | 1,425 00 | 68955 |  | 1600 | 8374 | 10000 |
| Superior | 95000 | 6008 |  |  |  |  |
| Wausau ........... | 96000 | 37600 | 478 |  |  |  |

EXPENSES OF DAY SCHOOLS FOR DEAF, SHOWN BY ITEMIZED STATEMENTS FOR YEAR 1910-1911—Continued.

|  | Repairs. | Room rent. | Appara- tus. | $\begin{aligned} & \text { Supplies } \\ & \text { and } \\ & \text { furniture. } \end{aligned}$ | $\begin{gathered} \text { Miscella- } \\ \text { neous. } \end{gathered}$ | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Totals | \$172 58 | \$460 50 | \$82 65 | \$1,209 58 | \$402 06 | \$60,907 60 |
| Antigo |  |  |  | \$44 67 |  | \$2,404 67 |
| Appleton |  | \$150 00 |  |  |  | 1,09981 |
| Ashland |  |  |  | 4263 16209 | $\$ 1475$ | 3,098 35 2,49191 |
| Black River Falls. Bloomington | \$3 00 |  |  | 16209 614 | \$14 75 | 2,49191 1,043 84 |
| Eau Claire ......... |  | 10000 |  | 3768 | 7123 | 6,516 80 |
| Fond du Lac...... | 16958 |  |  | 1794 | 144 | 1,652 09 |
| Green Bay ........ |  |  | 1750 | 428 |  | 3,765 92 |
| La Crosse ......... |  |  |  |  |  | 1,081 50 |
| Madison |  |  |  |  | 1502 | 2,220 95 |
| Marinette |  | 6050 | ........... | 1165 |  | 1,495 90 |
| Milwaukee |  |  |  | 49196 | 23260 | 20,665 01 |
| New London |  | 10000 |  |  | 1450 | 1,321 03 |
| Oshkosh |  |  | 5132 | 8200 |  | 1,814 02 |
| Platteville |  |  | 1383 | 2244 | 650 | 1,597 04 |
| Racine |  |  |  | 1353 | 1519 | 1,102 21 |
| Rice Lake .......... | ........ | 5000 | ........... | 850 | 843 | 1,234 93 |
| Sheboygan ........ |  |  |  | 145 236 |  | 1,351 45 |
| Stevens Point .... |  |  |  | 23695 | 1740 | 2,568 64 |
| Superior .......... |  |  |  |  |  | 1,010 1,37145 |
| Wausau ............ |  |  |  | 2567 | 500 | 1,371 45 |

STATISTICS OF THE DAY SCHOOL FOR THE BLIND, FOR THE YEAR ENDING JUNE 30, 1911.


CENSUS, ENROLLMENT AND ATTENDANCE, 1911-1912.

| Counties- <br> Exclusive of cities under city superintendents. | Census. |  | Enrollment and Attendance in Public School |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. of children between 4 and 19, residing in the county | No. of children between 7 and 13. | Number be- <br> tween 4 and 20. | Over 20. | Total number who have attended public school. |  | Whole num ber of days of different pupils. |
|  |  |  |  |  | Male. | Female. |  |
| Totals | 468,124 | 181,683 | 283,521 | 77 | 131,946 | 129,537 | 43,563,781 |
| Adams | 3,066 | 1,979 | 2,205 |  | 1,145 | 1,060 | ${ }_{2619,120}^{2128}$ |
| Ashland ... | 2,459 |  |  |  | (873 | 3,114 |  |
| ${ }_{\text {Barron }}^{\text {Bayfeld }}$. | 10,002 4,449 | 1,541 | $\xrightarrow{6,494} 3$ |  | 1,653 | 1,441 | 396,217 |
| Brown ................................................ | ${ }_{9}^{4,316}$ | 4,190 | ${ }_{4}^{4,763}$ |  | 2,429 | 2, 2 , 334 | 473,063 460,844 |
| Buffalo | ${ }^{5,697}$ | 2,627 1 1585 | 3,923 1,747 |  | 2,009 1,064 | 1,914 | 255,248 |
| Burnett | 3,524 5,780 | 3,987 | 2,825 |  | 1,406 | 1,419 | 349,585 |
| Chippewa | 7,233 | ${ }^{3,386}$ | 3,850 |  | $\underset{3}{1,954}$ | $\xrightarrow{1,898}$ | ${ }_{935,702}^{463,666}$ |
| Clark | 11,817 | ${ }_{\substack{5,111 \\ 3,957}}^{1}$ | $\underset{\substack{6,658 \\ 5,463}}{\text { c, }}$ |  |  |  | 647,824 |
| Crawford ........ | 4,537 | 1,790 | 3,137 | 2 | 1,657 | 1,482 | 247,594 |
| ${ }_{\text {Dane }}^{\text {Dirst }}$ district |  | 3,049 |  | 9 | 2,444 |  | 541,444 |
| First district ${ }_{\text {Second district }}$ | 8,009 7,129 | 3,049 | ${ }_{6}^{4,837}$ | ...... | - | ${ }_{3}^{3,430}$ |  |
| Dodge | 11,699 | ${ }_{2}^{4,898}$ | $\xrightarrow{6,500} 3$ |  | -1,707 | 1,587 | 389,296 |
| Door ${ }^{\text {Douglas }}$ | $\stackrel{2}{2,603}$ | 1,305 | 1,971 |  | 986 | 985 | 230,685 |
| Dunn ... | 7 7,637 |  | 5,151 2,069 |  | 983 | 1,086 | 403,912 |
| Eau Claire | 5,042 1,216 | ${ }^{2,282}$ | 2,069 |  | 453 | 404 | 130,761 |
| Florence du Lac | ${ }_{9,152}^{1,15}$ | ${ }_{3} \mathbf{3} 690$ | 5,161 |  | 2,753 | 2,408 | 578,771 |
| Forest . | 2,498 | ${ }_{5}^{1,225}$ | 1,958 4,740 |  | 2,468 | 2,272 | 12,228,319 |
| Grant | 12,066 | $\xrightarrow{5,211}$ | ${ }_{2,847}^{4,}$ | 6 | 1,433 | 1,420 | ${ }^{356,639}$ |
| Green Lake | 3,641 6,126 | 1,617 | 2,299 3,227 | .... | 1,125 <br> 1,733 | 1,1744. | 252,718 440,566 |
| Iowa .. | ${ }_{2,913}^{6,126}$ |  | $\stackrel{3}{3,028}$ |  | 1,040 | ,988 | 293,264 399 396 |
| Jackson | $\underset{6,844}{5,895}$ | $\underset{3,450}{2,661}$ | ${ }_{5}^{4,456}$ |  | $\stackrel{2}{2,546}$ | ${ }_{2,910}^{2,98}$ | ${ }_{347,120}$ |



| 7,012 | 3,317 | 4,997 | ............... | 2,422 | 2,575 | 597,324 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4,090 | 1,798 | 1,984 | .............. | 979 | 1,005 | 227,312 |
| 6,039 | 2,779 | 2,853 | 2 | 1,505 | 1,350 | 453,768 |
| 4,121 | 1,844 | 2,465 |  | 1,222 | 1,243 | 296,545 |
| 6,101 | 2,779 | 4,384 | 6 | 2,185 | 2,205. | 582,826 |
| 3,996 | 1,886 | 2,486 | 2 | 1,229 | 1,259 | 293,414 |
| 2,842 | 1.295 | 1,781 |  | 887 | 894 | 194,807 |
| 9,745 | 4,220 | 5,155 | 1 | 2,610 | 2,546 | 634,735 |
| 16,208 | 7,276 | 8,382 | 1 | 4,125 | 4,258 | 898,622 |
| 6,732 | 3,081 | 4,379 |  | 2,188 | 2,191 | 529,097 |
| 3,720 | 1.627 | 2,024 | 1 | 1,068 | 957 | 286.574 |
| 12,091 |  | 5,900 |  | 3,079 | 2,821 | 888.289 |
| 9,165 | 4,236 | 6,537 |  |  |  | 791,479 |
| 8,108 | 4,778 | 4,956 | 1 | 2,483 | 2,474 |  |
| 1,888 |  |  |  |  |  |  |
| 9,676 | 3,916 | 3,188 |  | 1,661 | 1,527 | 516,823 |
| 5,806 | 2,571 | 2,841 |  | 1,504 | 1,337 | 343,026 |
| 2,658 | 1,682 | 1,844 |  | 929 | 915 | 217,279 |
| 7,233 | 3,198 | 4,881 |  | 2,394 | 2,487 | 613,190 |
| 8,535 | 3,882 | 5,473 | 3 | 2,797 | 2,679 | 655,533 |
| 8,681 | 4,377 | 4,641 | 5 | 2,315 | 2,331 | 459,507 |
| 5,075 | 2,473 | 4,618 | ................ | 2,183 | 2,435 | 472,740 |
| 5,577 | 2,577 | 3,112 |  | 1,580 | 1,532 | 323,762 |
| 6,546 | 3,036 | 5.179 |  | 2,676 | 2,503 | 1,197,160 |
| 7,796 | 1.0. | 4,767 |  | 2,405 | 2,362 | 603,065 |
| 3,622 | 1,705 | 2,280 |  | 1,176 | 1,104 | 317,950 |
| 8,264 | 3,647 | 5,354 | 10 | 2,644 | 2,720 | 640,704 |
| 7,902 | 3,357 | 4,964 |  |  |  | 582,221 |
| 2,110 | 1,027 | 1,475 |  | 737 | 738 | 17,547 |
| 11,755 | 5,475 | 10,377 |  | 4,571 | 5,806 | 735,268 |
| 9,720 | 4,081 | 4,975 |  | 2,437 | 2,538 | 671,269 |
| 5,167 | 1,093 | 2,799 |  | 1,436 | 1,363 | 269,744 |
| 8,283 | 2,881 | 4,258 | 1 | 2,267 | 1,992 | 581,278 |
| 9,136 | 3,997 | 6,423 | 6 | 3,297 | 3,132 | 661,724 |
| 1,601 |  |  |  |  |  | 148,554 |
| 6,637 | 2,924 | 4,723 | 2 | 2,527 | 2,198 | 607,117 |
| 3,226 | 1,529 | 2,409 | 1 | 1,142 | 1,268 | 269,940 |
| 7,789 | 3,391 | 3,743 | 9 | 1,966 | 1,786 | 385,074 |
| 7,981 | 3,800 | 4,836 |  | 2,476 | 2,360 | 600,867 |
| 9,070 | 3,213 | 5,425 |  | 2,766 | 2,659 | 619,420 |
| 6,221 | 2,808 | 4,278 | 8 | 2,211 | 2, 075 | 495,747 |
| 5,264 | 2,256 | 3,200 | 1 | 1,605 | 1,596 | 364,207 |
| 7,145 | -.................. | 4,079 | ............... | 2,030 | 2,049 | 474,656 |

TEACHERS' CERTIFICATES, 1911-1912.

| CountiesExclusive of cities under city superintendents. | Certificates Grantedby County Superintendents. |  |  |  |  |  |  |  |  |  | Normal School Graduates. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1st Grade. |  | 2d Grade. |  | 3d Grade. |  | Limited. |  | $\begin{aligned} & \text { ※゙̈ } \\ & \stackrel{0}{0} \end{aligned}$ |  | Full course. | $\begin{aligned} & \text { Ele- } \\ & \text { mentars } \\ & \text { course. } \end{aligned}$ |  |  |  |  |
|  | $\begin{aligned} & \dot{\Phi} \\ & \text { घ } \\ & 0 \\ & \text { B } \end{aligned}$ | $\begin{aligned} & \text { di } \\ & \text { © } \\ & \text { B } \\ & 0 \\ & 0 \end{aligned}$ | g an 0 0 | $\dot{0}$ \# 0 0 0 B | $\begin{aligned} & \dot{\Xi} \\ & \dot{\mathbf{g}} \\ & \dot{\mathrm{H}} \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |
| To als | 54 | 381 | 127 | 1,642 | 369 | 2,938 | 19 | 133 | 5,891 | 1,338 | 1,033 | 243 | 1,411 | 467 | 1,357 | 4,962 |
| $\begin{aligned} & \text { Adams } . . . . . . . . . . \\ & \text { Ashland } \end{aligned}$ | 23 | 1 | 212 | 252530 | 3 | 72 | .... 1 |  | 10468 | 17 | .......... | .............. | - $\frac{6}{}$ | $\begin{array}{r} 1 \\ \ldots . . . . . . \end{array}$ | $36$ | $\begin{array}{r} 191 \\ 17 \end{array}$ |
|  |  | 6 |  |  | $\begin{aligned} & \cdots \\ & 3 \\ & 3 \\ & 4 \end{aligned}$ | ${ }_{6}^{34}$ | 1 | $\ldots$ |  | ${ }_{42}$ |  | $\ldots$ |  |  |  |  |
| Barron Bayfield |  | 6 5 | $\stackrel{1}{2}$ | 36 22 |  | 66 28 28 |  |  | $\begin{array}{r} 119 \\ 64 \\ 49 \end{array}$ | 42 22 | 19 | 8 8 | 53 2 | 8 | $\begin{aligned} & 20 \\ & 43 \end{aligned}$ |  |
| Brown |  | 5 |  | 16 |  | $\begin{aligned} & 20 \\ & 24 \\ & 18 \end{aligned}$ |  |  |  | 251010 | 8 | $\begin{aligned} & 8 \\ & 3 \\ & 4 \\ & 2 \\ & 3 \end{aligned}$ | $\begin{array}{r} 8 \\ 65 \\ 7 \end{array}$ | 2 | 20 | 39 52 |
| Buffalo |  | 1 | 2 | 5 | $\begin{aligned} & 0 \\ & 4 \\ & 2 \end{aligned}$ |  |  |  | $\begin{aligned} & 49 \\ & 28 \end{aligned}$ |  | 14 |  |  | , | 2 | ${ }_{26}^{64}$ |
| Burnett |  | 7 | 1 | 43 | 2 | 27 |  | 4 | 84 | 10 | 2 |  |  | 1 | 63 |  |
| Calumet | 1 | ${ }_{11}^{4}$ | 3 | 1541 | ${ }_{61}^{7}$ | 603 |  | . 5 | $\begin{array}{r} 95 \\ 117 \end{array}$ | 114 | 6 |  | ......... | 2 | 262 | 269 |
| Chippewa |  |  | 1 |  |  |  |  |  |  |  |  | - ${ }^{3}$ |  |  |  |  |
| Clark | 2 | 178 | 4 | $\begin{aligned} & 38 \\ & 45 \end{aligned}$ | 426 | 823940 |  | 12 | 159 |  | 1070 |  |  |  |  | $\begin{gathered} 150 \\ 75 \end{gathered}$ |
| Columbia |  |  |  |  |  |  | $\cdots i$ | $\cdots \cdots$ | $\begin{aligned} & 95 \\ & 82 \end{aligned}$ | $\begin{aligned} & 22 \\ & 41 \end{aligned}$ |  | ............. | $\begin{aligned} & 38 \\ & 29 \end{aligned}$ | 16 4 | $\cdots \cdots \cdots$ |  |
| Crawford . <br> Dane- | 1 | 13 | 1 | 19 |  |  |  |  |  |  |  |  |  | 4 |  | 75 |
| First Dist. |  | 15 | 1 | 44 | .... | 39 |  |  | 99120 | $\cdots$ | 25 |  | 3 | 12 |  | 13888117 |
| Second Dist. |  |  |  |  |  |  |  |  |  | 12 |  |  |  |  |  |  |
| Dodge ${ }_{\text {Door }}$... | ${ }_{2}^{2}$ |  |  |  | 10 7 |  | 1$\ldots . . .1$. | 1 <br> 4 | 154 31 | 12 10 |  | 1 28 <br> 6  |  | $\begin{array}{r}1 \\ \hline\end{array}$ | 10 | 6260 |
| Door ${ }_{\text {Douglas }}$ | ${ }_{1}^{2}$ |  | 223 | 62938 | 732 | $\begin{aligned} & 12 \\ & 35 \\ & 47 \end{aligned}$ |  |  | $\begin{aligned} & 31 \\ & 83 \\ & 90 \end{aligned}$ | 1048 | 4 8 8 |  |  | 19 91 |  |  |
| Dunn ... |  |  |  |  |  |  |  |  |  |  | 9 | 2 | 97 |  | 1 |  | 3 |
| Eau Claire |  |  |  | 9 | .... |  |  | \%....18 | 12 |  | 7 13 | 1 | 39 | 3 | 16 | 90 |
| Florence |  |  |  | $\stackrel{9}{9}$ |  | 2 |  |  | 12 |  | 5525 |  |  | 4 10 | - 4 | 7 448 |
| Fond du L | 1 |  | 1 | 23 6 | 12 | 86 19 |  |  | 135 31 | 8 |  | 3 <br> 3 <br> 3 | 3 | 10 | 13 | 448 2 |
| Grant |  | 11 | 3 | 8 | ii | 134 | 1 | 2 <br> $\ldots . . . . .$. <br> $\ldots$ | 170 | 59 | 89 |  | 3 | 35 | $\left\|\begin{array}{c} 69 \\ \cdots \cdots \cdots \end{array}\right\|$ | 142 |
| Green | 2 | 1012 | 4 <br> 2 | $\begin{aligned} & 20 \\ & 18 \end{aligned}$ | 102 | $\begin{aligned} & 45 \\ & 20 \end{aligned}$ |  |  | $\begin{gathered} 91 \\ 54 \end{gathered}$ | $\begin{aligned} & 16 \\ & 12 \\ & 12 \end{aligned}$ | 810 | 122 | $\begin{aligned} & 57 \\ & 27 \end{aligned}$ | 62 |  | 60 |
| Green Lake |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


| Iowa |  |  |  |  |  |  |  |  | 108 | 29 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Iron |  | 3 | 1 | 8 | 3 | - 6 | ........ |  | 121 | 1 | 13 | 3 |  | 6 | . ${ }^{\text {a }}$. ${ }^{\text {a }}$. | 12 |
| Jackson |  | 8 | 2 | 29 | 4 | 44 |  |  | 87 | 23 | 18 |  | 15 | 8 | 8 | 74 |
| Jefferson | 1 | 7 | 2 | 12 | 1 | 56 |  | . | 79 | $12 \cdot$ | 4 | 9 | ........... | 6 | ...... | 82 |
| Juneau |  | 3 | 2 | 22 | 2 | 79 |  | 1 | 109 | 35 | 27 | 1 | 6 | 18 | 5 | 61 |
| Kenosha | 1 | 4 |  | 14 |  | 42 |  |  | 61 | 8 | 2 | 2 |  |  |  | 76 |
| Kewaunee | 1 |  | 3 | 3 | 12 | 20 |  |  | 39 |  | 6 | 4 | 10 |  | 12 | 44 |
| La Crosse |  | 2 |  | 17 | 5 | 35 |  |  | 59 | 4 | 5 | 3 | 1 | 3 | 8 | 49 |
| Lafayette | 1 | 5 | 2 | 40 | 6 | 60 |  | 2 | 116 | 33 | 22 | 8 | 8 | 15 | 33 | 120 |
| Langlade . |  | 1 |  | 9 | 2 | 28 |  |  | 40 | 4 |  | 2 | 52 |  | 34 | 75 |
| Lincoln ... |  | 9 |  | 17 | 2 | 20 | 3 | 2 | 53 | 36 |  | 1 | 18 |  | 35 | 27 |
| Manitowoc |  |  | 5 | 13 | 2 | 5 |  |  | 25 | 13 | 17 | 7 | 88 | 2 | 39 | 156 |
| Marathon |  | 1 | 1 | 47 | 10 | 48 |  |  | 107 | 87 | 25 | 5 | 131 | 1 | 13 | 136 |
| Marinette | 1 | 7 |  | 30 | 6 | 35 |  |  | 79 | 9 | 9 | - 17 | 61 | 4 | .... | 44 |
| Marquette |  | 3 | 1 | 12 | 4 | 34 |  | 2 | 56 | 34 | 7 | 3 | 5 | 7 | 22 | 136 |
| Milwaukee | 2 | 3 |  | 16 | 4 | 11 | ......... | 3 | 39 | 15 | 81 | 5 | 1 | 1 | 16 | 42 |
| Monroe . |  | 3 |  | 30 | 1 | 93 | 1 | 4 | 132 |  | 40 | 5 | 4 | 26 | 14 |  |
| Oconto |  | 5 | 8 | 40 | 4 | 26 |  |  | 83 | 19 | 5 | 2 | 5 | .... | 28 | 44 |
| Oneida | 1 | 4 | 1 | 7 |  | 33 | 1 | 2 | 49 | 3 | 6 | 3 | 8 | 3 | 49 | 19 |
| Outagamie |  | 8 | 2 | 31 | 11 | 76 |  | 2 | 130 | 14 | 5 | 4 | 16 |  | 3 |  |
| Ozaukee .. | 1 | 2 | 1 | 13 | 8 | 24 |  |  | 49 | 15 | 22 | 3 | 2 | 8 | 30 | …… 68 |
| Pepin .. | 1 | 2 | - | 12 | 2 | 16 |  | 1 | 34 | 4 | 12 | 1 | 5 | 4 | 7 | 20 |
| Pierce | 5 | 3 | 1 | 24 | 5 | 55 | 1 | 2 | 96 | 15 | 14 | 6 | 1 | 18 |  | 60 |
| Polk ... | 2 | 6 | 2 | 23 | 2 | 26 | ........ | 2 | 63 | 9 | 22 | 5 | 75 | 4 | 29 | 88 |
| Portage |  |  |  |  |  |  |  |  |  |  | 12 | 7 | 10 | 1 |  |  |
| Price |  | 5 | 2 | 18 | 4 | 27 |  |  | 56 | 20 | 19 | 4. | 18 | 8 | 15 | 64 |
| Racine |  | 2 | $\cdots$ | 28 | 3 | 24 |  |  | 57 | 6 | 16 | 2 | .... | 14 |  |  |
| Richland |  | 2 | 4 | 37 | 10 | 45 | 3 | 4 | 105 | 11 | 18 |  | 49 | 4 | ............. | 83 |
| Rock | 1 | 18 | 2 | 38 | 6 | 80 |  | 11 | 156 | 6 | 27 | 3 | 14 | 19 | 31 | 73 |
| Rusk .... | 1 | 3 | 1 | 7 | 2 | 20 | 1 | 6 | 41 | 6 | 9 | 3 | 36 | 4 | ..... | 28 |
| St. Croix | 4 | 16 | 1 | 27 | 3 | 76 |  |  | 127 | 5 | 27 | 3 | .... | 12 | 62 | 131 |
| Sauk | 1 | 6 | 1 | 43 | 2 | 55 |  |  | 108 | 17 | 17 | 3 | 44 | 3 |  | 118 |
| Sawyer . |  | 5 | ........ | 16 | 2 | 18 |  | 4 | 45 | 2 | 18 | 1 | 6 | 4 | 25 | 18 |
| Shawano | 2 | 11 | 4 | 20 | 9 | 80 |  |  | 126 | 25 | 17 | 12 | 16 | 10 |  |  |
| Sheboygan | 7 | 32 | 11 | 42 | 26 | 105 |  | 2 | 225 | 135 | 22 | 2 | 1 | 10 | 9 | 94 |
| Taylor ..... |  |  | 2. | 6 | 2 | 20 |  |  | 30 | 8 | 12 | 8 | 8 | 5 | 10 | . . . . . . ${ }^{\text {. }}$ |
| Trempealeau | 1 | 4 | 1 | 19 | 7 | 36 | 1 | 5 | 74 | 5 |  | 4 | 5 | 3 | 61 | 62 |
| Vernon |  | 4 |  | 32 | 5 | 97 | 1 | 8 | 147 | 19 | - |  | 20 |  |  | 210 |
| Vilas .... | 1 | 5 | 1 | 21 | 2 | 25 | ......... | 1 | 56 | 2 | 9 | 1 | 4 | 4 | 18 |  |
| Walworth |  | 4 |  | 25 | 1 | 58 |  |  | 88 | 2 | 26 | 5 | 11 | 23 | 19 | 70 7 |
| W ashburn |  | 5 | 2 | 26 | 2 | 29 |  | 1 | 65 | 4 | 9 | 1 | 2 | 3 | 49 | 7 |
| Washington | 1 | 1 | 4 | 5 | 9 | 25 |  |  | 45 | 5 | 16 | 1 | . | 10 | $\cdots$ | 87 |
| Waukesha . |  | 4 | 1 | 30 | 5 | 48 |  |  | 88 | 112 | 24 | 4 | $\ldots$ | 5 |  |  |
| Waupaca. | 1 | 1 | 3 | 26 | 3 | 34 |  |  | 68 | 27 | 1 | .... | 45 | .... |  | $124{ }^{\prime}$ |
| Waushara |  | 3 | 8 | 58 | 3 | 22 | 2 | 24 | 120 | 63 | 8 | 11 | 50 | 35 |  | 4 |
| Winnebago |  | 8 | 2 | 49 | 9 | 88 |  |  | 156 | 44 | 15 | 3 | 3 | 5 | 124 | 147 |
| Wood ... | ........ | 2 | 2 | 27 | 1 | 28 |  | ........ | 60 | 33 | 19 | 2 | 71 |  | ..... | 112 |

$\angle 8$ •LN'HGN'HLNIYHAOS THVLS 田HL HO LצOdGY

TEACHERS IN PUBLIC SCHOOLS, 1911-19ิ13.



| Counties- <br> Exclusive of cities under city superintendents. | Less than $\$ 00$ per month. |  | No. teachers who receive not less than $\$ 20$ nor more than $\$ 35$ yer month. |  | Not less than $\$ 25$ nor more than ะ 30 per month. |  | Not less than $\$ 30$ nor more than $\$ 35$ per month. |  | Not less than \$35 nor more than $\$ 40$ per month. |  | Not less than $\$ 10$ nor more than $\$ 45$ per month. |  | Not less than $\$ 45$ nor more than $\$ \overline{0} 0$ per morth |  | More than ${ }^{\$ 50}$ per month. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Fem. | Male. | Fem. | Male. | Fem. | Male. | Fem. | Male. | Fem. | Male. | Ftm. | Male. | Fem. | Male. | Fem. |
| Totals |  | 1 | ...... | 4 | 5 | 120 | 16 | 961 | 83 | 2,066 | 146 | 2,285 | 109 | 1,244 | 692 | 2,165 |
| Adams |  |  |  |  |  | 6 | 1 | 45 | 1 | 26 |  | 8 |  | 8 | 1 | 4 |
| Ashland |  |  |  |  |  |  |  |  |  | 2 |  | 40 |  | 1 |  | ${ }^{17}$ |
| Barron |  |  |  |  |  |  |  | 4 |  | 65 | 5 | 50 | 8 | 12 | 22 | 26 |
| Bayfield |  |  |  |  |  | 1 |  |  |  | 4 | 2 | 43 | 1 | 16 | 8 | 41 |
| Brown. |  |  |  |  |  | 2 |  | 12 | 1 | 12 |  | 28 | 1 | 19 | 12 | 23 |
| Buffalo |  |  |  |  |  |  |  | 11 | 4 | 25 | 6 | 30 | 1 | 9 | 14 | 27 |
| Burnett |  |  |  |  |  |  |  |  | 1 | 31 | 2 | 33 | 1 | 11 | 1 | 9 |
| Calumet |  |  |  |  |  | 1 |  | 2 | 1 | 14 | 3 | 26 | 3 | 12 | 10 | 23 |
| Chippewa |  |  | ........ | 4 |  | 50 | 3 | 60 | 1 | 22 |  | 9 |  | 3 | 3 | ${ }_{5}^{2}$ |
| Clark ... |  |  |  |  |  |  | 1 | 18 | $\stackrel{2}{2}$ | 39 | 3 | 42 | 3 | 18 | 6 | 5 |
| Columbia |  |  |  |  |  |  |  | ${ }^{6}$ | $\stackrel{2}{2}$ | 30 |  | 69 |  | 29 | 11. | 50 |
| Crawford |  |  |  | .... | 1 | 9 | 2 | 42 | 3 | 23 | 1 | 12 |  | 8 | 9 | 15 |
| $\begin{aligned} & \text { Dane } \\ & \text { First Dist. } \end{aligned}$ |  |  |  |  |  | 1 |  | 17 | 1 | 32 |  | 50 |  | 21 | 7 | 32 |
| Second Dist |  |  |  |  |  | 2 |  | 26 | 2 | 39 | 3 | 41 | 5 | 7 | 12 | 45 |
| Dodge ........ |  |  |  |  |  | 5 |  | 39 | 2 | 74 | 4 | 55 | 5 | 17 | 15 | 34 |
| Door |  |  |  |  |  |  |  | 3 |  | 2 | 2 | 17 | 1 | 9 | 12 | 30 |
| Douglas |  |  |  |  |  |  |  |  |  |  | 2 | 28 | 2 | 26 | 1 | 30 |
| Dunn |  |  |  |  |  |  |  | 16 |  | 41 |  | 60 | 1 | 19 | 11 | 13 |
| Eau Olaire |  |  |  |  |  |  |  | 16 | 3 | 48 |  | 23 |  | 2 | ${ }_{2}^{6}$ | ${ }^{6}$ |
| Florence .... |  |  |  |  |  |  |  |  |  | 1 |  | 3 |  | 4 | $\stackrel{2}{12}$ | 21 |
| Fond du Lac. |  |  |  |  |  |  |  | 7 | 5 | 55 | 6 | 55 | 3 | 24 | 12 | $17$ |
| Forest |  |  |  |  |  |  |  |  | 1 | 1 |  |  |  | $\stackrel{2}{2}$ | ${ }^{7}$ | ${ }_{99}^{50}$ |
| Grant . |  |  |  |  | 1 | 3 | 1 | 49 | 5 | 77 16 |  | 62 49 | 1 4 | 25 54 | $\stackrel{24}{6}$ | 99 25 |
| Green ${ }_{\text {Green }}$ Lake |  |  |  |  |  | 4 |  | 14 |  | ${ }_{20}^{16}$ | 4 | ${ }_{21}^{49}$ | 4 | 54 10 | ${ }_{6}^{6}$ | 17 |
| Iowa . |  |  |  |  |  | 2 |  | 26 |  | 47 | 2 | 37 | 1 | 29 | 28 | 43 |
| Iron .. |  |  |  |  |  |  |  |  |  |  | 1 | 14 | 3 | 16 | 5 | 28 |
| Jackson |  |  |  |  |  | 1 | 1 | 12 | 1 | 49 |  | 31 |  | 11 | 8 | 31 |



| CountiesExclusive of cities under city superintendents. | No. of schools in county enrolling 5 or less than 5 pupils. | $\begin{gathered} 6 \text { to } 10 \\ \text { children. } \end{gathered}$ | 11 to 15 children. | $\begin{gathered} 16 \text { to } 20 \\ \text {-hildren. } \end{gathered}$ | 21 to 25 children. | $\begin{gathered} 26 \text { to } 30 \\ \text { children. } \end{gathered}$ | 31 to 35 children. | $\begin{gathered} 36 \text { to } 40 \\ \text { children. } \end{gathered}$ | 41 to 45 <br> :hildren. | $\begin{gathered} 46 \text { to } 50 \\ \text { children. } \end{gathered}$ | 51 to 55 shildren. | $\begin{gathered} 56 \text { to } 63 \\ \text { child ren } \end{gathered}$ | More than 60 children. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Totals | 73 | 356 | 690 | 1,009 | 1.145 | 1,243 | 1,007 | 867 | 600 | 403 | 234 | 149 | 233: |
| Adams |  | 4 | 15 | 20 | 13 | 14 | 9 | 11 | 4 | 1 | ........... | 1 | ........... |
| Ashland |  | 6 | 11 | 8 | 9 | 9 | 8 | 9 | 1 | 3 | 1 | ...... | . |
| Barron |  | 3 | 4 | 19 | 21 | 20 | 22 | 22 | 21. | 17 | 13 | 10 | 10 |
| Bayfield |  | 10 | 16 | 15 | 7 | 13 | 12 | 11 | 11 | 3 | 9.... | 7 | 4 |
| Brown .. |  | 1 | 8 | 3 | 4 | 11 | 17 | 10 | 16 | 7 | 9 | 7 | 13 |
| Buff alo |  | 1 | 11 | 9 | 14 | 28 | 24 | 11 | - 1 | 9 | 2 | 3 | 1 |
| Burnett | 2 | 11 | 11 | 21 | 12 | 9 | 8 | 4 | 4 | 2 | 1 | 1 | 1 |
| Calumet |  | 2 | 6 | 9 | 9 | 8 | 8 | 4 | 8 | 1 | 1 | 2 | 9 |
| Chippewa | 3 | 6 | 10 | 18 | 19 | 33 | 18 | 17 | 19 | 6 | 4 | 4 |  |
| Clark ..... | 2 | 4 | 7 | 11 | 20 | 13 | 18 | 19 | 15 | 9 | 3 | 5 | 24 |
| Columbia | 3 | 6 | 15 | 25 | 30 | 29 | 27 | 15 | 5 | 1 | 1 | 1 | 3 |
| Crawford | 1 | 5 | 9 | 11 | 17 | 15 | 29 | 16 | 12 |  | 4 | ........... |  |
| Dane- <br> First district |  | 4 | 6 | 11 | 18 | 26 | 20 | 10 | - 11 | 3 | 1 |  | 1 |
| Second district | $4^{\cdots \cdots}$ | 9 | 14 | 29 | 23 | 10 | 11 | 24 | 18 | 7 | 8 | 1 | 5 |
| Dodge ............. | 2 | 9 | 20 | 36 | 30 | 26 | 41 | 31 | 12 | 4 | $\stackrel{2}{8}$ | 1 | 3 |
| Door ... |  |  | 1 | 4 | 5 | 12 | 2 | 6 | 7 | 14 | 8 | 6 | 11 |
| Douglas | 1 | 12 | 19 | 17 | 8 | 13 | 7 | 5 | 4 | 1 | 1 |  | 1 |
| Dunn ... |  |  |  |  |  |  |  |  |  |  | .......... | .......... |  |
| Eau Claire | 2 | 1 | 4 | 8 | 15 | 20 | 18 | 8 | 4 | 2 | 1 | .......... | 2 |
| Florence .. |  | 1 | 2 | 3 | $\ldots{ }^{\text {a }}$ | 5 | 3 | 5 | 2 |  |  | 1 |  |
| Fond du Lac. |  | 11 | 18 | 28 | 31 | 19 | 21 | 16 | 7 | 2 | 4 |  |  |
| Forcst | 2 | 3 | 4 | 4 | 8 | 8 | 5 | 7 | 4 | 7 | 1 | 1 | 5 |
| Grant ....... | 2 | 19 | 42 | 54 | 68 | 40 | 34 | 24 | 10 | 3 | 2 | - | 8 |
| Green | 4 | 10 | 19 | 21 | 20 | 32 | 11 | 4 | 1 | 1 |  | 1 | .......... |
| Green Lake . |  | 8 | 12 | 13 | 17 | 11 | 9 | 7 | 6 | 4 | ........... | 1 | .......... |
| Iowa ................. |  |  | 5 |  |  |  |  |  |  |  |  |  |  |
| Iron .......... | 5 1 | 3 5 | 5 9 | 4 13 | 5 21 | 4 8 | 5 12 | 10 | ${ }_{11}^{3}$ | 8 2 | 3 5 | 2 <br> 1 | 19 |
| Jackson ...... |  | 5 3 | 9 23 | 13 39 | 44 | -80 | 12 | 13 3 | - 8 | 5 | $\ldots . .$. | \|.......... | 4 |



HIGH AND GRADED SCHOOLS, AND DISTRICT INDEBTEDNESS, 1911-1912. NO. AND VALUE OF SCHOOL HOUSES, 1910-1911.



TOWNSHIP LIBRARIES,1911-1912.

| Counties- <br> Exclusive of cities ander city superintendents. | No. of volumes received during the year from town, village, or city clerk. | Total cost of these volumes. | Amount expended in purchase of library books (with funds other than township library fund) including price of books secured by gift. | No. of volumes added by 9 ift or pur. hase with funds other than town-hip library fund. | To' al number of volumes in the school libraries. | Total cost of these books. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Totals | 80,255 | \$44,143 06 | \$5,022 06 | 5,276 | 1,295,758 | \$635,627 36 |
| Adams | 650 | \$312 60 |  |  | 11,467 | \$6,649 10 |
| Ashland | 217 | 13678 | \$225 72 | 231 | 3,596 | 1,952 23 |
| Barron Bayfield | 1,905 | 99299 | 1,357 | 34 | 20,475 | 10,938 39 |
| Bayfield Brown | 977 1,340 | 4992.5 | 567 55 | 8 | 13,403 | 6,717 97 |
| Buffialo | 1,340 938 | 80064 54845 | 5535 59 | 58 | 24,318 | 14,019 27 |
| Burnett | 656 | 34086 | 255 | 4 | 15,765 | 4,070 16 |
| Calumet ... | 822 | 48370 | 980 | 10 | 18518 | 9,254 20 |
| Chippewa . | 1,213 | 54816 | 4312 | 182 | 16,968 | 8,029 88 |
| Clark Columbia | 2,307 | 1,044 71 | 8151 | 93 | 27,490 | 14,709 54 |
| Crawford | 1,342 855 | 74143 46900 |  |  | 26,424 | 12.86643 |
| Dane- | 855 | 469 | C3 | 33 | 10,599 | 4.41317 |
| First Dist. | 1,307 | 73242 | 22076 | 805 | 25,850 |  |
| Second Dist. | 1,220 | 75072 | 220 | cos | 18,935 | 11,645 80 |
| Dodge ${ }_{\text {Door }}$........... | 1,88) | 1,093 34 | 2585 | 20 | 18,935 | 11,655 64 |
| Douglas | 751 | 51226 | 4691 | 73 | 16,683 | 8,635 94 |
| Dunn | 1,375 | 74641 |  |  | 4,878 | 1,909 43 |
| Eau Claire | 1,009 | 48200 | 3450 300 | 46 9 | 20,210 19,865 | *9,700 80 |
| Florence ... | 1,219 | 11362 | 23 25 | 9 35 | 19,865 3,288 | 7,643 63 |
| Fond du Liac. | 2,147 | 56533 | 12236 | 111 | 31,070 | 1,717 40 |
| Forest | 342 | 206 | 2509 | 76. | 31,080 3,861 | $14.71564$ $1,66428$ |
| Grant | 2,139 | 1,274 05 | 65644 | 335 | 29',445 | 25,219 94 |
| Green Green Lake | 780 730 | 597 <br> 3 <br> 14 | . . . . . . . . . . . . | .............. | 18,319 | 7,829 11 |
| Iowa ....... | 1,000 | 58645 | 10000 | 133 | 14,929 $* 13,087$ | *, 885370 |
|  | 1,583 | 27127 | 6545 |  | 13,087 4,34 | *7,896 45 |


*Figures based on 1911 report.

COUNTY SUPERINTENDENT, INSTITUTES, ETC., 1911-1912.

| Colnties- <br> Exclusive of cities under city superintend- | Salary of county superin- | Salary of office | Amount paid for printing. postage | Amount allowed for | No. of different schools visited by | No of visits | No. of teachers meetings | Total number of days these | $\begin{gathered} \text { No. of } \\ \text { teachers } \\ \text { insti- } \end{gathered}$ | No. of Gays | $\begin{array}{r} \text { AtTenp } \\ \text { TEAC } \\ \text { lnsti } \end{array}$ | ANCE AT HERS' TUTES. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | tendent. |  |  | held. |  |  | Male. | Female. |
| Totals | \$77,290 00 | \$8,375 00 | \$11,628 98 | \$12,753 07 | - 7,872 | 11,888 | 269 | 308 | 171 | 294 | 718. | 6,041 |
| Adams Ashland | $\begin{array}{r}\$ 900 \\ 95000 \\ \hline 100\end{array}$ |  | \$11500 | \$15000 | 88 | 96 | 2 | 3 | 1 | 3 | 1 | 68 |
| Barron | 1,100 00 | \$320 00 | 20000 200 | 200 | 182 | 250 | 4 | 4 | $\ldots . . . .$. |  |  |  |
| Bayfield | 190000 | 60000 | 20000 | 25000 | 103 | 188 | 4 | 4 | 4 | 8 | 20 14 | 225 182 |
| Brown | 1,00000 |  | 20000 | Actual | 107 | 133 | 14 | 15 | 6 2 | 2 | 14 |  |
| Buffalo | 190000 |  | 20000 | 20000 | 113 | 151 | 1 | 2 | 1 | 5 | 10 | 60 |
| Calumet | 1,000 1,100 1,000 |  | A...... | 25000 | 89 | 115 |  |  | ]. | 3 | 4 | 60 |
| Chippewa | 1,00000 | 42000 | Actual 20000 | Actual 25000 | 95 133 | 150 | 4 | 4 | 1 | 2 | 10 | 60 |
| Clark ... | 1,20000 | 36000 |  | 2500 | 133 | 149 | . |  | 2 | 2 | 6 | 152 |
| Columbia | 1,350 00 |  | 30000 | 15000 | 146 | 152 | 34 | 370 | 3 | 6. |  |  |
| Crawford | 1,200 00 |  | 20000 | 150 | 119 | 142 | 34 | 340 | 2 | 4 |  |  |
| First district | 90000 | 15000 | 20000 | 20000 | 169 |  |  |  |  |  |  |  |
| Second district | 90000 | 10000 | 20000 | 25000 | 108 | 169 | 4 | 4 | 2 | 6 | 2 | 148 |
| Dodge | 1,40009 | 100 | Actual | 20000 | 179 | 112 |  |  | 4 | 9 | 22 | 225 |
| Door.. | 1,100 00 |  | 20000 | Actual | 66 | 150 | 6 | 6 |  |  |  |  |
| Douglas | 1,200 00 |  | 32600 | 23600 | 80 | 121 | 6 | 6 | 3 2 | 6 3 | 26 2 | 126 |
| Dunn ... | 1,000 00 | 40000 | 50000 | ........ | 135 | 121 | 6 | 7 | 2 1 | 3 2 | 2 11 | 53 122 |
| Eau Claire | 90000 |  | 20000 | 25000 | 88 | 171 | 3 | 3 | 1 | $\stackrel{2}{3}$ | \% $\begin{array}{r}11 \\ . . . . . . . ~\end{array}$ | 122 |
| Florence ... | 24000 |  | 10000 |  | 15 | 30 |  | 3 | 1 |  |  | $\cdots$ |
| Fond du Lac | 1,050 00 | 35000 | 22500 | 20000 | 65 | 71 | 6 | 6 | 1 2 | 2 4 | 4 12 | 36 140 |
| Forest | 80000 |  | Actual | Actual | 45 | 70 | 3 | 3 | 2 |  |  |  |
| Grant | 1,500 00 | 60000 | Actual | Actual | 301 | 352 | 4 | 5 |  |  |  |  |
| Green ...... | 1,200 00 | 30000 | 20000 | Actual | 103 | 115 | 2 | 5 3 |  |  |  |  |
| Green Lake | 1,200 00 | 300 | 20000 | 25000 | 103 | 175 | 2 2 | $\stackrel{3}{2}$ | 2 4 | 3 8 | 4 6 | 24 70 |
| Iowa | 1,050 00 |  | 20000 | 25000 | 160 | 184 | 6 | 8 | 6 | 8 |  |  |
| Iron | 50000 |  |  | 20000 | 50 | 51 | 3 | 3 |  | 8 |  | . . . . ${ }^{\text {c }}$ |
| Jackson | 1,000 00 |  | 20000 | 20000 | 123 | 140 | 6 | 8 | 1 | 2 |  |  |
| Jefferson | 1,200 00 | 10000 | 20000 | 20000 | 187 | 212 | 10 | 12 | 1 | 5 | 5 5 | 80 104 |
| Juneau | 1,20000 | 10000 | Actual | 20000 | 155 | 187 |  |  | 2 | 4 | - 22 | 104 178 |



FINANCIAL RECEIPTS, 1911-1912.

| Cojnties- <br> Exclusive of citjes under city superintendents. | Condition June 30, 1911. |  | From taxes levied at distri t school meeting. | From special state aid. | From taxes levied by county board of supervisors | From state school fund income. | From all other sources. | Total amount received during the year. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Money on hand. | Deficit. |  |  |  |  |  |  |
| Totals | \$1,958,097 60 | \$21,337 38 | \$3,078,977 22 | \$291,780 70 | \$1,141,558 52 | \$1,177,123 24 | \$1,115,872 94 | \$6,805,312 62 |
| Adams | \$10,031 31 | \$164 50 | \$16,525 77 | \$2,250 00 | \$7,657 92 | \$8,136 64 | \$2,692 82 | \$37,263 15 |
| Ashland | 8,995 37 | 3025 | 26,488 52 | 1,950 23 | 5,949 95 | 5,261 06 | 2,191 78 | 41,84154 |
| Barron | 42,579 42 | 3592 55899 | 51,879 54 | 3,995 <br> 4,778 | - 23,19895 | 12,096 51 | 28,037 7,814 23 | 132,544 89 887 75 |
| Bayfield | 43,454 75 | 55899 | 54,95000 17,72089 | 4,77806 5,22254 | 10,19895 22,923 | 12,09651 24,63216 | $\begin{array}{r}7,814 \\ 18,323 \\ \hline 1\end{array}$ | 89,837 <br> 88,821 <br> 94 |
| Brown Buff | 24,53853 17,323 49 | 71342 | 17,72089 27,77652 | 5,22254 3,665 1,66 | -15,752 38 | 24,63216 15,610 | 18,323 7,875 87 | 70,680 91 |
| Burnett | 15,138 14 | 83484 | 23,364 11 | 1,822 64 | 9,854 45 | 8,827 00 | 3,199 22 | 47,067 42 |
| Calumet | 23,838 67 |  | 30,569 29 | 2,556 33 | 14,570 88 | 14,923 96 | 7,69093 | 70,311 39 |
| Chippewa | 35.24316 |  | 37,052 37 | 5,519 75 | 17,367 11 | 18,108 61 | 6,009 14 | 84,056 98 |
| Clark | 75,936 14 |  | 70,419 32 | 6,435 24 | 26,227 23 | 30,716 74 | 28,053 96 | 161,852 49 |
| Columbia | 28,538 56 | 8437 | 60,183 72 | 5,133 6,061 75 | 18,400 <br> 11,515 <br> 1 | 18,558 11,121 39 | 11,097 10,058 67 | 113,37385 61.797 |
| Crawford | 9,862 40 | 24058 | 23,041 05 | 6,061 07 | 11.51574 |  | 10,058 67 | 61.79792 |
| DaneFirst Dist | 27,051 30 | 24619 | 39,644 15 | 6,317 08 | 18,119 62 | 18,986 41 | 20,136 73 | 103,203 99 |
| Second Dist. | 39,443 05 | 127.02 | 44,331 29 | 4,572 20 | 16,454 72 | 19,157 45 | 9,426 09 | 93,941 75 |
| Dodge. | 34,042 04 | 229 '59 | 57,906 86 | 6,118 12 | 27,904 92 | 29,924 51 | 8,532 19 | 130,386 60 |
| Door | 18,483 68 | 1400 | 17,885 46 | 2,987 1,850 60 | $\begin{array}{r}13,02918 \\ 5,662 \\ \hline\end{array}$ | $\begin{array}{r}13,59983 \\ 5,379 \\ \hline 88\end{array}$ | 4,89143 5,92169 | 52,393 73,76355 |
| Dougla | 27,63455 28,74852 | 21182 | 54.949 38,73161 | 1,850 ${ }^{1} \mathbf{6 7 2} 54$ | -5,662 20 | $\begin{array}{r}5,379 \\ 18,886 \\ \hline 18\end{array}$ | o,921 3,568 97 | 82,977 84 |
| Dunn Eau Claire | 28,74852 33,91624 | 1,25086 | 38,586 61 | 2,195 08 | 12,806 65 | 12,278 67 | 6,252 05 | 67,119 06 |
| Florence | -9,237 71 |  | 22,516 22 | 1,101. 88 | 82700 | 4,573 03 | 1,911 77 | 30,929 90 |
| Fond du Lac | 25,661 11 | 27316 | 49,158 43 | 4,431 49 | 23,212 51 | 21,960 01 | 11,683 78 | 110,446 22 |
| Forest | 17,870 49 | 66416 | 48,851 75 | 4,710 10 10 1969 | 3,058 28,75218 | $\begin{array}{r}5,253 \\ 29,785 \\ \hline 13\end{array}$ | 11,78253 53,519 | 96,656 241,673 00 |
| Grant | 52,056 <br> 22,804 <br> 1 | 53519 | 119,41950 41.369 | $\begin{array}{r}10,19691 \\ 1,987 \\ \hline 1\end{array}$ | -28,150 92 | 11,456 89 | 34,819 9 9,906 20 | 24,671 76,81 |
| Green ${ }_{\text {Green }}$ L | 22,804 12,253 62 |  | 21,558 38 | 1,424 94 | 8,308 19 | 8,355 43 | 7,006 77 | 46,653 71 |
| Iowa .. | 15,035 93 | 9315 | 63,034 81 | 4,660 98 | 16,654 24 | 14,071 98 | 19,104 55 | 117,526 56 |
| Iron | 25,392 59 |  | 38,225 44 | 1,253 4,180 62 | 6,54657 14,96236 | 6,542 14,470 58 | 843 <br> 196 <br> 19213 | 53,41180 88,863 76 |
| Jackson | 24,495 76 | 96 438 45 | 36,037 50 | 4,180 <br> 3,440 <br> 16 | 14,96236 16,92832 | 14,47058 18,00435 | 19,21310 24,930 | 88,863 108,166 18 |
| Jefferson | 22,73981 17,14211 | 43785 | 44,86310 <br> 48,887 <br> 8 | 3,440 4,290 16 | 16,322 18,320 | 17,477 80 | 17,874 74 | 106,853 38 |
| Juneau | 17,043 55 |  | $\stackrel{48,8876}{23,37} 64$ | 3,072 54 | -8,661 56 | 8,665 53 | 4,426 02 | 48,163 29 |



FINANCIAL DISBURSEMENTS.

| CountiesEiclusive of cities under city superintendents. | For lands and buildings. | Loans. | Equipment. | Interest. | Services of district schoul clerk. treasurer and director. | Salaries of men teachers. | Salaries of women teachers | Textloooks. | $\begin{gathered} \text { Stationery } \\ \text { and } \\ \text { supplies. } \end{gathered}$ | Janior service. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | \$522,927 42 | \$450,455 14 | \$151,817 49 | \$53,505 75 | \$123,602 02 | \$674,679 52 | \$3,310,855 34 | \$89,910 08 | \$94,475 34 | \$191,662 36 |
| Adams | \$1,198 29 | \$996 63 | \$761 00 | \$93 22 | \$1,105 39 |  |  |  |  |  |
| Ashland | 17,035 40 | ......... | 1,732 49 | 8438 84 | \$1,105 866 | $\$ 1,267$ 2,428 12 | 424,79856 22,615 30 | $\$ 21662$ 43922 | $\$ 334$ 2,10260 | $\begin{array}{r} \$ 45341 \\ 1,67152 \end{array}$ |
| Barron Bayfield | 6,611 30 | 19,441 66 | 2,570 13 | 1,62700 | 2,309 73 | 9,400 97 | 63,654 77 | 2,596 59 | 1,558 86 | $\begin{aligned} & 1,67152 \\ & 2,87319 \end{aligned}$ |
| Bayfield Brown | 5,353 70 | 1,035 00 | 2,089 70 | 20474 | 1,984 06 | 7,388 50 | 42,368 80 | 1,586 04 | 3,159 08 | 5,271 80 |
| Buffalo | 16,459 2,252 | 4,803 75 3,79333 | 1,604 93 | 57590 | 1,887 03 | 7,898 62 | 36,885 35 | 1,023 84 | 1,543 08 | 1,529 75 |
| Burnett | 2, 1100 | 1,098 31 | 24131 84153 | 40644 184 | 1,219 1,456 74 | 11,637 12 | 35,868 00 | 93660 | 71428 | 1,736 75 |
| Calumet | 1,206 57 | 5,465 20 | 1,397 41 | 18450 | 1,456 | 2,44798 9,28490 | 28,054 26 | 84230 | 41435 | 1,232 68 |
| Chippewa | 2,953 44 | -828 06 | 2,841 29 | 16308 | 1,408 17 | 9,284 6,707 76 | 32,23925 <br> 48,157 <br> 82 | 68293 2,47881 | 68626 1.880 | 1,888 73 |
| Clark | 29,877 95 | 13,798 06 | 4,846 56 | 1,068 96 | 2,408 17 | 6,707 17,585 71 | 48,15722 73,19020 | 2,47881 4,56688 | 1,88039 1,73786 | 1,456 16 |
| Columbia | 1,353 68 | 4,168 77 | 1,905 96 | 40676 | 1,385 21 | 1096088 | 68,040 80 | 4,56688 74939 | 1,73786 1,31178 | $\begin{aligned} & 5,03610 \\ & 3 \times 98 \end{aligned}$ |
| Crawford | 3,088 18 | 7,244 65 | -689 67 | 24842 | 1.05602 | 10,960 6,941 | 68,040 32,07845 | 74939 43821 | 1,31178 37868 | $\begin{aligned} & 3,82863 \\ & 1,07073 \end{aligned}$ |
| Dane- district | 72679 | 11,634 62 | 7,817 35 | 41066 | 1.63093 | 6,912 00 | 54,198 59 | 90236 |  |  |
| Second 'district Dodge ......... | 13,511 03 | 7,259 25 | 1,316 11 | 32144 | 1.38451 | 10,77191 | 53,649 54 | 1.07397 | 1,277 65 | 2,34105 2,71958 |
| Dodge | 1,393 <br> 4,043 <br> 84 | 6,10728 2,92498 | 74756 1.38926 | 24577 | 2,535 62 | 15.59988 | 76,482 72 | - 83336 | 1,659 22 | 3,179 51 |
| Douglas | 8,066 51 | $\begin{array}{r}2,924 \\ 46450 \\ \hline 158\end{array}$ | 1,38926 80074 | 28768 | 1,364 43 | 7,115 30 | 25,768 88 | 54453 | 73345 | 59278 |
| Dunn .. | 3,367 24 | 1.58831 | 1,050 41 | 216 34 | 2,13689 2.10208 | 1,848 7,807 00 | 32,758 40 | $\begin{array}{r}555 \\ \hline\end{array}$ | 2,180 19 | 3,860 85 |
| Eau Claire | 12,536 42 | 3,441 11 | 3,541 26 | 21325 | 2.192 <br> 1,444 <br> 18 | 7,807 49 | 48,84828 37,01291 | 1,941 26 | 99750 | 1,647 93 |
| Florence | , 59336 | $\bigcirc 10000$ | 3,541 55718 | 21325 1929 | 1,44423 450 72 | 5,94570 2.20750 | 37,01291 14,53156 | 1,822 29 | 1,450 83 | 1,542 17 |
| Fond du Lac. | 2,742 57 | 7,711 25 | 2,292 62 | 35431 | 450 1,965 43 | 2,20750 12,55469 | 14,53156 60,453 | 46780 | 1,212 83 | 2,464 10 |
| Forest | 10,536 53 | 17,750 00 | 2,793 80 | 1,016 67 | 1,060 1,07119 | 12,554 6,826 | 60,45313 26,724 | 9410 1,24514 | 1,556 61 | 2,278 09 |
| Grant | 18,737 68 | 13,712 93 | 8,870 48 | 1,221 10 | 1,971 2,980 81 | 6,82600 23,959 | 26,72404 119,013 30 | 1,24514 2.62663 | -993 79 | 3,562 40 |
| Green | 2,041 57 | 2,095 00 | 1,348 37 | 1,211 111 | 2,980 1,181 10 | 23,959 8,297 6,29 | 119,013 45,386 72 | $\begin{array}{r}1,62663 \\ 613 \\ \hline 127\end{array}$ | 2,263 32 | 8,16309 |
| Green Lake | 8182 | 2,760 74 | 1,322 97 | 6307 | 1,181 79430. | 8,295 6,445 10 | 45,38672 26,09388 | 613 127 75 | 812 1,117 | 1,264 55 |
| Iowa | 2,059 79 | 10,756 59 | 3,392 65 | 1,476 74 | 1,883 92 |  | 54,184 10 | 1275 | 1,117 21 | 1,278 20 |
| Iron | 5,057 82 | 20000 | 1,036 61 | 10257 | 1,804 37 | 15,261 6,477 | -24,184 10 |  | - 81567 | 2,759 39 |
| Jackson | 2,696 34 | 4,005 24 | 1,078 42 | 63219 | 1, 004 | 6,477 7,11590 | 27,678 44,983 | 1,036 86 | 1,300 17 | 3,701 00 |
| Jefferson | 4,668 71 | 8,973 31 | 2,520 09 | 1,001 33 | 1,798 ${ }^{\text {¢ }}$ | 8,520 50 | 44,983 70 | 1,211 69 | 67421 | 2,233 14 |
| Juneau ......... | 1,497 25 | 3,688 11 | 86960 | 37418 | 1,659 19 | 10,425 87 | 54,18215 | 1,10512 2,107 | 1,957 65 | 2,832 3,171 06 |



1,060 71
2,616 54
1,440
2,999
42
2,99942
1,117
73
1,117
43047
1,851 32
3,475 43 2,66243 1,515 35 5,433 01
1,9043
80
5
1,989 37
2,525 79
3,667 21
1,571 82 4,991 29 2,701 3 4,14859 3,100 42 2,367 31 2,984 09 3,609 93 2, 99495 2,263 33 2,403 84 6,194 93 1,80133 2,620 98 3,817 71
2,60432
1,77254
,675 15

FINANCIAL IISBURSEMENTS. 1911-1912 (Continued).



| Cities. | Children Residing: in City. |  | Enrollment in Schools. |  |  |  |  | Attendance. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number between 4 and 20 . | Number between 7 and 14. | Number between 4 and 20 who have attended public school. |  |  | Over 20. | Total number enrolled. | Number between 7 and 14 who attended. |  | A verage daily aitendance of all pupils. | Whole number of days attendance of different pupils. |
|  |  |  | Male. | Female. | Total. |  |  | Public school 32 weeks or more. | Private or parochial schools only. |  |  |
| Totals | 307,348 | 122,241 | 46,878 | 47,127 | 151,683 | 330 | 152,013 | 25,206 | 10,589 | 103,697 | 5,786,500 |
| Antigo | 2,365 | 1,034 | 768 | 773 | 1,541 | 1 | 1,542 | 276 |  | 1,281 | 223,569 |
| Appleton | 5,712 | 2,496 | 1,320 | 1,345 | 2,665 | 1 | 2,666 |  | 1.062 | 2,269 | 220, 406,748 |
| ${ }_{\text {Ashland }}$ Baraboo | 4,663 1,508 | 2,022 |  |  | 2,226 |  | 2,226 |  |  | 1,891 | 359,323 |
| Beaver Dam | 1,925 | ${ }_{902}^{62}$ | ${ }_{5}^{556}$ | 648 | 1,205 | 6 | 1,211 | 799 | 45 | 10,001 | 174,398 |
| Beloit | 4,209 | 1,779 | 1,745 | ¢79 $\mathbf{1 , 7 3 9}$ | 1,175 3,484 | $\stackrel{2}{23}$ | 1,177 3,507 | 521 | 346 | 945 | 174,975 |
| Berlin ... | 1,563 | 1,651 | 1,320 | 1,359 | 3,484 679 | 23 1 | - 680 | 1,446 | 341 | 2,793 | 511,190 |
| Crodhead ${ }_{\text {Chippewa }}$ Falls | + 340 | 130 | 160 | 147 | 307 | 1 | 308 | 120 |  | ${ }_{246}$ | 109,519 45,380 |
| Columbus ...... | 2.929 | 1,360 | 291 | 259 | 1,468 | 2 | 1,468 | 869 |  | 1,227 | 220, 871 |
| De Pere .. | 863 | 382 | 148 | 162 | ${ }_{310}^{50}$ | 2 | 552 310 | 226 | ${ }^{62}$ | 477 | 88,337 |
| Eau Claire... | 6,201 | 2,530 | 1,601 | 1,686 | 3,287 | 20 | 3,307 | 1,498 | 178 | 158 | 39,210 |
| Fond du Lac... | 4,912 | 2,206 | 1,721 | 1,770 | 3,491 | 5 | 3,496 | 1,292 | 495 |  |  |
| Fort Atkinson | 1,002 | 523 | ${ }_{507}$ | ${ }^{1} 537$ | 1,044 | 4 | 1,048 | 1,292 | 495 | 2,656 822 |  |
| Grand Rapids | 2,393 | 1,030 | 739 | 680 | 1,419 | 2 | 1,421 | 535 | 223 | 1,176 | $\begin{aligned} & 147,866 \\ & 211.699 \end{aligned}$ |
| Green Bay | 8,641 | 3,759 |  |  | 3,972 |  | 3,972 | 1,662 |  | 1,176 3,278 | $\begin{aligned} & 211,699 \\ & 655,600 \end{aligned}$ |
| Hudson ${ }_{\text {Janesville }}$...... | 929 3,837 | 1,581 | 337 1,238 |  | 711 0.480 |  | 711 |  | 92 | 3,278 | 650,600 |
| Kaukauna | 1,852 | 1,841 | 1,238 | 1,242 | 2,480 |  | 2,480 | 1,158 |  | 2,048 | 383,683 |
| Kenosha | 6,279 | 3,042 | 1,794 | 1,765 | -6,559 | 4 | 700 3,564 | 326 1.462 | ${ }_{1}^{614}$ | 541 | 99,107 |
| La Crosse | 9,746 | 3,845 | 2,332 | 2,246 | 4,578 | 17 | 3,564 | 1,462 | 1,073 | 2,836 | - 527,630 |
| Ladysmith . | 900 | 406 | 405 | 386 | 791 |  | ${ }^{4} 891$ | 180 |  | 3,809 534 | 712,314 |
| Lake Geneva . | 846 | 481 | 471 | 459 | 930 | 1 | 931 | 308 |  | 534 720 | 92,342 129,538 |
| Madison. | - 6,877 | 283 3,088 | 274 | 279 | +553 | 3 | ${ }_{5}^{556}$ |  | 14 | 474 | 81,387 |
| Mani.owoc | 4,646 | 1,914 | 1,106 | 1,066 | $\stackrel{4}{2,172}$ | $\cdots \cdots$ | 4,271 2,173 |  |  | 3,594 | 664,954 |



Report of the State Superintendent. 107

CITIES UNDER CI IY SUPERINTENDENTS, 1911-1912.

| Cities. | Teachers Employed. |  |  | Certificates granted by city suphrintendents. |  |  |  |  |  |  |  |  | Public Kindergartens. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Jst Grade. |  | 2d Grade. |  | 3d Grade. |  | Special. |  | Total. | $\begin{gathered} \text { No. } \\ \text { mained } \\ \text { tained } \\ \text { in city. } \end{gathered}$ | No.teachersemployed | Total number enrolled. |
|  | Male. | Female. | Total. | $\underset{\text { mon. }}{\text { To }}$ | $\begin{gathered} \text { Too } \\ \text { wo- } \\ \text { mon. } \end{gathered}$ | $\begin{gathered} \text { To. } \\ \text { men. } \end{gathered}$ | $\underset{\substack{\text { To } \\ \text { wo- } \\ \text { men }}}{ }$ | $\begin{gathered} \text { To } \\ \text { men. } \end{gathered}$ | $\begin{gathered} \text { To } \\ \text { wo- } \\ \text { men. } \end{gathered}$ | $\begin{gathered} \text { To } \\ \text { men. } \end{gathered}$ | $\begin{array}{\|c} \text { To } \\ \text { Wo- } \\ \text { mon. } \end{array}$ |  |  |  |  |
| Totals | 253 | 1,869 | 4,584 | 13 | 182 | 1 | 89 |  | 42 | 16 | 56 | 410 | 247 | 408 | 16,453 |
| Antigo | 5 | ${ }_{9}^{42}$ | 47 |  |  |  |  |  |  |  |  |  |  | 14 | 127 549 |
| ${ }_{\text {Appleion }}^{\text {Ashland }}$.. | 11 |  | 110 67 | ...... | 3 |  | 2 |  | 1 |  | 1 | 7 | $\begin{array}{r}8 \\ 4 \\ \hline\end{array}$ | ${ }_{14}^{14}$ |  |
| Baraboo | 4 | 30 | 34 |  |  |  |  |  |  |  |  |  | 1 | 2 | 64 |
| Beaver Dam | 3 | 30 | 88 | .... | 6 |  | 4 |  | 1 |  |  | 5 |  |  |  |
| Beloit ... | 2 | 21 | ${ }_{23}^{88}$ |  | 6 |  | ..... |  |  |  | 2 | ${ }_{1}^{8}$ | 2 | ${ }_{2}^{12}$ | 539 71 |
| Brodhead ... | 6 | 6 | 12 |  |  |  |  | .... |  |  |  |  |  |  |  |
| Chippewa Falls | 17 | 41 | 58 |  |  |  |  |  |  |  |  | 5 |  |  |  |
| De Pere Pre. | $\stackrel{2}{2}$ | ${ }_{8}^{17}$ | 19 |  |  |  | 4 |  | 1 |  |  | 5 | 1 | 1 |  |
| Eau Claire | 16 | 106 | 122 |  |  |  |  | .... |  |  |  |  | 10 | 10 | 170 |
| Fond du Lac.. | 6 | 93 | 99 | ..... | 1 |  |  |  |  |  | 8 | - | 8 | 16 | 610 |
| Fort Atkinson ... | 7 | 39 |  |  |  |  | 1 |  | 1 |  | 2 | ${ }_{5}^{6}$ | 1 | 1 | ${ }_{139}^{174}$ |
| Green Bay ....... | 1 |  | 107 | …… | 6 |  | 4 |  |  |  |  | 10 | ${ }_{1}^{4}$ | $\stackrel{5}{2}$ | ${ }^{135}$ |
| Hudson .. |  |  | 21 |  |  |  |  |  |  |  |  |  | 1 | 1 | 53 |
| Janesville |  |  | 76 |  | 4 |  | 5 |  | 5 |  | 1 | 15 | 4 | 8 |  |
| Kaukauna | $\stackrel{4}{9}$ | ${ }_{89}^{22}$ | ${ }_{98}^{26}$ |  |  |  | ${ }_{19}^{19}$ |  |  |  |  | ${ }_{21}^{1}$ | ${ }_{7}^{2}$ | $\stackrel{2}{9}$ | 93 479 |
| Kenosha ... |  |  | 129 | 10 | 110 |  | 3 |  |  | 8 | 3 | 138 | ${ }_{9}$ | $\stackrel{9}{9}$ | 479 589 |
| Ladysmi.h |  |  |  |  |  |  |  |  | 4 |  |  | 3 | 2 | 2 | 110 |
| Lake Geneva | ${ }_{2}^{5}$ | 25 14 | ${ }_{16}^{30}$ |  |  |  | 2 |  | 1 |  |  | 3 | ${ }_{1}^{2}$ |  | 82 63 |
| Madison . | 12 | 136 | 148 |  | 2 |  | 1 |  |  |  |  |  | 6 |  | 284 |
| Manitowoc |  |  | 79 |  | 1 |  | 5 | ..... |  |  |  | \% | ${ }_{6} 6$ | ${ }_{6}^{6}$ | 335 349 |
| Marshfield | ${ }_{2}^{6}$ | ${ }_{29}^{47}$ | 53 31 |  | 1 |  | 2 |  |  |  |  |  | ${ }_{1}^{6}$ | ${ }_{2}^{6}$ | 349 44 |



C1TIES UNDER CITY SUPERINTENDENTS, 1911-1912.

\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Cities.} \& \multicolumn{4}{|c|}{School Libraries.} \& \multicolumn{2}{|r|}{Indebtedness.} \& \multirow[b]{2}{*}{Salaries office of superintendent of schools.} \\
\hline \& No of volumes added during the year. \& Amount expended for library bouks. \& Whole number of volumes in the library. \& Cost of books now in the library, price of gift books included. \& Bonded indebtedness of city district. \& General indebt edness of city district. \& \\
\hline Totals ........... \& . 15,386 \& \$10,12190 \& 177,758 \& \$142,310 46 \& \& \& \\
\hline Antigo \& 250 \& \$283 90 \& 1,400 \& \$1,050 00* \& \$26,600 00 \& \$1,345 65 \& \\
\hline Appleton . \& 367
150 \& 80908
150
00 \& 8,700
1,800 \& \begin{tabular}{l}
8,420 \\
2,000 \\
\hline 100
\end{tabular} \& 100,332 99 \& 2,100 00 \& \$800 00 \\
\hline Baraboo \& 125 \& 8400 \& 1,800 \& 2,600 00 \& \& \& 3,106 65 \\
\hline Beaver Dam \& 320 \& 18580 \& 1,000 \& 60000 \& \& \& \\
\hline Beloit \& 513 \& 25000 \& 3,502 \& 1,865 37 \& \& \& \\
\hline Berlin \({ }_{\text {Brodhead }}\) \& 286
57 \& 15120
42
75 \& 1,310
625 \& 198250* \& \& \& 1,750 00 \\
\hline Chippewa Falls \& 54 \& 8557 \& 1,856 \& 1,100
2,135 \& \& \& \\
\hline \begin{tabular}{l}
De Pere ... \\
Eau Claire
\end{tabular} \& 48 \& 10375 \& 958 \& 70000 \& 43,000 \& \& \\
\hline Fond du Lac. \& 2,100 \& 1,050 \(00^{*}\) \& 20,519 \& 25,000000 \& \& \& \\
\hline Fort Atkinson \& 138 \& \(10350{ }^{*}\) \& 2,500 \& 1,800 00 \& \& \& 2,869 96 \\
\hline Grand Rapids \& 405 \& 23400 \& 3,505 \& 2,80000 \& 60,000 00 \& 1,897 12 \& \\
\hline Green Bay . \& 400
50 \& 246
37
00
50 \& 6,863
1,116 \& 4,500 00 \& \& 1,81 \& 2,000 00 \\
\hline Janesville .. \& 200 \& 3500 \& 1,000 \& 1,550
750

00 \& \& \& <br>
\hline Kaukauna \& 394 \& 17000 \& 2,324 \& 1,57500 \& 12,149 10 \& 8,500 00 \& 2,850 00 <br>
\hline Kenosha \& 130 \& 14430 \& 1,500 \& 10000 \& 12,149 10 \& 8,000 0 \& 40000
3,40827 <br>
\hline La Crosse . \& 50
139 \& 12400 \& 6,576 \& \& 4,500 00 \& 4,64500 \& 3,40827 <br>
\hline Ladysmith ... \& 139 \& 8270
200 \& ${ }_{5} 925$ \& 50000 \& \& \& 6419 <br>
\hline Lake Mills . \& 65
25 \& 20000 \& 500
1,000 \& 80000 \& \& \& 10936 <br>
\hline Madison \& 150 \& $11250{ }^{*}$ \& 2,220 \& 700
3,000
00 \& \& 3,550 00 \& <br>
\hline Manitowoc \& 200 \& 12500 \& 4,000 \& 3,000

3,00 \& 32,100 00 \& \& $$
\begin{aligned}
& 3,400 \\
& 2,700 \\
& \\
& 00
\end{aligned}
$$ <br>

\hline Marinette \& 62 \& 12406 \& 1,678 \& 1,807 45 \& \& \& <br>
\hline Mellen \& 76 \& 5260 \& 758 \& \& \& \& <br>
\hline Menasha ... \& 189 \& 24150 \& 1,391 \& 1,640 00 \& \& 46,000 00 \& 2,454 45 <br>
\hline
\end{tabular}



[^6]CITIES UNDER CITY SUPERINTENDENTS_FINANCIAL RECEIPTS, 1911-1912.

| Cities. | Condition June 30, 1911. |  | From high scnool aid. | From state aid for manual training. | ```From general tax for school purposes.``` | From tax levied by county supervisors. | $\begin{gathered} \text { Frim } \\ \text { income of } \\ \text { sch.oo fiund. } \end{gathered}$ | Nonrevenue receipts. | From all other sources. | Total amount received during the jear. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Money on hand. | Deficit. |  |  |  |  |  |  |  |  |
| To:als | \$1,766.813 62 | \$7,250 55 | \$18,109 64 | \$10,950 00 | \$3,394,031 65 | \$716,980, 24 | \$827,583 25 | \$796,634 35 | \$439,977 78 | \$6,236,287 36 |
| Antigo |  | \$864 33 | \$322 54 | \$350 00 | \$27,500 00 | \$7,191 46 | \$7,76192 |  | \$5,799 82 | \$48,925 74 |
| Appleton | \$4,937 55. |  | 32254 | 35000 | 80,708 34 | 13,864 41 | 15,497 01 | \$24,115 54 | 5,100 43 | 139,958 27 |
| Ashland | 6,003 95 | ............... | 32254 | 35000 | 46,500 00 | 12,451 09 | 12,341 80 | 1,879 24 | 5,547 88 | 79,392 46 |
| Baraboo ... | 21,424 85 |  | 32254 |  | 25,800 00 | 3,590 89 | 4,035 23 |  | 1,097 07 | 34,845 73 |
| Beaver Dam | 11,399 79 |  | 32254 | 35000 | 19,372 46 | 4,985 01 | 5,127 07 | 18,628 48 | 4000 | 48,825 56 |
| Beloit | 1,821 49 |  | 32254 | 35000 | 80,769 57 | 10,715 71 | 12,279 12 | 1,749 59 | 2,055 89 | 108,242 42 |
| Berlin | 5,153 88 |  | 32254 |  | 9,000. 00 | 3,208 05 | 3,905 50 | 6200 | 2,685 92 | 19,184 01 |
| Brodhead . | 1,043 09 |  |  | ......... | 11,473 00 | 83788 | 1,237 63 | 3,512 00 | 2,638 50 | 17,399 01 |
| Chippewa Falls | 29,121 86 |  | 32254 | 35000 | 27,000 00 | 8,40000 | 9,291 23 | 17273 | 80254 | 46,339 04 |
| Columbus | 15,850 58 | . $\cdot$, | 32254 | 35000 | 17,500 00 | 1,366 56 | 1,698 34 | 4696 | 1,238 35 | 22,522 75 |
| De Pere | 4,355 64 | ............. | 32254 |  | 5,111 21 | 2,035 90 | 2,312 75 |  | 1,23035 | 10,002 75 |
| Eau Claire. | 27,943 16 |  | 32254 | 35000 | 81,700 00 | 31,304 98 | ⒈....... |  | 33,478 51 | 147,156 03 |
| Fond du Lac.. | 5,63761 |  |  | 25000 | 47,500 00 | 13,114 50 | 17,183 92 |  | 33,478499 | -85,433 41 |
| Fort Atkinson | 1, , 45868 46 | .............. | 322 32 34 |  | 19,172 55 | 2,585 34 | 3,765 24 |  | 1,105 99 | 26,951 66 |
| Grand Rapids | 4567 24,75500 | .............. | 32254 64500 | 350 500 00 | 36,000 00 | 5,575 32 | 6,044 22 | 5549 | 69495 | 49,042 52 |
| Hudson ... | 24,41457 |  | 645 32254 | 50000 | 81,000 12,23602 | 19,41100 2,144 | 22,618 00 | 51,244 00 | 7,159 00 | 182,577 00 |
| Janesville | 13,738 81 |  | 32256 | 25000 | 41,000 00 | 2,144 86 | 10,753 46 | 14,000 00 | 1,483 2,936 14 | 18,550 10 |
| Kaukauna | 2,630 62 |  |  |  | 10,506 71 | 4,847 32 | 10,825 63 | 14,000 5,550 | 8,982 18 | 35,711 84 |
| Kenosha | 26,934 02 |  | 32254 |  | 3,007 35 | ........... | 3220800 | 42,431 07 | 80,607 34 | 158,576 30 |
| La Orosse | 63,840 86 |  |  |  |  | 22,592 05 | 25,966 37 |  | 102,349 15 | 150,907 27 |
| Ladysmith .. | 3,502 70 |  | 32254 | 35000 | 13,347 10 | 1,76152 | 2,218 84 | 2.12303 | 102,386 92 | 21,109 95 |
| Lake Geneva | 3,592 70 |  |  | 35000 | 28,598 55 | 2.382 n6 | 2,632 91 | 7,000 00 | 4.70490 | 45,668 42 |
| Lake Mills | 3,113 70 |  | 32254 |  | 13,674 99 | 1,343 17 | 1,656 55 | 5,000 00 | 99096 | 22,988 21 |
| Madison Manitowoc | 1,457 4,18888 |  |  | 350 350 00 | 115,000 00 | 16.27000 | 18,609 29 | 20,000 00 | 13,073 91 | 183.30320 |
| Marinette | 4,188 83 1,239 |  | 32254 32254 | 35000 25000 | 59,27607 30,000 | 9,503 01 | 10,804 44 | 10430 | 63927 | 80,999 63 |
| Marshfield | 8,292 51 |  | 32254 | 25000 | 30,000 00 | 14,196 36 | 14,997 97 |  | 3,979 60 | 63,746 47 |
| Mellen |  | 2,261 07 | 32254 |  | 20,00000 | 1,463 49 | 1,64021 | 70109 |  | 32,020 45 |
| Menasha | 10,371 14 |  | 32254 | 35000 | 11,000 00 | 5,764 32 | 6,237 95 | 7,010 50 | 13498 16620 | 30,57172 23,84101 |
| Menomonie | 15,099 83 |  |  | 35000 | 25,318 16 | 4,157 87 | 4,107 67 |  | 1,436 74 | 23,84101 35,37044 |
| Merriil |  | 1,809 24 | 32254 |  | 23,150 00 | 10,000 00 | 7,787 75 | 25,00000 | 1,495 00 | 66,955 29 |



CITIES UNDER CITY SUPERINTENDENTS-FINANCIAL DISBCRSEMENTS, 1911-1912.

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline Cities. \& For lands, building, repairing and maintenance. \& For equipment. \& For expenses of general control. \& \begin{tabular}{l}
For \\
expenses of instruction.
\end{tabular} \& For old indebtedruess. \& For fuel, water, light and janitor. \& For salary board of education and secretary's office. \& For all other purposes. \& Total. \& Balance on hand June 30, 1912. \& Deficit June 30, \(191 \%\). \\
\hline Totals \& \$877,234 73 \& \$66,659 28 \& \$140,063 45 \& \$3,622,077 84 \& \$203,959 04 \& \$668,833 40 \& \$29,663 06 \& \$114,957 25 \& \$5,723,488 05 \& \$2,275,660 39 \& \$3,298 01 \\
\hline \begin{tabular}{l}
Antigo . \\
Appleton
\end{tabular} \& \& \$204 13 \& \$10190 \& \$33,469 55 \& \$192 00 \& \$7,264 34 \& \& \$3,753 97 \& \$44,985 89 \& \$3,075 52 \& \\
\hline Appleton \& \$4,141 27 \& 2,848 49 \& 1,097 66 \& 72,496 02 \& 36,642 75 \& 19,258 11 \& \$127 80 \& 1,92956 \& 138,541 66 \& \(\$ 3,075\)
6,354
16 \& \\
\hline Ashraboo \& 2,175 57 \& 1,739 86 \& 3,306 65 \& 50,701 86 \& 1,893 00 \& 9,506 21 \& 1,073 98 \& 24395 \& 70,641 08 \& 14,755 33 \& \\
\hline Beaver Dam \& 18,259 06 \& \& 669
100
00 \& 23,27755
20,94339 \& \& 6,482 89 \& 30000 \& 1,601 81 \& 33,413 70 \& 22,856 88 \& \\
\hline Beloit \& 6,042 50 \& \& 3,639 65 \& \begin{tabular}{l}
20,943 \\
57,564 \\
\hline 17
\end{tabular} \& 22,031 97 \& 6,88420
13,93350 \& 35000 \& 3,271 53 \& 48,458 18 \& 11,767 17 \& \\
\hline Berlin \& 1,149 42 \& \& 1,927 50 \& 11,351 00 \& 22,031 97 \& 13,933
4,951
19 \& 35000 \& 977
53
76 \& 104,538 94 \& 5,524 97 \& \\
\hline Brodhead \& 25217 \& \& 1,327 50 \& 11,351
7,459 \& 6,976 87 \& 4,95119
1,908 \& 12500 \& 5376
8996 \& 19,557
16,686
82 \& 4,780 02 \& . \(\cdot . . . .\). \\
\hline Chippewa Falls \& 2,905 75 \& \& 2,857 48 \& 34,855 62 \& 6,576 87 \& 1,908
6,528
23 \& 20000 \& 8996
54855 \& \begin{tabular}{l}
16,686 \\
47,895 \\
\hline 63
\end{tabular} \& 1,755
27,565
27 \& ......... \\
\hline Columbus \& 14,954 41 \& 2,625 20 \& 1,479 10 \& 10,384 53 \& 1058 \& 2,971 64 \& 100

100 \& | 548 |
| :--- |
| 5765 |
| 166 | \& 47,895 63

33,00322 \& 1,565
27,57
5,370 \& <br>
\hline De Pere E Claire \& 73518
12,652 \& 26930
1.632 \& 6050 \& 7,10103
80 \& \& 1,501 33 \& 7500 \& 16673 \& 9,909 07 \& 4,449 32 \& <br>
\hline Fond du Lac. \& 12,652
8,585
08 \& 1,63210
3,239 \& 634
2,869
96 \& 80,48968
66,53481 \& 5,197 10 \& 13,750 30 \& 4,453 08 \& 17,259 11 \& 136,068 10 \& 39,031 09 \& <br>
\hline Fort Atkinson \& 32981 \& 3,239 64 \& 2,869
2500 \& 16,964 45 \& 4,228 48 \& 11,427
5,172
83 \& \& \& 92,657
27,282
34 \& \& \$1,586 21 <br>
\hline Grand Rapids \& 3,171 32 \& 2,44785 \& 2,010 00 \& 19,855 12 \& $\begin{array}{r}4,228 \\ 480 \\ \hline\end{array}$ \& 5,172
9,800
47 \& 350
52143 \& 21237
1,25481 \& 27,282
49,631
78 \& 1,027 68 \& 54359 <br>
\hline Green Bay. \& 3,805 00 \& 10,329 00 \& 4,020 00 \& 74,271 00 \& \& 15,693 00 \& 58000 \& 2,351 00 \& 111,054 00 \& 96,27800 \& 54359 <br>
\hline Hudson ${ }^{\text {Janesville }}$ \& 25126
4,71894 \& 1,381 $4 \times \cdots$ \& 2993
3,650 \& 13,991 19 \& \& 2,595 23 \& 10000 \& 2, 40118 \& 17,368 79 \& 10,595 88 \& <br>
\hline Kaukauna \& 4,465 09 \& 1,381 27161 \& 3,650
995
95 \& 43,21172
17,30559 \& $\begin{array}{r}14,283 \\ 7,380 \\ \hline 19\end{array}$ \& 11,492 58 \& $\begin{array}{r}300 \\ 8500 \\ \hline 00\end{array}$ \& 66267
219 \& 79,700 83 \& 12,997 00 \& .......... <br>
\hline Kenosha \& 58,627 24 \& 2,820 82 \& 4,970 55 \& 67,334 78 \& 7,380 19 \& 3,18257
14,15965 \& 8500
33500 \& 21938
7000 \& $\begin{array}{r}32,305 \\ 148,948 \\ \hline 18\end{array}$ \& 5,437
36,562
28 \& <br>
\hline La Orosse \& 11,978 10 \& 2,585 65 \& 6,400 00 \& 110,354 21 \& \& 23,444 34 \& 33500 \& 52273 \& 155,948 03 \& 36,562
59,463
10 \& <br>
\hline Ladysmith . \& 2,383 31 \& 89872 \& 19319 \& 14,178 56 \& \& 2,21703 \& 12477 \& 8698 \& 20,082 56 \& 1,027 39 \& <br>

\hline Lake Geneva \& | 3,792 |
| :--- |
| 1,945 |
| 15 | \& 67354 \& 48436 \& 19,041 53 \& 11,598 64 \& 7,860 86 \& 21000 \& 82000 \& 44,480 99 \& 4,780 13 \& <br>

\hline Madison \& 21,278 81 \& 2,33798 \& 3,678 10 \& 10,76363
120,42111 \& 5,973 33 \& 1,908 44 \& 15000 \& \& 20,741 15 \& 5,360 76 \& <br>
\hline Manitowoc \& 3,521 15 \& 1,016 06 \& 3,696 60 \& 120,42111
50,184
59 \& 5,395
5.572
00 \& 23,703 69 \& 25000 \& 3,006 25 \& 180,071 48 \& 4,689 21 \& <br>
\hline Marinette \& 5,176 10 \& - 4469 \& 3,000 00 \& 47,362 15 \& 5.57200 \& 11,432 81 \& 60000 \& 3,006 84 \& 78,430 05 \& 6,758 41 \& <br>
\hline Marshfield \& \& \& 3,000 0 \& 19,303 75 \& \& 7,06720
12,02252 \& 35500
30000 \& 52406 \& 63,529 20 \& 1,456 34 \& <br>
\hline Mellen \& 1,072 35 \& 14272 \& 18378 \& 8,894 49 \& 16,494 90 \& $\begin{array}{r}12,022 \\ 2,457 \\ \hline 19\end{array}$ \& 30000

5100 \& 18213 \& | 31,626 |
| :--- |
| 29,478 |
| 86 | \& 8,686 69 \& <br>

\hline Menasha \& 2,468 21 \& \& 2,508 79 \& 14,481 10 \& \& 3,449 94 \& 7500 \& 41357 \& 29,478 86 \& 10,815 54 \& 1,168 21 <br>
\hline Menomonie .. \& 2,113 67 \& ............. \& 2,071 50 \& 22,596 41 \& ...... \& 7,490 03 \& 2500 \& 2,811 33 \& 37,107 94 \& 13,362 33 \& <br>
\hline
\end{tabular}



FREE HIGH SCHOOLS HAVING FOUR YEAR COURSES, 1911-1912.

| Location. | Principal, | Legal qualification of principal. | Salary of the principal. | No. teachers employed. |  | Enrollment in High Sohool. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Pupils under 20 years of age. |  |  | $\mathrm{Pu}-$ pils over 20. |
|  |  |  |  | Male. | Fem. | Male. | Fem. | To- <br> tal. |  |
| Totals |  |  | \$1,220 37 | 651 | 1,008 | 13,396 | 16,461 | 29,857 | 179 |
| Abbotsford | Morton Hughes ...... | Milwaukee Normal School |  | 1 | 2 | 18 | 25 | 43 |  |
| Albany | Fred F. Householder | Milwaukee Normal School. | 1,000 00 | 1 | 2 | 14 | 23 | 37 | $\ldots$ |
| Algoma . | W. L. Dahl ... | River Fialls Normal School | 1,40000 | 2 | 3 | 76 | 60 | 136 | ...... |
| Alma Center | Ellis N. C'ale | University of Wisconsin. | 1,050 00 | 1 | 2 | 20 | 43 | 63 | - |
| Almond .... | A. G. Brown . | Superior Normal School...... | 855 76500 00 | 1 | 1 | 19 | 23 | 42 | - |
| Amery . | George De Guire | Oshkosh Normal School....... | 1,20000 | 1 | 2 1 | 13 35 | 27 30 | 40 65 |  |
| Amherst Antigo | A. L. Nimtz .... | Oshkosh Normal School. | 1,25500 | 1 | 1 | 35 17 | 30 30 | 47 |  |
| Antigo Appleton | W. H. Hickok | Unlimited state certificate. | 2,000 00 | 6 | 9 | 170 | 182 | 352 | $\cdots{ }^{1}$ |
| Appleton ${ }_{\text {Arbor }}$ Vitae | Paul G. W. Keller. | Milwaukee Normal School. | 2,500 00 | 7 | 16 | 207 | 236 | 443 | 4 |
| Arbor Vitae | Eugene H. Prior | Oshkosh Normal School. | 1,200 00 | 1 | 2 | 15 | 18 | 33 |  |
| Arcadia Arena | Robert Lohrie ... | Unlimited state certificate. | 1,500 00 | 1 | 3 | 49 | 37 | 86 |  |
| Arena Argyle . | Earl K. Lightcap . | Platteville Normal School. | 1,000 00 | 1 | 2 | 27 | 27 | 54 |  |
| Argyle Ashland | Wm. J. Trautmann | University of Wisconsin. | 1,100 00 | 1 | 2 | 31 | 32 | 63 | 1 |
| Athens | S. G. Corey .. | University of Wisconsin.... | 1,600 00 | 7 | 14 | 194 | 210 | 404 | 1 |
| Augusta | L. C. Hatch . | River Falls Normal School. University of Wisconsin... | 1,000 00 | 1 | 2 | 20 | 22 | 42 | ...... |
| Avoca . | John Lane. | Whitewater Normal School. | 1,60000 72500 | 2 | 3 | 44 | 74 | 118 | . |
| Baldwin | G. M. Appleman | Stevens Point Normal School. | 72500 94500 | 1 | 1 3 | 13 | 19 37 | 32 81 | $\cdots$ |
| Bangor | C. W. Green . . | Milton College . . . . . . . . . . . . . . | 94500 | 1 | 3 2 2 | 44 25 | 37 35 | 81 | \%.... |
| Baraboo | A. O. Kingsford | University of Wisconsin | 1,900 00 | 1 | 2 8 | 25 91 | 35 166 | 250 | $\cdots$ |
| Barron | H. H. Humphrey | Ripon College ........... | 1,900 00 | 1 | 3 | 37 | +67 | 104 | 2 |
| Bayfield | F. E. Hamlin ... | Unlimited state certificate | 1,500 00 | 3 | 3 3 | 37 43 | 67 36 | 104 79 |  |
| Beaver Dam | T. G. Gronert . | University of Wisconsin.. | 1,050 00 | 3 3 | 3 6 | 43 72 | 36 78 | 79 150 |  |
| Belleville | J. A. Mortimer | Oshkosh Normal School.. | 1,100 00 | 1 | 2 | 9 | 26 | + |  |
| Belmont | F. O. Bartelt .. | Whitewater Normal School | 1,100 00 | 1 | 2 | 21 | 19 | 40 |  |
| Beloit | John C. Pierson | Northwestern University .. | 2,000 00 | 7 | 14 | 252 | 314 | 566 | 22 |
| Benton | Frank Schofield . | River Falls Normal Schooi. | 2,86400 | 1 | 14 2 | 202 | 314 23 | 566 43 | 22 |
| Berlin . | W. T. Anderson . | University of Wisconsin.... | 1,750 00 | 2 | 4 | 56 | 74 | 130 | $\cdots$ |



Free high schools Haying four year courses, 1911-1912_-Continued.

| Location. | Principal. | Legal qualification of principal. | Salary of tne principal. | No. teachers employed. |  | Enrollment in High SChool. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Pupils under 20 years of age. |  |  | $\begin{gathered} \text { Pu- } \\ \text { pils } \\ \text { over } \\ 20 . \end{gathered}$ |
|  |  |  |  | Male. | Fem. | Male. | Fem. | To- |  |
| Eagle River | F. D. Wartinbee | River Falls Normal School. |  |  |  |  |  |  |  |
| East Troy | Rollie A. Petrie | University of Wisconsin.... | 1,20000 | 1 | 2 | 22 | 12 | 34 | 1 |
| Eau Claire | M. S. Frawley . | University of Wisconsin. | 1,10000 1,900 | 1 | 2 2 | 23 29 | 55 374 | 78 673 | $\cdots \cdots$ |
| Edgar ... | J. E. Giessel .. | Unlimited state certificate. | $\begin{array}{r}1,900 \\ 85500 \\ \hline 1,6500\end{array}$ | 9 | 23 | 299 23 | $\begin{array}{r}374 \\ 35 \\ \hline\end{array}$ | 673 58 | 1 |
| Edgerton | Frank O. Holt |  | $\begin{array}{r}1,85500 \\ 1,650 \\ \hline\end{array}$ | 1 | 1 | 23 | 35 | 58 | 1 |
| Elkhorn | John Dixon | Unlimited state certificate. | 1,650 1,500 1,500 | 2 | 5 | 60 | 96 | 156 |  |
| Ellsworth | N. A. Anderson | University of Wisconsin.. | 1,500 00 | 1 | 6 | 58 | 75 | 133 | ...... |
| Elmwood | W. A. White | Superior Normal School. | No report | 2 | 4 | 47 | 75 | 122 | ...... |
| Evroy … | Geo. R. Ray.. | University of Wisconsin. | 1,30000 | 2 | 3 | 42 | 75 | 117 |  |
| Fairchild | Roy M. Lewis | Whitewater Normal School | 1,100 00 | 3 | 2 | 41 | 68 | 109 |  |
| Fennimore | F. E. Drescher | Lawrence College ....... | 1,125 00 | 1 | 1 | 22 | 21 | 43 | $\therefore .$. |
| Fifield | Henry A. Cook | University of Wisconsin. | 1,250 00 | 1 | 5 | 50 | 74 | 124 | $\cdots$ |
| Florence | Lewis A. Jones | University of Wisconsin | 76500 | 1 | 1 | 5 | 15 | 20 |  |
| Fort Atkinson | J. A. Hagemann. | University of Wisconsin. | 1,400 00 | 1 | 3 | 30 | 48 | 78 |  |
| Fountain City | B. W. Weenink | Oshkosh Normal School. | 1,800 00 | 4 | 4 | 92 | 32 | 174 | ...... |
| Fox Lake | Larne F*. Smith | Edinboro Normal School. | 1,15000 | 1 | $\stackrel{2}{2}$ | 27 | 14 | 41 | $\cdots$ |
| Frederic | E. B. Young ... | River Falls Normal School. | $\begin{array}{r}1,150 \\ 72000 \\ \hline 1,550\end{array}$ | 1 | 2 | 15 7 | 27 | 42 | . 1 |
| Galesville | H. O. Aimy... | River Falls Normal School. | 1.15000 1.55000 | 1 | 1 | 7 | 11 | 18 | $\therefore \ldots$ |
| Genoa Junction | L. B. Krueger | Whitewater Normal School. | 1,550 81000 1,000 | 3 | 3 | 40 | 61 | 101 | 1 |
| Gillett ... | B. J. Gallagher | University of Wisconsin.... | 1,51000 1,00000 | 1 | 1 | 15 | 22 | 37 | ...... |
| Gilmanton | A. S. Wells .... | University of Wisconsin...... | 1,000 <br> 1,100 <br> 100 | 1 | 1 | 11 | 11 | 22 | 2 |
| Glenbeulah | C. W. Collmann | Stevens Point Normal School University of Wisconsin..... | 1,10000 | 1 | 1 | 4 | 10 | 14 |  |
| Glenwood | P. J. Lynch .... | Whitewater Normal School | 85000 1,20000 | 1 | 1 | 12 | 12 | 24 |  |
| Glidden ... | Rose K. Brandt | Oshkosh Normal School.... | 1,200 00 | 2 | 3 | 40 | 64 | 104 | 2 |
| Grand Rapids | H. F. Kell . | Oshkosh Normal School. | 185500 1,15000 |  | ${ }^{2}$ | 6 | 18 | 24 | ...... |
| Gratiot .... | E. L. Geach | Platteville Normal School. | 1,15000 81000 | 6 1 | 10 | 128 | 141 | 269 | 2 |
| Grantsburg | John M. Hammer | River Falls Normal School. | 1,000 00 | 1 | 1 | 12 28 | 11 60 | 23 88 |  |
| Green Bay (East) | W. T. Ream ... | Beloit College ............... | 1,80000 | 4 | ${ }_{10}^{2}$ | 28 170 | 60 149 | 88 319 | 3 |
| Green Bay (West) | C. F. Cole . . . | Lawrence College | 1,600 00 | 5 | 10 | 173 | 149 | 319 300 | 3 |
| Green Lake ....... | Geo. Eigenberger | Oshkosh Normal School. | 1,000 00 | 1 | 2 | 15 | - 28 | 43 4 |  |




1,10000



 $\qquad$
$\qquad$
$\qquad$
$\qquad$
$\ldots$

FREE HIGH SCHOOLS HAVING FOUR YEAR COURSES, 1911-1912—Continued.

| Location. | Principal. | Legal qualification of principal, | Salary of the principal. | No. teachers employed. |  | Enrollment in High School. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Pupils under 20 years of age. |  |  | $\begin{array}{\|c} \text { Pu- } \\ \text { pils } \\ \text { over } \\ 20 . \end{array}$ |
|  |  |  |  | Male. | Fem. | Male | Fem. | Total. |  |
| Marshall | C. E. Fawcett ... | Platteville Normal School. |  | 1 | 2 | 19 | 30 | 49 |  |
| Marshfield | C. W. Otto ... | Lawrence College ........... | 1,600 00 | 2 | 8 | 78 | 112 | 190 | 2 |
| Mattoon Mauston | D. W. Kumm | Stevens Point Normal School. University of Wisconsin. | $\begin{array}{r}1,810 \\ 1,450 \\ \hline\end{array}$ | 1 | 1 | 12 | 15 | 27 |  |
| Maystill | L. S. Keeley .. | University of Wisconsin.: | 1,450 1,425 00 | 1 | 4 3 3 | 49 | 43 | 142 76 |  |
| Mazomanie | H. G. Parkinson | University of Wisconsin. | 1,300 00 | 1 | 3 | 29 | 37 | 66 |  |
| Medford | Jas. E. Phillips | Stevens Point Normal School | 1,600 00 | 1 | $\stackrel{3}{6}$ | 60 | 75 | 135 | 2 |
| Mellen | W. P. Hagman | Oshkosh Normal School. | 1,500 00 | 2 | 2 | 27 | 37 | 64 | 1 |
| Melrose | Walter A. Reddy | Platteville Normal School. | 76500 | 1 | 1 | 14 | 18 | 32 | 2 |
| Menasha | John Callahan | Unlimited state certificate | 2,000 00 | 4 | 5 | 51 | 65 | 116 |  |
| Menomonee Falls | W. J. Arnold . | Oshkosh Normal School.. | 1,100 00 | 3 | 2 | 54 | 49 | 103 | 1 |
| Merrill ${ }_{\text {Merrillan }}$ | E. W. McCrary | Lawrence University | 1,400 00 | . | 9 | 129 | 149 | 278 |  |
| Middleton | Chas. A. Jahr | Milwaukee Normal School | 1,300 00 | 1 | 1 <br> 2 | 16 | 17 36 | 33 69 | 1 |
| Milton ... | J. F. Whitford | University of Wisconsin. | 1,350 00 | 1 | ${ }_{3}^{2}$ | 45 | 47 | $\stackrel{69}{92}$ |  |
| Milton Junction | John M. Gahagan | Milwaukee Normal School | 1,150 00 | 1 | 3 | 32 | 31 | 63 |  |
| Mineral Point | R. E. Loveland | Oberlin College ........... | 1,700 00 | 1 | 4 | 76 | 103 | 179 |  |
| Minocqua | L. J. Hollister | University of Wisconsin. | 1950 00 | 1 | 2 | 15 | 14 | 29 |  |
| Mondovi | P. F. Neverman | Oshkosh Normal School. | 1,200 00 | 2 | 4 | 75 | . 68 | 143 |  |
| Monroe | G. B. Haverson | University of Minnesota. | 1,750 00 | , | 6 | 66 | 104 | 170 | 8 |
| Montfort | J. Earl Rohr . | Oshkosh Normal School.... | 1,20000 1,100 | 1 | 4 <br> 3 | 21 40 | 45 44 | 86 | 2 |
| Monticello | W. C. Miles | University of Minnesota... | 1,900 00 | 1 | 3 <br> 1 | 40 16 | 44 24 | 84 40 40 |  |
| Mosinee | H. G. Ingham | Milton College ........... | 96000 | 1 | 4 | 11 | 19 | 30 |  |
| Mt. Hope | Roscoe R. Luce | Platteville Normal School | 76500 |  | 1 | 10 | 22 | 32 |  |
| Mt . Horeb | M. V. Boyce | Stevens Point Normal School. | 1,350000 | $\stackrel{1}{2}$ | 1 | 48 | 54 | 102 |  |
| Mukwonago | Jas. F. Desmond | University of Wisconsin....... | 1,100 00 | 1 | 3 | 34 | 36 | 70 |  |
| Muscoda ... | May L. Orosby | Platteville Normal School. | 1,000 00 |  | 2 | 13 | 26 | 39 |  |
| Necedah | C. C. Aller ... | Lawrence College ... | 1,011 66 | 1 | 2 | 13 | 39 | 52 |  |
| Neenah Neillsville | E. M. Beeman ..... Geo. M. Snodgrass | University of Wiscons | 2,200 00 | 4 | 7 | 79 | 107 | 186 | 1 |
| Neillsville | Geo. M. Snodgrass | Hamline University | 1,550 00 | - | 4 | 65 | 76 | 141 | 1 |



| 1,200 | 00 |
| ---: | ---: | ---: |
| 1,100 | 00 |
| 1,400 | 00 |
| 1,872 | 23 |
| 900 | 00 |
| 950 | 00 |
| 900 | 00 |
| 900 | 00 |
| 765 | 00 |
| 1,600 | 00 |
| 1,750 | 00 |
| 1,250 | 00 |
| 1,200 | 00 |
| 1,200 | 00 |
| 720 | 00 |
| 1,035 | 00 |
| 900 | 00 |
| 1,000 | 00 |
| 900 | 00 |
| 950 | 00 |
| 1,500 | 00 |
| 720 | 00 |
| 810 | 00 |
| 900 | 00 |
| 1,100 | 00 |
| 1,400 | 00 |
| 720 | 00 |
| 1,300 | 00 |
| 1,800 | 00 |
| 765 | 00 |
| 1,800 | 00 |
| 1,700 | 00 |
| 1,400 | 00 |
| 900 | 00 |
| 900 | 00 |
| 1,500 | 00 |
| 1,200 | 00 |
| 900 | 00 |
| 1,200 | 00 |
| 1,200 | 00 |
| 1,200 | 00 |
| 765 | 00 |
| 1,400 | 00 |
| 807 | 50 |
| 810 | 00 |
| 1,000 | 00 |
|  | 1 |
| 1 |  |

## 1,90000

FREE HIGH SCHOOLS HAVING FOUR. YEAR COURSES, 1911-1912—Continued.

| Location. | Principai. | Legal qualification of principal. | Salary of the principal. | No. teachers employed. |  | Enroldment in HIGH SCHOOL. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | $\begin{aligned} & \text { Pupi } \\ & y \in \mathrm{a} \end{aligned}$ | $\begin{aligned} & \text { ls und } \\ & \text { rs of } \end{aligned}$ | $\begin{aligned} & 20 \\ & \text { ge. } \end{aligned}$ | $\begin{aligned} & \text { Pu- } \\ & \text { pils } \end{aligned}$ |
|  |  |  |  | Male. | Fem. | Male | $\mathrm{F} \in \mathrm{~m} .$ | Total. | 20. |
| Rib Lake | J. F. Weinberger | Stevens Point Normal School. | 1,050 00 | 1 |  |  |  |  |  |
| Rice Lake | H. J. Steeps ..... | Lawrence College ............. | 1,600 00 | 1 3 | $\stackrel{2}{5}$ | $\begin{aligned} & 21 \\ & 62 \end{aligned}$ | 30 86 | 148 | $\cdots$ |
| Richland Center | E. G. Doudna | Platteville Normal School | 1,600 00 | 2 | 7 | 113 | 104 | 217 |  |
| Ridgeway | Victor C. Hill | Platteville Normal School. | 1,810 00 | 1 | 1 | 14 | - 27 | + 41 |  |
| Ripon ..... | H. M. Comins . | University of Michigan | 1,650 00 | 1 | 5 | 44 | 64 | 108 |  |
| River Falls | J. W. T. Ames .. | Lawrence Colege ......... | 1,700 00 | 2 | 5 | 83 | 55 | 138 | 1 |
| Roberts Rosendale | Roger C. Bigford | Stev $\in$ ns Proint Normal School. | 1,000 00 | 1 | 1 | 16 | 16 | 32 | . $\quad$. |
| St. Croix Falls. | R. F. Priest .... | Stevens Point Normal School Unlimited state certificate.... | +85500 | 1 | 1 | 18 | 29 | 47 | ...... |
| Sauk City ...... | M. T. Buckley | Unlimited state certificate. Oshkosh Normal School. | 1,50000 | 2 | 3 | 55 | 35 | 90 |  |
| Seneca .... | E. A. Jewett . | Platteville Normal School. | 1,20000 | 1 | 2 | 14 | 22 | 36 37 |  |
| Sextonville | F. E. White . | Whitewater Normal School. | 180000 | 1 | 1 | 13 | 22 | 35 |  |
| Seymour | F. W. Axley .... | Oshkosh Normal School.... | 1,100 00 | 2 | 1 | 28 | 28 | 56 |  |
| Sharon - | B. D. Richardson | University of Wisconsin | 1,21500 | 2 | 3 | 34 | 36 | 70 |  |
| Shawano ... | J. F. Powers . | University of Wisconsin | 1,50000 | 2 | 4 | 69 | 66 | 135 | $\cdots$ |
| Sheboygan Sheboygan Falls | William Urban | University of Wisconsin. | 1,800 00 | 8 | 10 | 214 | 217 | 431 |  |
| Sheboygan Falls | Wm. H. Luehr ... | University of Wisconsin. | 1,500 00 | 2 | 2 | 36 | 48 | 84 |  |
| Shiocton . | F. A. Maas ..... | Milwaukee Normal School | 1,80000 | 1 | 2 | 22 | 45 | 67 |  |
| Shullsburg | H. G. Plumb | Beloit College ............ | 72000 1,15000 | 2 | 3 | 21 34 | 12 | 33 | $\ldots$ |
| Soldiers Grove | J. H. Mills | Oshkosh Normal School | 1,1500 85500 | 1 | 3 <br> 2 | 34 23 | 62 21 | 96 44 |  |
| South Milwaukee | Fred W. Hein | Whitewater Normal Schooi | 1,666 66 | 1 | 5 | 59 | 64 | 123 | 2 |
| South Wayne | O. P. Gump ... | Oberlin College ............. | 1,60000 9000 | 1 | 1 | 10 | 10 | 20 | 1 |
| Sparta | Lewis Atherton | University of Michigan | 1,900 00 | 4 | 4 | 102 | 150 | 252 | 1 |
| Spooner .... | E. G. Toan . | Carleton College ...... | 1,130 00 | 1 | 3 | 28 | 48 | 76 |  |
| Spring Green | R. W. Adams | Oshkosh Normal School | 1,170 00 | 1 | 2 | 27 | 49 | 76 |  |
| Spring Valley | F. L. Olson | University of Wisconsin | 1,10000 | 2 | 2 | 22 | 24 | 46 | i |
| Stanley ...... | Edgar A. Baird | River Falls Normal School. | 1,400 00 | 3 | 5 | 47 | 103 | 150 |  |
| Stevens Point | Guy A. Benedict | Oshkosh Normal School . | 1,250 00 | 3 | 8 | 113 | 139 | 252 | 3 |
| Stockbridge | A. F". Elmegreen. | Unlimited state certificate | 1,76500 | 1 | 1 | 13 | 18 | - 31 | 3 |
| Stoughton | G. O. Banting . | Unlimited state certificate | 2,00000 | 4 | 8 | 126 | 172 | 298 | 2 |
| Stratford ... | M. Mortenson | Oshkosh Normal School | 1.57500 | 1 | 1 | 17 | 12 | 29 |  |
| Sturgeon Bay | R. Soukup | University of Wisconsin | 1,350 00 | 2 | 6 | 104 | 101 | 205 | 1 |
| Sun Prairie .. : | F. E. Ballard | Beloit College .......... | 1,250 00 | 2 | 2 | 33. | 40 | 73 |  |
| Thorp .......... | Frank V. Powell | Whitewater Normal School | 1,90000 | 1 | 2 | 20 | 45 | 65 | 1 |


| igerton | J. J. Haass | Oshkosh Normal School | 81000 | 1 | 1 | 12 | 18 | 30 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tomah | F. M. Bray | University of Wisconsin | 1,55000 | 4 | 5 | 102 | 115 | 217 | 3 |
| Tomahawk | L. C. Johnson | Lawrence College ...... | 1,40000 | 2 | 5 | 46 | 82 | 128 |  |
| 'I'rempealeau | W. A. McLaughlin | Unlimited state certificate | 90000 | 1 | 6 | 12 | 17 | 29 |  |
| I'wo Rivers | W. J. Hamilton .. | Milwaukee Normal School | 2,000 00 | 2 | 6 | 71 | 56 | 127 |  |
| Union Grove | W. J. Sizer . . . | Ripon College | 81000 | 1 | 2 | 28 | 33 | 61 | 1 |
| Unity | O. L. Stinson | University of Wisconsin | 76500 | 1 | 1 | 14 | 17 | 31 |  |
| Verona | H. 'T. Emmett | Oshkosh Normal School | 1,050 00 | 1 | 2 | 23 | 24 | 47 |  |
| Viola. | W. F. Livingston | Whitewater Normal School | 90000 | 1 | 2 | 31 | 41 | 72 |  |
| Viroqua | W. P. Colburn .. | University of Wisconsin | 1,70000 1,300 00 | 4 | 4 3 | 101 35 | 113 81 | 214 6.9 | 4 |
| W abeno | E. G. Beckwith | Wheaton College | $\begin{aligned} & 1,30000 \\ & 1,00000 \end{aligned}$ | 1 | 3 2 | 35 30 | :1 | $\begin{aligned} & 6: 9 \\ & 69 \end{aligned}$ | 1 |
| Waldo | D. P. Hughes | Stevens Point Normal Sc | $\begin{array}{r} 1,00000 \\ 81000 \end{array}$ | 1 | 2 3 | 30 28 | 3:5 41 | $\begin{aligned} & 69 \\ & 69 \end{aligned}$ |  |
| W alwortn | Millard Lufts | Oshkosh Normal School | 1.81000 | 1 | 3 | 28 | 41 | ${ }^{69}$ |  |
| W ashburn | S. A. Oscar | University of Wisconsin | 1,600 00 | 3 | 4 | 75 | 8 | 165 68 |  |
| Waterford | W. U. Blanchard | University of Wisconsin | 1,000 00 | 1 | 2 | \%3 30 | 83 46 | 68 76 |  |
| W aterloo | L. G. Curtis | Milwaukee Normal School | 1,100 00 | 1 | 4 6 | 3\% | 46 171 | 76 3.6 | 1 |
| Watertown | 'I'hos. J. Berto | University of Wisconsin | 1,820 00 | 6 | 6 | 102 | 171 | 320 | $\stackrel{2}{6}$ |
| Waukesha | G. F. Loomis | Beloit College | 2,250 00 | 4 | 5 | 11:9 | 148 | ¢ 56 | 6 |
| Waunakee | 'I'hos. Campion | Milwaukee Normal School | 1,000 00 | 1 | 2 | 20 | 20 | 45 | - . . . |
| Waupaca | E. H. Miles . | Stevens Point Normal Scho | 1,400 00 | 2 | 4 | 80 | 91 | 171 |  |
| Waupun | Hrancis R. Nash | University of Wisconsin | 1,40000 | 3 | 5 | 56 | 68 | 124 |  |
| W ausau | Ira O. Painter | Harvard University ... | 2,000 00 | 6 | 21 | 282 | 256 | 538 | 2 |
| Wausaukee | C. J. Kreilkamp | University of Wisconsin | 1,200 00 | 1 | 2 | 21 | 34 | 55 |  |
| Wautoma | G. E. vaioe | Unlimited state certificate | 1,500 00 | 1 | 6 | 23 | 21 | 44 | 4 |
| Wauwatosa | P. A. Kolb | Univarsity of Wisconsin | 2,100 00 | 3 | 6 | 75 | 66 | 141 | 1 |
| West Allis | T. J. Jones | University of Wisconsin | 1,900 00 | 3 | 4 | 53 | 65 | 118 |  |
| West Bend | D. E. McLane ..... | Whit $\in$ water Normal School | 1,600 00 | 2 | 3 | 53 | 52 | 105 | 1 |
| Westboro | Chas. R. Steinfeldt | University of Wisconsin ... | 90000 | 1 | 1 | 8 19 | 30 31 | 38 |  |
| Westby . | A. L. Godfrey | Whitewater Normal School | 81009 1,10000 | 1 | 2 3 | 19 | 31 33 | 50 |  |
| West De Per | H. W. Lyon | Oshkosh Normal School. | 1,100 00 | 2 | 3 | 21 32 | 31 37 | 54 69 |  |
| Westfield . | D. L. Swartz ... | Milwaukee Normal School | 1,00000 | 2 | 6 3 | 32 19 | 37 31 | 69 50 |  |
| West Salem | Geo. E. Sanford | La Crosse Normal School. | 1,170 1,000 1,000 | 1 | 3 3 | 19 19 | 31 36 | 50 |  |
| Weyauwega Whitenall | G. W. Puffer .... | Oshkosh Normal School Un:versity of Wisconsin | 1,00000 1,00000 | 1 | 3 3 | 19 31 | 36 33 | 65 | 1 |
| Whitehall | Emma J. Schulze | Un.versity of Wisconsin Oberlin College ........ | 1,000 <br> 1,800 |  | 3 | 31 76 | 33 80 | 64 156 | 1 |
| Whitewater | C. W. R. Russewitz | Oberlin College . ${ }^{\text {Milwaukee Normal } \text { School }}$ | 1,80000 99000 | 2 1 | 6 1 | 76 20 | 80 16 | 156 36 | 1 |
| Wilmot | B. M. Squires | Unlimited state certificate. | 1,200 00 | 1 | 2 | 17 | 24 | 41 |  |
| Wilton | R. J. McMahon | La Crosse Normal School | 90900 | 1 | 2 | 23 | 37 | 60 |  |
| Winneconne | Karl Evert . . . . | University of Wisconsin | 1,150 00 | 1 | 2 | 25 | 24 | 49 |  |
| Wittenberg | Milton V. Jones | Oshkosh Normal School | 99000 | 1 | 2 | 18 | 34 | 52 |  |
| Wonewoc . | Fred G. Bishop | Oshkosh Normal School | 1,200 00 | 1 | 2 | 24 | 21 | 45 | 2 |

FREE HIGH SCHOOL HAVING THREE YEAR COURSE, 1911-1912.

FREE HIGH SCHOOLS HAYING FOUR YEAR COURSES, 1911-1912.

| Location. | Averace dally attendance. | No of dass taught. | Pupils in Euglish branches ully'. | Pupils in German. | Pupils in Lathil. | Pupils in Greek. | Pupils in buth Latin anu German. | No of Pupils in Manual Training. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | Wood work. | Domestic science, |
| Totals and averages | 89 | 182 | 17,394 | 7,887 | 3,677 | 5 | 1,163 | 2,256 | 2,544 |
| Abbotsford | 33 | 180 | 43 | 7 |  | . | 7 | . | . .......... |
| Albany | 35 | 180 | 24 | 13 |  |  |  |  |  |
| Algoma | 126 | 190 | 90 | 46 |  | , |  |  |  |
| Alma . | 59 | 180 | 36 | 27 | .-......... | ........... |  |  |  |
| Alma Center | 40 | 180 | 42 |  |  |  |  |  | .......... |
| Almond ... | 33 | 180 | 35 | 5 |  |  |  |  |  |
| Amery . | 57 | 180 | 46 |  | 19 |  |  |  |  |
| Amherst | 42 | 180 | 47 |  |  |  |  |  |  |
| Antigo | 307 | 180 | 251 | 96 | 45 |  | 11 | 81 | 115 |
| Appleton ... | 382 | 180 | 245 | \&3 | 92 | ........... | 18 | 61 | 82 |
| Arbor Vitae | 33 |  | 29 | 4 | -10 |  |  |  | . $\cdot$. $\cdot$. . |
| Arcadia | 79 | 180 | 60 | 16 | 10 | ...... |  |  |  |
| Arena | 51 | 180 | 47 | 7 21 |  |  |  |  | 27 |
| Argyle . | 57 | 179 | 43 | 21 |  |  |  |  |  |
| Ashland | 330 | 190 | 209 | 130 | 110 |  | 45 | 96 | 102 |
| Aihens | 36 | 180 | 32 | 10 | , |  |  |  |  |
| Augusta | 97 | 180 | 68 | 41 | 9 |  | 1 |  |  |
| Avoca | 28 | 178 | 32 |  |  |  |  | 2 | 5 |
| Baldwin | 72 | 180 | 83 |  |  |  |  |  |  |
| Bangor | 51 | 180 | 25 | 35 |  |  |  |  |  |
| Baraboo | 225 | 177 | 124 | 80 | 100 |  | 37 | 16 |  |
| Barron | 101 | 180 | 55 | 49 |  |  |  |  |  |
| Bayfield | 59 | 180 | 59 | 19 | 1 |  |  | 25 | 19 |
| Beaver Dam | 131 | 185 | 87 | 41 | 29 |  | 7 | 42 | 36 |
| Bellevil'e | 32 | 180 | 29 | 6 |  |  |  |  | 14 |
| Belmont | 35 | 180 | 30 | 10 |  |  |  |  |  |
| Beloit | 493 | 190 | 369 | 116 | 121 |  | 18 | 144 | 116 |
| Benton | 38 | 180 | 29 | 10 | 4 |  |  |  |  |
| Berlin | 120 | 199 | 75 | 32 | 31 |  | 6 |  |  |
| Birnamwood | 39 | 180 | 45 |  |  |  |  |  | . ......... |
| Black Earth .. | 31 | 180 | 25 | 10 |  |  |  | 24 | 63 |
| Black River Falls... | 102 | 176. | 95 | 25 |  |  |  | 24 | 63 |



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Edgar




FREE HIGH SCHOOLS HAVING FOCR YEAR COLRSES, 1911-191?_Continued

| Location. | Average daily attendance, | No. of days taught. | Pupils in English branches only. | Pupils in German. | Pupils in Latin. | Pupils in Greek. | Pupils in both Latin and German. | No. of Pupils in Mantal lraining. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | Wood work. | Domestic science. |
| Edgerton | 135 | 180 | 6 | 48 | 22 |  | 8 |  |  |
| Elkhorn | 123 | 180 | 69 | 33 | 33 |  | 2 |  |  |
| Ellsworth ............. | 107 | 180 | $\varepsilon 6$ | 18 | 21 |  | 4 |  |  |
| Elroy Eli.............. | 111 | 180 | 62 |  |  |  |  |  |  |
| Evansville | 104 | 178 | 12 | 38 | 26 |  | ${ }_{12}^{9}$ | ...... | . |
| Fairchild | 39 | 180 | 35 | 8 |  |  |  |  |  |
| Fennimore | 116 | 180 | 81 | 21 | 22 |  | 3 |  |  |
| Fifield . | 17 | 180 | 20 |  |  |  |  |  |  |
| Flort Atkinson . | 72 164 | 190 180 | 62 | 16 | 13 | ........ |  |  |  |
| Fountain City | 164 36 | 180 | 18 | 15 | 13 |  | 14 | . |  |
| Fox Lake | 42 | 190 |  | 15 |  |  |  |  |  |
| Frederic ${ }_{\text {Galesvill }}$.. | ${ }_{96} 13$ | 180 | 17 |  |  |  |  |  |  |
| Galesville ....... | 96 32 | 180 180 | 63 37 | 39 | 25 | ........ | 9 | 41 | 46 |
| Gillett ......... |  | 180 | 24 |  |  |  |  |  |  |
| Gilmanton | 14 | 180 | 14 |  |  |  |  |  | 迷 |
| Glenbeulah | 22 | 180 | 24 |  |  |  |  |  |  |
| Glenwood | 91 | 180 | 50 | 19 | 19 |  | 6 |  |  |
| Glidden ...... | 21 | 180 | 24 |  |  |  |  |  |  |
| Grand Rapids | 237 16 | 180 180 | 194 23 | 59 6 | 23 |  | 5 | 44 | 59 |
| Grantsburg | 70 | 180 | 57 | 31 |  |  |  |  |  |
| Green Bay (East). | 282 | 200 | 204 | 51 | 76 |  | 9 |  |  |
| Green Bay (West). | 276 | 200 |  | 56 | 85 |  | 9 | ${ }_{69}$ | 69 |
| Green Lake . | 41 | 180 | 43 |  |  |  |  |  |  |
| Greenwood | 75 | 180 | 6 | 20 |  |  |  |  |  |
| Hammond | 60 28 | 180 | 65 |  |  |  |  |  | ............. |
| Hancock Hartford | 28 142 | 173 180 | 31 75 |  |  |  |  |  | . |
| Hayward | 142 62 | 180 177 | 75 42 | 40 28 | 35 |  | 20 | 18 | 17 |
| Hazel Green | 30 | 180 | 20 | 16 |  |  |  |  |  |
| Highland | 26 | 180 |  | 29 |  |  |  |  |  |





[^7](


FREE HIGH SCHOOLS HAVING FOUR YEAR COURSES, 1911-1912_Contınued.

| Location. | $\begin{gathered} \text { Average } \\ \text { daily } \\ \text { attendance. } \end{gathered}$ | No. of days taught. | Pupils in English branches only. | Pupils in German. | Pupils in Latin. | Pupils in Greek. | Pupils in buth Latin and German. | No. of Pupilis in Manual Training. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | Woodwork. | Domestic science. |
| Mellen | 52 | 180 | 50 | 14 | 1 |  | 1 | .. | ......... |
| Melrose | 27 | 180 | 34 |  |  |  |  |  |  |
| Menasha ..... | 103 | 190 | 62 | 38 | 24 | ............ | 8 | 22 | 25 |
| Menomonee Falls | 88 | 180 |  | 10 | 23 | . .......... | 4 |  |  |
| Merrill | 261 | 180 | 165 | 70 | 50 |  | 7 |  | . . . . . |
| Merrillan | 29 | 170 | 33 | . |  |  |  |  | .......... |
| Middle! on | 63 | 180 | 39 | 30 | . .... | ......... |  | 13 | 25 |
| Milton .... | 84 | 180 | 39 | 32 | 21 |  | 2 |  |  |
| Milton Junction | 55 | 180 | 38 | 8 | 16 | . ............ | 1. | . . . . . | . ........... |
| Mineral Point .... | 170 | 180 | 35 | 65 | 50 |  | 45 | ... . . | . |
| Minocqua ........ | 170 | 180 | 1 | 28 |  |  |  | . | . |
| Mondovi .. | 126 | 178 | 95 | 48 | 18 | . | 6 |  |  |
| Monroe . . | 167 | 180 | 12 | 131 | 44 | ............ | 9 | 24 | 24 |
| Montel:o.. | 61 | 180 | 38 | 16 | 21 | . . . . . . . . . | 7 |  |  |
| Montfort . | 75 | 180 | 69 | 15 | ............ | . . . . . . . . |  | . $\cdot$. | ........... |
| Monticello | 34 | 180 | 30 | 10 | . . . . . . . . . |  |  |  |  |
| Mosinee . . | 24 | 180 |  |  |  |  |  |  |  |
| Mt. Hope. | 28 | 180 | 32 |  |  |  |  |  |  |
| Mt. Horeb. | 89 | 180 | 58 | 36 | 8 | . |  | 21 | 33 |
| Mukwonago . | 67 | 190 | ……..... | 28 | - 14 |  | 3 |  |  |
| Muscoda.... | 34 | 180 | 39 | ................. | ......... |  |  |  |  |
| Necedah .... | 49 | 180 | 51 | ................. | 11 |  |  |  |  |
| Neenah .. | 173 | 185 | 129 | 36 | 27 | . . . . . . . . | 5 | 47 | 42 |
| Neillsville ..... | 125 | 180 | 123 | 38 | 28 |  | 2 | $\ldots .$. | 35 |
| New Holstein . | 36 | 200 | 20 | 19 | $\ldots$ |  |  | 30 |  |
| New Lisbon . | 79 | 180 | 61 | 21 | 5 |  | 5 | ..... | ............... |
| New London | 109 | 180 | 93 | 29 | 14 | . | 7 | 38 | 34 |
| New Richmond | 237 | 180 | 149 | 41 | 67 | . ....... | 8 |  | ............ |
| North Crandon ..... | 8 | 180 | 8 | ............... |  | ............ |  | . |  |
| North Fond du Lac. | 3.9 38 | 180 | 43 | $\cdots 9$ | ....... 2 | . . . . . . . |  |  | ..... |
| Norwalk | 38 | 180 | 36 | 6 18 | .......... | - ........... |  |  | . . . |
| Oakfield | 39 | 180 | 40 | 18 | . ....... |  | ............. | . ..... | . . . . . . . |
| Oakwood ... | 24 | 180 | 32 | 70 | . . . ${ }^{\text {a }}$ |  | . $10 . .$. | 58 | . |
| Oconomowoc ... | 171 | 190 | 92 | 70 | 40 |  | 10 | 58 |  |



FREE HIGH SCHOOLS HAVING FOUR YEAR COURSES, 1911-1912_Continued.



FREE HIGH SCHOOL HAVING THREE YEAR COURSE, 1911-1912.


FREE HIGH SCHOOLS HAVING FOUR YEAR COURSES, 1911-1912.

| Location. | Graduates, 1911. |  | No. graduates 1911. WhO HAVE TAUGHT SINCE. |  | Graduates this YEAR. |  | Graduates since ORGANIZATION OF SCHOOL. |  | No. nonresident pupils during year | Rate tuition nonresidents per month. | Total amount received for tuition. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. |  |  |  |
| Totals and aver.. | 1.721. | 2.520 | 151. | 992 | 1,825 | 2,582 | - 19,438 | 30,960 | 8,214 | \$194 | \$140,954 98 |
| Abbotsford | 6 | 5 |  |  |  | 3 | 10 | 14 | 9 | \$200 | \$246 00 |
| Albany ........ | 6 | 3 | 2 | 2 | 4. | 6 | 30 | 35 | 13 | 200 | 23650 |
| Algoma ......... | 5 | 8 |  |  | 6 | 11 | 100 | 121 | 55 | 200 | 87000 |
| Alma ....... | 5 | 7 | 1 | 1 | 2 | 6 | 71 | 117 | 7 16 | 200 200 | 24300 41600 |
| Alma Center ... | 6 | 5 | 1 | 4 | 1 | 5 2 | 28 |  | 16 25 | 200 200 | 45000 |
| Almond ........ | 4 | 4 | 1 | 3 1 | $\stackrel{2}{6}$ | 4 | 28 19 | 22 30 | 25 34 | 200 200 | 58000 |
| Amery ..... | 1 | 4 | 2 | 1 2 | 6 3 | 6 4 | 19 | 30 77 | 34 23 | 200 200 | 580 41400 |
| Amherst . . Antigo | $\begin{array}{r}7 \\ \hline\end{array}$ | 5 26 | 2 2 | $\stackrel{.}{11}$ | +3 | 4 25 |  | 297 | 75 | 200 200 | 1,465 50 |
| Antigo. | 19 19 | 28 |  |  | 26 | 33 | 144 | 194 | 55 | 200 | 92300 |
| Arbor Vitae |  |  |  |  |  | 2 |  | ${ }^{2}$ | 88 | 200 | …… |
| Arcadia .... | 9 | 5 | 3 | 2 | 11 | 6 | 167 | 126 | 38 | 200 | 59200 |
| Arena ... | 2 | 2 |  | 2 | 5 | 2 | 9 | 8 | … | 200 | . . . . . . . . . . ${ }^{\text {a }}$ |
| Argyle . ${ }^{\text {a }}$ | 12 | 5 |  |  | 8 | 3 | 75 | 100 | 29 | 200 | 42350 |
| Ashland | 16 | 29 |  | 2 | 17 | 24 | 171 | 290 | 37 | 200 | 69600 |
| Athens | 2 | 2 |  | 2 | 2 | 1 |  |  | 78 | 200 | 10400 |
| Augusta ..... | 2 | 9 |  | 5 | 6 | 6 | 14 |  | 38 | 200 | 50000 |
| Avoca ........ | 2 | 5 | 1 | 3 | 3 |  | 14 | 17 | 14 | 200 | 23850 |
| Baldwin | 2 | 12 |  | 8 | 8 | 8 | 32 | 55 | 43 | 200 | 72900 |
| Bangor . | 4 | 3 |  | 1 | 2 | 8 | 26 | 58 | 17 | 200 | 24100 |
| Baraboo | 18 | 19 | 5 | 12 | 12 | 32 | 237 | 477 | 55 | 200 | 70750 |
| Barron. | 5 | 14 | 1 | 6 | 4 | 10 |  |  | 34 | 200 | 57750 |
| Bayfleld | 5 | 7 | 1 | 4 | 6 | 5 | 38 | 88 | ............. |  | ....... |
| Beaver Dam | 9 | 11 |  |  | 8 | 10 | 160 | 301 | 19 | 200 | 30650 |
| Belleville | 1 | 2 | 1 | ] | 1 | 5 | 41 | 94 | 13 | 200 | 51900 |
| Belmont |  | 8 |  | 3 | 4 | 3 | 15 | 52 | 16 | 200 | 33000 |
| Beloit | 15 | 24 |  |  | 26 | 62 | 265 | 750 | 66 | 200 | 1,082 50 |
| Benton | 4 | 4 | 1 | 1 | 2 | 4 | 30 | 32 | 8 | 200 | 14400 |
| Berlin .. | 9 | 10 | 1 | 5 | 8 | 15 | 230 | 405 | 39. | 200 | 69350 |
| Birnamwood | 4 | 4 | 3 |  |  | 8 | 30 | 54 | 15 | 200 | 15500 |
| Black Earth | 7 | 7 |  | 3 | 4 | .... | 94 | 106 | 14 | 200 | 25200 |
| Black River Falls. | 2 | 18 | 2 | 7 | 7 | 12 | 165 | 300 | 4.9 | 2.20 | 98170 |



FREE HIGH SCHOOLS HAVING FOUR YEAR COURSES, 1911-1912_Continued.



FREE HIGH SCHOOLS HAYING FOUR YEAR COURSES, 1911-1912_Continued.



FREE HIGH sCHOOLS HAVING FOUR YEAR COURSES, 1911-1912_Continued.



FREE HIGH SCHOOL HAVING THREE YEAR OOURSE, 1911-1912.


FREE HIGH SCHOOLS HAVING FOUR YEAR COURSES, 1911-1912.

| Location. | Average yearly salary of assistants. | Total amount of salaries of principal and assistants. | Total Number Pupils Enrolled. |  |  |  | Does H. S. district furnish textbooks? If so, free, rented or sold? | High School apportionment, November, 1911. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\stackrel{1 \text { st }}{\text { grade. }}$ | $\stackrel{2 d}{\text { grade. }}$ | $\begin{gathered} \text { 3d } \\ \text { grade. } \end{gathered}$ | $\begin{aligned} & \text { 4th } \\ & \text { grade. } \end{aligned}$ |  |  |
| Totals and averages | \$61681 | \$1,128,217 65 | 10,674 | 7,726 | 6,364 | 4,929 |  | \$121,575 41 |
| Abbottsford | \$540 00 | \$1,440 00 | 20 | 11 | 9 | 3 | Rented | \$322 54 |
| Albany Algoma | 54000 68300 | 2,080 3,450 00 | 10 | 8 | 7 | 12 | No ........... | 32254 |
| Alma ... | 683 49500 | 3,450 2,030 | ${ }_{20}^{40}$ | 47 16 | 19 | 24 8 | Free .................. | 32254 32254 |
| Alma Center | 54000 | 1,395 00 | 10 | 10 | 12 | 10 | Free ................. | 322 324 54 |
| Almond | 49500 | 1,777 50 | 20 | 12 | 3 | 5 | No. | 32254 |
| Amery ${ }^{\text {Amherst }}$ | 66500 | 2,330 00 | $\stackrel{23}{ }$ | 19 | 11 | 12 | No | 32254 |
| Antigo | ${ }_{741} 4400$ | 1,395 11,380 00 | 25 126 | 10 98 | 75 | 52 | No ... | 32254 |
| Appleton | 86252 | 20,703 00 | ${ }_{210}$ | 94 | 80 | ${ }_{63}$ | Rented |  |
| Arbor Vitae | 63000 | 2,460 00 | 16 | 10 | 4 | 3 | Free |  |
| Arcadia | 68250 | 3,547 50 | 31 | 16 | 22 | 17 | No | 322 54 |
| Arena | 58500 | 2,170 00 | 11 | 16 | 17 | 9 | No ... | 81500 |
| Ashland | 57385 90000 | 2,247 6,225 00 | 17 198 | 18 99 | ${ }_{64}^{17}$ | 12 | Rented | 32254 |
| Athens | 49500 | 1,990 00 | 17 | 14 | $\stackrel{8}{8}$ | $\stackrel{44}{3}$ | Free | 32254 32254 |
| Augusta | 60000 | 4,075 00 | 32 | 34 | 30 | 12 | Yes | 32254 |
| Avoca .. | 47700 | 1,202 00 | 15 | 8 | 5 | 4 | No | 32254 |
| Bangor | 524 540 00 | 2,46250 1,84500 | 19 | 11 | ${ }_{16} 24$ | 18 | Free | 32254 |
| Baraboo | 86011 | 9,041 00 | 78 | 69 | ${ }_{53}^{16}$ | 14 44 |  | 32254 32254 |
| Barron. | 58500 | 2,655 00 | 25 | 30 | 35 | 14 | No | 32254 322 |
| Bayfield ${ }_{\text {Beaver }}$ Dam | 65700 | 4,785 00 | 33 | 22 | 13 | 11 | Free | 1,500 00 |
| Beaver Dam | 73400 | 6,190 00 | 62 | 35 | 30 | 21 | No | -322 54 |
| Belleville . | 51750 56250 | 2,13500 2,22500 | 13 | 8 | 8 | ${ }_{8}$ | Sold... | 32254 |
| Beloit ..... | 500 800 00 | 17,980 00 | 1381 | 10 129 | 9 103 | -88888 | Rented | 322 54 |
| Benton | 50850 | 1,88100 | 12 | 15 | 10 | 105 | No | 32254 <br> 32254 |
| Berlin ........ | 69350 540 500 | 5,21750 | 54 | 25 | 29 | 24 | Rented | 32254 3225 |
| Black Earth | 545000 | 1,39500 | 14 | 12 | 9 | 10 | Free | 32254 |
| Black River Falls. | 64800 | 4,690 00 | 42 | ${ }_{23}^{14}$ | 33 | 22 | Free | 32254 <br> 32254 <br> 22 |
| Blair . | 54000 | 2,14200 | 19 | 15 | 20 | 16 | Sold | 32254 32254 |



| 58500 | 2,755 00 |
| :---: | :---: |
| 51750 | 2,135 00 |
| 57375 | 3,002 50 |
| 45750 | 1,474 15 |
| 65800 | 3,430 90 |
| 45000 | 1,110 00 |
| 52250 | 1,945 00 |
| 56250 | 2,050 00 |
| 66675 | 4,055 00 |
| 54000 | 1,170 00 |
| 45000 | 1,800 00 |
| 73536 | 6,947 50 |
| 54000 | 1,350 00 |
| 47250 | 1,845 00 |
| 59625 | 2,292 50 |
| 49500 | 1,495 00 |
| 45000 | 1,900 00 |
| 60000 | 3,300 00 |
| 51750 | 2,035 00 |
| 66666 | 3,300 00 |
| 51750 | 1,935 00 |
| 70437 | 4,517 50 |
| 80640 | 10,424 90 |
| . 57000 | 2,970 00 |
| 65250 | 3,057 50 |
| 45000 | 1,710 00 |
| 63000 | 2,160 00 |
| 45000 | 1,260 00 |
| 73214 | 6,575 00 |
| 65250 | 3,285 00 |
| 55500 | 2,865 00 |
| 63.00 | 3,953 00 |
| 94500 | 1,800 00 |
| 74812 | 4,292 50 |
| 50125 | 2,002 50 |
| 67500 | 4,300 00 |
| 68200 | 4,985 00 |
| 64900 | 3,34700 |
| 74000 | 6,570 00 |
| 58500 | 3,105 00 |
| 65250 | 2,505 00 |
| 54000 | 2,180 00 |
| 76580 | 19,513 03 |
| 49500 | 1,350 00 |
| 61497 | 5,34500 |
| 71666 | 5,810 00 |








FREE HIGH SCHOOLS HAVING FOUR YEAR COURSES, 1911-1912--Continued.

| Location. | Average yearly salary of assistants. | Total amount of salaries of principal and assistants. | Total Number Pupils Enrolled. |  |  |  | Does H. S. district furnish textbooks? If so, free, rented or sold? | High School apportionment. November, 1911. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{gathered} \text { 1st } \\ \text { grade. } \end{gathered}$ | $\begin{gathered} 2 d \\ \text { grade. } \end{gathered}$ | $\begin{gathered} \text { 3d } \\ \text { grade. } \end{gathered}$ | $\begin{aligned} & \text { 4th } \\ & \text { grade. } \end{aligned}$ |  |  |
| Ellsworth .......... | 72000 | 4,900 00 | 35 |  |  |  |  |  |
| Elmwood (No repor |  | 4,900 00 | 35 | 27 | 36 | 24 | Rented | 32254 |
| Elroy ....... | 63000 | 3,820 00 | 18 | 22 | 28 |  |  | 32254 |
| Fvansville........ | 697 67500 | 3,890 00 | 34 | 28 | 28 | 49 | Yes . . . . . . . . . . . . . . | 32254 |
| Fennimore | 67500 59400 | 1,800 00 | 19 | 13 | 4 | 7 | Free . . . . . . . . . . . . . . . | 32254 |
| Fifield | 49500 | 4,220 <br> 1,260 | 58 | 36 | 9 | 21 | No ... | 32254 |
| Florence | 71500 | 1,260 3,545 00 | ${ }_{26}$ | 9 | 4 | 2 | Free . .................... | 69750 |
| Fort Atkinson | 70560 | 3,545 00 | 26 55 | 16 | 21 | 15 | Rented ......... | 1,500 00 |
| Fountain City | 56250 | 2,275 00 | 55 14 | 49 9 | 40 | 30 | Sold .................. | 1,322 34 |
| Fox Lake ... | 61750 | 2,38500 | 14 | 9 10 | 10 | 8 | No ....................... | 32254 |
| Frederic | 54000 | 1,260 00 | 13 | 10 | 12 | 8 | No ...................... | 32254 |
| Galesville ........ | 64100 | 3,600 00 | 13 32 | 4 28 |  | 1 | Free . . . . . . . . . . . . . . . | 32254 |
| Genoa Junction | 58500 | 1,395 00 | 14 | 28 9 | 24 | 18 |  | 32254 |
| Gillett .... <br> Gilmanton | 58500 | 1,58500 | 14 | 9 10 | 7 6 | 7 | Free .................... | 32254 |
| Gilmanton Glenbeulah | 54000 | 1,640 00 | 10 | 10 | 6 | 1 | No .................... | 32254 |
| Glenbeulah | 49500 61500 | 1,345 00 | 12 | 4 | 5 | ${ }^{2}$ | Nold No .................... | - |
| Glidden . | 61500 540 | 3,020 00 | 40 | 28 | 22 | 16 |  | 32254 |
| Grand Rapids | $\stackrel{540642}{842}$ | 1,39500 12,43989 | 6 | 5 | 10 | 3 | Free . . . . . . . . . . . . . . . . . . . . . | 32254 |
| Gratiot ....... | 49500 | 12,43989 1,30500 | 109 5 | 68 | 57 | 37 | Sold $\ldots$...................... | 32254 |
| Grantsburg ........ | .......... | 1,30500 2,083 40 | -5 | 9 23 | $\begin{array}{r}3 \\ \hline\end{array}$ | 6 | No. | 56250 |
| Green Bay (East). | $77000 \cdots$ | 11,820 00 | 108 | 88 | 18 | 19 | Free | 32254 |
| Green Bay (West). | 77800 | 11,720 00 | 108 99 | 85 | 63 | 66 | No. | 32254 |
| Green Lake | 57000 | 11,14000 | 14 | 17 | 72 | 52 | No | 32254 |
| Greenwood | 59750 | 2,19500 | 14 | 118 | 14 | 4 | No. | 32254 |
| Hammond | 54000 | 1,845 00 | 44 25 | 18 | 14 | 13 | Free . . | 32254 |
| Hancock | 55250 | 1,395 00 | 12 | 14 9 | 20 | 6 | Rented ................. | 32254 |
| Hartford | - 58050 | 4,283 00 | 47 | 9 40 | ${ }^{6}$ | 4 | No ..................... | 32254 |
| Hayward ... | ' 75152 | 3,396 17 | 22 | 15 | 34 | 27 | -..... | 32254 |
| Hazel Green | 67500 | 1,395 00 |  | 15 8 | 18 | 15 | Free . . . . . . . . . . . . . . . . | 1,500 00 |
| Highland . | 58500 | 1,395 1,7800 | 13 7 |  | 12 | 3 | Sold .................... | 32254 |
| Hillsboro . | 54000 | 1,280 00 | 32 | 112 | 8 12 | 3 | Sold ................... | 32254 |
| Hixton . | 63000 | 1,665 00 | 17 | 12 | 12 8 | 9 | Free | 32254 |


|  |  |  |  | 17 | 23 | 21 | Sold | 32254 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Horicon | 64914 | 3，922 50 | 20 | 17 | 17 | 11 | No． | 32254 |  |
| Hortonville | 54000 | 1，665 00 | 84 | 64 | 40 | 30 | Rented | 32254 |  |
| Hudson ．．． | 68014 | 6，561 00 | 84 | 64 | 40 | 8 | Free ．． | 32254 |  |
| Humbird | 54000 | 1，350 00 | 5 | 26 | 27 | 13 | No ．． | 32254 |  |
| Hurley | 63750 | 4，250 00 | 52 22 | $\stackrel{4}{4}$ | 7 | 3 | Sold | 32254 |  |
| Independence | 54000 | 1，64000 | 26 | 14 | 13 | 9 | No ．．． | 322 ＇54 |  |
| Iola ．．．．．．．．． | 54000 | 1，890 1,15000 | 9 | 1 | 5 |  | Free ． |  |  |
| Iron Belt | 40000 65250 | 1,150 2,20500 | 17 | 15 | 8 | 5 | Free ． | 1,08000 32254 | 1 |
| Iron River | 65250 86863 | 2,205 14,27950 | 173 | 115 | 74 | 59 | No ．． | 32254 32254 | W |
| Janesville | 86863 78250 | 6，295 00 | 56 | 39 | 30 | 21 | Free ． | 322 324 | － |
| Jefferson ．．．． | 78250 58500 | 1，305 00 | 5 9 | 3 | 7 | 2 14 | Free | 322 54 | O |
| Johnson Cree | 58500 570 | 2，802 50 | 24 | 18 | 14 | 14 | No． | 32254 | 号 |
| Juneau ．．． | 69000 |  | 47 | 35 | 26 | 18 | Free ${ }^{\text {N }}$ | 32254 |  |
| Kaukauna | 695 5850 | 1，48500 | 12 | 6 | 10 | 11 39 | Free | $32 \overline{2} 54$ | $\bigcirc$ |
| Kendall ．． | 96666 | 16，000 00 | 186 | 97 | 66 | 39 14 | No | 32254 |  |
| Kewaskum | 64000 | 1，840 00 | 14 | 10 | 27 | 15 | No ． | 32254 | 官 |
| Kewaunee ． | 77000 | 5,05000 | －68 | 28 | 14 | 8 | Rented | 322 54 | 国 |
| Kiel | 67500 | 3，225 00 | 28 | 21 | 14 | 13 | No ． | 32254 |  |
| Kilbourn | 65250 | 2，455 00 | 28 | 22 | 16 | 13 | Free ． | 32254 | 2 |
| Ladysmith | 70916 | －，855 00 | 24 | 20 | 13 | 5 |  | 32254 | － |
| La Farge | 54000 | 2，15500 | 74 | 39 | 45 | 34 | Free | 32204 | ， |
| Lake Geneva | 64500 | 4,680 4,480 4,00 | 52 | 33 | 28 | 19 | Free ． | 32254 | （x） |
| Lake Mills | 72000 | 4，480 5,600 | 43 | 43 | 29 | 19 | Rented | 32254 |  |
| Lancaster | 66750 | 1，974 100 | 11 | 13 | 1 | 6 | No ． | 32254 | $\Omega$ |
| Linden ．．．．．．． | 49500 56000 |  | 11 | 6 | 5 |  |  |  | ŋ |
| Little Chute | 56000 51750 | 1，517 50 |  | 12 | 5 | 2 | No |  | ＊ |
| Livingston | 51750 | 1，517 3 ，44500 | 43 | 30 | 24 | 24 | No ． | 32254 | 2000 |
| Lodi ．．．．．． | 57375 54000 | 1，490 00 | 12 | 14 | 14 | 7 | Free ．． |  | 安 |
| Lone Rock | 54000 56250 | 1,490 2,12500 | 12 | 21 | 10 | ${ }^{7}$ | Rented | 32254 1,38250 | － |
| Loyal ．．． | 56250 56100 | 2，125 00 | 23 | 20 | 12 | 13 | Sold | 1，382 59 | 잔 |
| Manawa | 56100 978 | 16，475 00 | 183 | 123 | 55 | 62 | Free | 32254 | Z |
| Manitowoc | 97833 81700 | 16,475 <br> 11,948 <br> 00 | 140 | 110 | 100 | 54 | Free | 32254 | $\bigcirc$ |
| Marinette | 81700 54000 | 11,948 1,800 | 14 | 9 | 13 | 7 | Sold | 945 32254 | 皆 |
| Marion ${ }_{\text {Markesan }}$ | 54000 58500 | 1，800 2,295 | 21 | 19 | 9 | 3 | No | ． 32254 | H |
| Markesan | 58500 56250 | 2，295 00 2,12500 | 15 | 11 | 14 | 9 | No | 1，057 50 | $\square$ |
| Marshall | 56250 | 2，125 000 | 53 | 53 | 46 | 40 | No | 32254 |  |
| Marshfield | 71889 | 8,320 1,350 00 | 14 | 5 | 7 |  | No ．． | 32254 |  |
| Mattoon | 54000 | 1,350 3,92500 | 51 | 27 | 39 | 25 | Free ． | 32254 |  |
| Mauston | 61875 | 1,92500 <br> 3,158 | 23 | 23 | 20 | 10 | Sold | 32254 |  |
| Mayville ． | 57791 | 3,158 3,14500 | 17 | 16 | 21 | 12 | Free ． | 32254 |  |
| Mazomanie | 61500 | 3,14500 5,400 | 48 | 39 | 31 | 17 | Free ． | 32254 |  |
| Medford | 63334 | 5,400 3,36750 | 48 22 | 26 | 12 | 5 | Free | 32254 | $\stackrel{1}{1}$ |
| Mellen Melrose | 62225 | 3,36700 $.1,26000$ | 11 | 8 | 8 | 5 | No ．． | 65250 | $\stackrel{4}{4}$ |
| Melrose | 49500 72250 | $-1,26000$ 7,780 | 44 | 28 | 20 | 24 | No ．． | 32254 | 0 |

FREE HIGH SCHOOLS HAYING FOUR YEAR COURSES, 1911-1912.

| Location. | Average searly salary of assistants. | Total amount of salaries of principal and assistauis. | Total Number Pupils Enroljied. |  |  |  | Noes H. S. district furnish textbooks? If so, free. rented or so.d : | High School apportionment, November, 1911. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{aligned} & \text { lst } \\ & \text { grade. } \end{aligned}$ | $\stackrel{2 d}{\text { grade. }}$ | $\stackrel{3 d}{\text { grade. }}$ | $\begin{gathered} \text { 4th } \\ \text { grade. } \end{gathered}$ |  |  |
| Menomonee Falls | 52500 | - 2,825 00 | 30 | 24 | 22 | 28 |  | 32254 |
| Merrill ........ <br> Merrillan | 66150 | 8,01500 | 98 | 62 | 72 | 46 | No .. | 32254 |
| Merrillan | 63875 | 1,551 25 | 14 | 8 | 6 | 5 | No | 32254 |
| Milton ...... | 54000 540 | 2,380 00 | 21 | 18 | 18 | 12 | Rented | 1,140 00 |
| Milton Junction | 54000 | 2,970 2,837 50 | 28 | 26 | 18 | 20 | No .. | 1,299 34 |
| Mineral Point . | 60200 | 2,837 4,710 00 | 21 | 22 | 15 | 5 | No. | 1,253 75 |
| Minocqua ..... | 65250 | 4,710 2,25000 | 53 6 | 40 | 15 8 8 | 40 3 | No . . . . . . . . . . . . . . . . . | , 322̄ 54 |
| Mondovi ...... | 68400 | 4,620 00 | 6 40 | 14 | 28 | 3 26 | Frree . . . . . . . . . . . . . . . | 1,107 50 |
| Monroe . . | 78312 | 8,015 00 | 68 | 49 | 28 33 | 26 38 | Free | 322.54 |
| Montello | 57575 | 3,495 00 | 16 | 21 | 33 15 | 38 14 | Free ...................... | 32254 |
| Montfort | 52500 | 2,675 00 | 20 | 28 | 21 | 15 |  | -322 54 |
| Monticello | 54000 | 1,440 00 | 19 | 11 | $\stackrel{1}{4}$ | 15 6 | No Yes Y . | 1,26500 32254 |
| Mosinee . | 54000 | 1,440 00 | 16. | 11 4 | 2 | $\stackrel{6}{8}$ | Yes . . . . . . . . . . . . . . . . , | 32254 32254 |
| Mt. Hope | 58509 | 1,350 00 | 11 | 9 | 4 | $\begin{array}{r}8 \\ -8 \\ \hline\end{array}$ |  | 32254 67500 |
| Mt. Horeb .. | 58500 | 3,690 00 | 34 | 22 | 22 | 24 | No . N , ........................... | 675 <br> 3220 <br> 24 |
| Mukwonago | 57000 | 2,660 00 | 28 | 15 | 16 | 12 | No ......................... | 32254 32254 |
| Muscoda | 58500 | 1,740 00 | 13 | 13 | 4 | 9 | No | 32254 |
| Necedah | 51750 | 2,046 66 | 18 | 11 | 6 | 6 | No | 32254 |
| Neenah | 70500 | 7,445 00 | 65 | 52 | 33 | 37 | Sold | 32254 |
| New Holstein | 637 57500 | 4.21750 | 45 | 37 | 35 | 25 | Rented ............. | 32254 |
| New Lisbon . | 57500 | 2,350 2,675 00 | 12 | 8 | 12 | 7 | Free . . . . . . . . . . . . . . . | 32254 |
| New London. | 60750 | 2,575 400 | 37 | 28 37 | 18 31 | 14 26 | Sold | 32254 |
| New Richmond | 64522 | 4,546 7,711 23 | 37 85 | 37 67 | 31 50 | 26 55 | No ... | 32254 |
| North Crandon | 63000 | 1,530 00 | 3 | 2 | 2 | 1 | Free ........................... | 32254 |
| North Fond du Lac | 56250 | 2,075 00 | 30 | 14 | 7 | 3 | No. | 81000 32254 |
| Norwalk | 56250 | 1,462 50 | 16 | 6 | 12 | 8 | Free $\quad$............................. | 32254 32254 |
| Oakfield | 47250 | 1,845 00 | 12 | 10 | 11 | 9 | Nree $\quad$ N.......................... | 32254 32254 |
| Oakwood | 49500 | 1,260 00 | 11 | 13 | 1 | 8 | No .......................... | 32254 32254 |
| Oconomowoc | 76000 | 6,920 00 | 60 | 57 | 48 | 27 | Free | 32254 32254 |
| Oconto ...... | 75200 | 7,01500 | 70 | 57 | 53 | 36 |  | 32254 |
| Oconto Falls Omro ....... | 51000 | 2,78009 | 25 | 22 | 10 | 10 | No ..................... | 32254 32254 |
| Onrolaska | 59250 | 4,755 00 | 46 | 30 | 16 | 34 | No .................... | 32254 |
| Ontario ..... | 49500 | 2,30250 1,21500 | 19 18 | 23 | 10 | 10 | Free . ................... | 32254 |
|  |  | 1,215 0 | 18 | 7 | 10 | 3 | No ...................... | 32254 |



FREE HIGH SCHOOLS HAVING FOUR YEAR COURSES, 1911-1912-Continued.

| Location. | Average yearly salassistants | Total amount of salaries of principal and assistants. | Total Number Pupils Enrolled. |  |  |  | Does H, \& district furnish textbooks?If so, free, rente or sold? | High School apportionment, November, ber, 1911. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{gathered} \text { 1st } \\ \text { grade. } \end{gathered}$ | $\stackrel{2 \mathrm{~d}}{\text { grade. }}$ | $\begin{gathered} \text { 3d } \\ \text { grade. } \end{gathered}$ | $\stackrel{4 \mathrm{th}}{\text { grade. }}$ |  |  |
| Sheboygan | ${ }^{86400}$ | 15,350 00 | 170 | 97 | 97 | 66 | No .... | 32254 |
| Sheboygan Falls | 78300 | 3,850 00 |  | 25 | 14 | 15 | Free .................... | 32254 |
| Shell Lake | 56250 | 2,125 00 | 25 | 22 | 12 | 8 | Free .......... | 1,045 69 |
| Shiocton | 54000 | 1,260 00 | ${ }^{10}$ | ${ }^{15}$ | ${ }^{6}$ | ${ }^{2}$ | No ...... | 58500 |
| Shullsburg | ${ }^{665} 00$ | 2,808 75 | ${ }_{21}^{28}$ | 30 | ${ }_{9}^{23}$ | 15 | No .................... | 322 34 329 |
| Soldiers Grove | ${ }_{7} 51750$ | 1,890 00 | $\stackrel{21}{51}$ | ${ }^{6}$ | ${ }_{19}^{9}$ |  | No .................... | 32254 322 54 |
| South Wayne ... | 54000 | -1,440 0 | 7 | ${ }_{3}$ | 9 | 2 | No : | 720 7 720 |
| Sparta | 81553 | 7,608 75 | 110 | 61 | 54 | 28 | Free and rented......... | 32254 |
| Spooner | ${ }^{608} 00$ | $\stackrel{2,954}{ } 00$ | ${ }^{22}$ | ${ }^{20}$ | $\stackrel{1}{21}$ | 13 | Free .............. | ${ }_{3}^{322} 54$ |
| Spring Green | 58500 | 1,755 00 | ${ }_{21}^{20}$ | 20 | 21 | 15 | No ${ }_{\text {Nree }}$................... | ${ }_{3}^{322} 54$ |
| Spring Valley | ${ }_{6}^{686} 66$ | 3,160 00 | ${ }_{53}^{21}$ | $\stackrel{4}{47}$ | ${ }_{37}^{15}$ | ${ }_{23}$ | Free $\begin{aligned} & \text { Free } \\ & \text { Pre..................... }\end{aligned}$ | ${ }_{322}^{324} 5$ |
| Stevens Point | 74475 | ${ }_{8,697} 50$ | 60 | 91 | 56 | 48 | No ..................... | 32254 |
| Stockbriage .. | 49500 | 1,260 00 | 15 | 7 | 8 | 1 | Free .................... | 32254 |
| Stoughton | 77300 | ${ }^{8,287} 50$ | 104 | 75 | ${ }_{8}^{65}$ | $\stackrel{56}{3}$ | Free .......................... | 32254 79250 |
| Sun Prairie | 66000 | 3,230 00 | 16 | 25 | 17 | 15 | No .................... | 32254 |
| Thorp | ${ }^{630} 00$ | 1,530 00 |  |  | $\stackrel{13}{5}$ | 8 | Free ................... | 32254 67500 |
| Tigerton | 54000 73800 | 1,350 7,54500 | ${ }_{81}^{12}$ | 54 | 49 |  | Sree ... | ${ }_{322}^{651}$ |
| Tomahawk | 60904 | 4,90625 | 42 | ${ }_{37}$ | 31 | 18 | Free . | 32254 |
| Trempealeau | 54000 | 1,400 00 | ${ }_{41} 12$ | ${ }_{4}^{6}$ | - ${ }^{3}$ |  | No ${ }_{\text {Nree }}$......................... | ${ }_{322}^{324} 5$ |
| Two Rivers. | 91275 573 75 | 7,300 00 | 41 |  | 19 | 11 | No .................. |  |
| Unity ....... | 58500 | 1,350 00 | 16 | 6 | 4 | 13 | Free .................. | 32254 |
| Verona | 56250 | 2,175 00 | ${ }_{23}^{15}$ |  |  | ${ }_{14}^{13}$ | Free | 1,070 ${ }^{32} 5$ |
| Viroqua | ${ }_{681} 83$ | ${ }_{6,470}^{2,00}$ | ${ }_{72}$ | 57 | 51 | 37 | Free .. | 32254 |
| Wabeno | 60000 | 3,100 00 | 23 | 23 | 18 | ${ }^{6}$ | Free | 1,500 00 |
| Waldo ${ }_{\text {Walworth }}$ | 78750 540 500 | 1,787 2,430 00 | ${ }_{23}^{21}$ | 23 17 | 17 | 12 | Sold ... | $\begin{array}{r}32254 \\ 32254 \\ \hline\end{array}$ |
| Washburn | 71200 | 5 5,875 00 | 52 | 48 | 39 | ${ }^{26}$ | Free ................. | 32254 |
| Waterford | 64125 | 2,284 50 | 31 | 16 |  | 13 | No ............... | 1,092 50 |



FREE HIGH SCHOOL HAVING THREE YEAR COURSE, 1911-1912.


INDEPENDENT H1GH SCHOOLS HAVING FOUR YEAR COURSES, 1911-1912.


INDEPENDENT HIGH SCHOOLS HAVING FOUR YEAR COURSES, 1911-1912.

| Locatlon. | Average daily attendance | No. of days taught. | Pupils in English branches only. | Pupils in German. | Pupils in Latin. | Pupils in Greek. | Pupils in both Latin and German. | No. of Pupils in Mandal Training. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | Woodwork. | Domestic science. |
| Totals and averages. | 612 | 194 | 4,189 | 2,875 | 1,700 | 45 | 525 | 1,795 | 927 |
| Fond du Lac. | 386 | 190 | 231 | 121 | 109 | ......... | 24 | 21 | 26 |
| La Crosse | 614 | 195 | 100 | 374 | 170 | 11 | 60 | 40 | 220 |
| Madison .. | 802 | 185 | 290 | 317 | 257 | 6 | 75 | 82 | 99 |
| Menomonie ................. | 225 | 180 | 190 | 38 | 11 |  | 1 | 114 | 120 |
| Milwaukee (East Division). | 657 | 200 | 77 | 347 | 168 | ............. | 85 | 36 | ....... |
| Milwaukee (West Division). | 997 | 200 | 500 | 474 | 223 | 21 | 100 | 113 | . . . . . |
| Milwaukee (North Division) | 944 | 200 | 464 | 368 | 191 | 7 | 34 | 119 | . |
| Milwaukee (South Division). | 847 | 200 | 839 | 322 | 264 | . ........... | 77 | 65 | ....... |
| Oshkosh | 625 | 195 | 443 | 234 | 77 | . . . . . . . . . . | 3 | 154 | 142 |
| Racine $\qquad$ | 575 | 200 | 392 | 142 | 86 |  | 33 | 184 | 127 |
| Superior (Dewey). Superior (Blaine | 115 554 | 190. | 88 575 | 28 110 | 16 128 |  | 5 28 | 35 307 | 15 178 |
| Superior (Blaine ....... | 554 | $190^{*}$ | 575 | 110 | 128 | . . . . . . . . . | 28 | 307 | 178 |

INDEPENDENT HIGH SCHOOLS HAVING FOUR YEAR COURSES. 1911-1912.

| Location. | Graduates,1911. |  | No. graduates, 1911, who have taught since. |  | Graduates this year. |  | Graduates since organization of school. |  | No. nonresident pupils during year. | Rate tuition nonresidents per month. | Total amount received for tuition. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female. | - Male. | Female. | Male. | Fem. | Male. | Fem. |  |  |  |
| Totals and averages. | 450 | 506 | 6 | 13 | 494 | 542 | 2,899 | 7,098 | 394 | \$3 89 | \$9,304 50 |
| Fond du Lac. | 21 | 26 |  |  | 27 | 36 |  |  | 73 | \$400 | \$2,500 00 |
| La Crosse | 38 | 38 | 2 | 1 | 39 | 45 | 329 | 580 | 17 | 240 | 10000 |
| Madison ${ }^{\text {Menomonie }}$ | 67 19 | 18 |  | 1 | 63 17 | 72 | 308 | 34. | 49 | 432 300 | 1,960 00 |
| Milwaukee (East Division). | 40 | 63 |  |  | 50 | 47 | \% | 342 | 24 | 600 | 1,140 00 |
| Milwaukee (West Division). | 61 | 77 |  | . | 60 | 79 | 508 | 845 | 18 | 500 | 72000 |
| Milwaukee (North Division). | 46 | 51 |  |  | 70 | 31 | 222 | 208 | 14 | 600 |  |
| Milwaukee (South Division).. | 41 | 62 |  |  | 62 | 70 | 490 | 635 | 46 | 600 | .... |
| Oshkosh | 50 | 46 | 4 |  | 39 | 59 | 506 | 614 | 53 | 400 |  |
| Racine .... | 22 | 31 |  |  | 30 | 44 | 441 | 816 | 44 | 400 | 1,527 00 |
| Superior (Dewey) | 10 | 12 |  |  | 4 <br> 3 | 5 | 95 | 159 |  | 200 |  |
| Superior (Blaine). | 35 | 40 |  |  | 33 | 37 |  |  |  |  |  |

INDEPENDENT HIGH SCHOOLS HAVING FOUR YEAR COURSES, 1911-1912.

| Location. | Average yearly salary of assistants. | Total amount of salaries of principal and assistants. | TOtAL NUMBER PUPILS ENROLEED. |  |  |  | Does high school district furnish textbooks? If so, tree,rented or sold: |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1st grade. | 2d grade. | 3 d grade. | tth grade. |  |
| Totals and averages. | \$94178 | \$341,163 80 | 3,192 | 2,310 | 1,593 | 1,333 |  |
| Fond du Lac. | \$915 00 | \$18,146 81 | 157 | 107 | 101 | 72 | No. |
| La Crosse . | 90350 89650 | 28,000 00 | 236 | 185 | 96 | 92 | Fee. |
| Menomon: ${ }^{\text {e }}$ | 89650 74200 | 38,610 9,96500 | 265 | 256 | 210 | 173 | No. |
| Milwaukee (East Division). | 1,23600 | 9,965 00 39,17600 | 267 | 78 176 | 62 111 | 39 163 | No. |
| Milwaukee (West Division). | 1,241 00 | 58,000 00 | 478 | 298 | 260 | 163 177 | No. |
| Milwaukee (North Division). | 1,274 72 | 48,890 00 | 536 | 339 | 178 | 134 | No. |
| Milwaukee (South Division). | 1,246 84 | 50,080 00 | 345 | 230 | 161 | 145 | No. |
| Racine . | 85227 90720 | 20,70000 21,394 | 258 281 | 197 | 139 | 160 | No. |
| Superior (Dewey). | 1,086 43 | 21,394 34 8,20165 | 281 50 | 159 33 | 107 37 | 83 12 | Rented. |
| Superior (Blaine). |  |  | 292 | 252 | 131 | 83 | Free. |

F1RST CLASS．

| Locition． |  | Enrollment． |  |  | Average ATtENDANCE． |  |  | Graddutes THIS YEAR． |  |  |  | Amount | Fin | ancial I rom June | $\frac{\text { Report．}}{}$ | June 30， 1912 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\underset{\underset{\sim}{\Xi}}{\underset{\sim}{\Xi}}$ |  | तु ¢ H | 家 | ¢ | Ė ¢ H | 家 | 閨 |  | Teachers＇ wages． | $\begin{gathered} \text { Appara- } \\ \text { tus. } \end{gathered}$ | Books． | Repairs | New buildings． | All other purposes． | Total． |
| Totals | 543 | 9，424 | 9，494 | 18，918 | 5，799 | 5，818 | 12，714 | 381 | 510 | 891 | \＄272，381 10 | \＄10，366 55 | \＄9，113 44 | \＄25，995 28 | \＄124，681 79 | \＄110，637 35 | \＄553，175 51 |
| Ableman | 4 | 65 | 50 | 115 |  |  | 98 | 3 | $\stackrel{2}{2}$ | 5 | \＄1，935 00 |  |  |  |  | $\$ 64182$ 37200 | $\$ 2,57682$ 2,51031 |
| Amberg ． | 3 | 78 | 106 39 | 184 | 54 | 73 | 127 | 1 | 2 | 2 | 1,73000 1,77565 |  | \＄313 31 | $\$ 9500$ 1170 |  | 37200 375 74 | 2，510 2,29134 |
| Apollonia | 3 | 52 | 39 | 91 | 33 | 18 | 51 | 4 | 4 | 9 | 1，215 00 | \＄13 53 | 11472 44 | 1170 |  | 284 29 | 1，544 04 |
| Arena ．．．． | 3 | 44 | 41 | 85 | 33 | 32 46 | 65 88 | 4 | 5 4 | 8 | 1，377 00 | 4537 | 4450 | 2550 | \＄1，500 00 | 33094 | 3，286 31 |
| Arkansaw | 3 | 53 | 53 | 106 78 | 42 21 | 46 32 | 88 53 | 4 | 3 | 4 | 1，395 00 | 54637 | 5 |  | 13，878 21 | 54157 | 16，361 15 |
| Auburndale | 3 | 31 | 47 49 | 78 114 | 21 45 | 32 34 | 53 79 | 1 | 3 | 1. | 1，976 25 | 546 | 3000 |  | 13，878 21 | 35688 | 2，363 13 |
| Bagley ．．．．．． | 3 3 | 65 39 | 49 56 | 114 95 | 45 36 | 34 <br> 50 <br> 0 | 79 86 | 1 | $\ddot{3}$ | 4 | 1，976 1,44000 | 13 20 | 5095 | 19744 |  | 41134 | 2，112 93 |
| Balsam Lake | 3 | 39 24 | 56 53 | 95 90 | 36 30 | 42 | 72 | 2 | 5 | 7 | 1，485 00. | 2012 | 8212 | 433 |  | 44620 | 2，037 77 |
| Baraboo | 3 4 | 4 | 50 | 97 | 40 | 39 | 79 | 3 | 5 | 8 | 2，070 00 | 8763 |  | 27622 |  | 49472 | 2，928 57 |
| Birchwood | 5 | 70 | 89 | 159 |  |  |  | 3 | 8 | 11 | 2，655 00 | 2469 | 16484 | 24994 |  | 1，489 26 | 4，583 73 |
| Black Creek | 4 | 75 | 74 | 149 | 58 | 52 | 110 | 1 | 4 | 5 | 1，981 80 |  |  | 7281 |  | 17094 | 2，825 55 |
| Blue River | 3 | 64 | 73 | 137 | 34 | 46 | 80 | 1 | 3 | 4 | 1，485 00 | 750 297 | 7789 | 21098 | 5，770 65 | 1,019 1,390 | 8,28231 3,49963 |
| Boaz | 3 | 47 | 66 | 113 | 32 | 40 | 72 |  | 4 | 4 | 1,52280 3.74812 | 29706 15385 | 7789 20585 | 21098 <br> 124 | ．．．．．．．．．．．．．． | 1,39090 79638 | 5，028 53 |
| Butternut | 6 | 119 | 121 | 240 | 94 | 97 | 191 | 2 | 4 | 6 3 | 3.74812 | 15385 | 20585 8790 | 3，876 66 |  | 2，251 05 | 5，587 61 |
| Cable | 3 | 49 | 41 | 90 | 39 | 30 | 69 | 3 |  | ${ }_{15}^{3}$ | 1,372 2,655 00 |  | 8790 30 | 3,876 354 86 |  | 2,20105 808 | 4，149 62 |
| Cameron | 4 | 108 | 102 | 210 | 84 | 80 | 164 77 | 9 3 | 6 | 15 3 | 2，655 00 1,494 | 30086 5911 | 3020 | 35486 88200 |  | 32717 | 2，762 28 |
| Caroline | 3 | 60 | 58 | 118 | 42 | 35 | 77 | 3 |  | 3 3 | 1，485 00 | 5 | － 1800 | 5814 |  | 48606 | 2，047 20 |
| Catawba | 3 | 45 | 51 54 | 96 111 | 34 44 4 | 34 46 | 68 90 |  | 3 1 | 2 | 1，485 1,485 |  | 18 | 58 |  | 50831 | 1，993 31 |
| Cecil ．．．．．．．．． | 3 3 | 57 54 | 54 49 | 111 | 44 36 | 46 38 | 90 74 | 1 <br> 2 | 1 | 4 | 1，170 00 |  | 3400 |  |  | 28478 | 1，488 78 |
| Cedar Grove | 3 3 | 54 64 | 79 | 138 | 36 55 | 38 57 | ＋112 | 3 | 5 | 8 | 1，485 00 |  | 6069 |  | 6000 | 53020 | 2，135 89 |
| Olear Lake | 5 | 86 | 69 | 155 | 67 | 61 | 128 | 6 | 3 | 9 | 2，47500 | ． | 5433 | 2836 | 3，400 00 | 90914 | 6,86683 |
| Coleman | 4 | 64 | 83 | 147 |  |  | 109 | 1 | 5 | 6 | 1，840 95 | 16520 | 9523 | 65393 | ．．．．．．．．．．．．． | 41684 | 3，172 15 |
| Coloma | 3 | 68 | 65 | 133 | 36 | 42 | 78 | $\cdots$ |  |  | 1，350 00 | 500 14285 |  |  |  | $\begin{array}{r}92110 \\ 1,954 \\ \hline\end{array}$ | 2，276 10 |
| Commonwealth | 4 | 66 | 59 | 125 |  |  | $\cdots$ | 6 |  | 8 | 2,780 1,12500 | 14285 2045 | 32236 1365 | 544 600 | 32500 | 1,954 76081 | 2，250 91 |
| Coon Valley ．．． | 3 | 47 | 47 | 94 | 31 | 33 | 64 | 1 | 3 | 4 | 1，125 00 | 2045 | 1365 | 60 | 32500 | 76081 | 2，250 91 |


| Corliss |
| :---: |
| Cottage Grove |
| Crivitz |
| Dallas |
| Deer Park |
| De Forest |
| Delafield |
| De Soto |
| Dorchester |
| Downing |
| Downsville |
| Drummond |
| Dunbar |
| Eagle |
| Eau Galle |
| Elcho ． |
| Eleva |
| Elkhart Lake |
| Elk Mound |
| Embarrass |
| Endeavor |
| Ettrick |
| Fall Creek |
| Fall River |
| Fernwood |
| Fifield ． |
| Fontana |
| Footville |
| Forestville |
| Forestville |
| Gays Mills |
| Glen Flora |
| Glidden ．．． |
| Goodman |
| Graf on |
| Grand Rapids |
| Granton ．．．．． |
| Gratiot |
| Green Bay |
| Greenbush |
| Hackley． |
| Hartland |
| Hatley |
| Haugen |
| Hawkins |
| Hazelhurst |

NAsN







| $\infty$ เロ ๓ை |  | $\vdots \rightarrow \infty \infty \infty \text { ORNー }$ | $\therefore み み の み \circ ん 上 N$ |  | $100$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ローNN | :NO |  | NHTN | － | $\vdots{ }^{\text {¢ }}$ |
| m Nr－r |  |  | $\begin{array}{cll} \vdots \infty & \vdots \infty 円 \infty & \vdots \\ \vdots & \vdots & \vdots \end{array}$ |  | :N |


| 1,8881,20510 |  |
| :---: | :---: |
|  |  |
|  | 1，395 00 |
|  | 1，350 00 |
|  | 1，57500 |
|  | 1，56500 |
|  | 1，5：500 |
|  | 1，530 00 |
|  | 1，871 10 |
|  | 1，867 50 |
|  | 1，332 00 |
|  | 1，575 00 |
|  | 6，277 50 |
|  | 1，507 95 |
|  | 1，985 00 |
|  | 1，642 50 |
|  | 2，169 45 |
|  | 1，973 00 |
|  | 1，835 00 |
|  | 1，440 00 |
|  | 1，404 00 |
|  | 1，350 00 |
|  | 2，692 00 |
|  | 1，935 00 |
|  | 2，030 00 |
|  | 2，096 00 |
|  | 1，890 00 |
|  | 1，395 00 |
|  | 1，30500 |
|  | 1.61500 |
|  | 2，700 00 |
|  | 2，160 00 |
|  | 3，240 00 |
|  | 1，725 00 |
|  | 1，620 00 |
|  | $2.4{ }^{-8} 86$ |
|  | 2，054 50 |
|  | 1，377 00 |
|  | 1，462 50 |
|  | 2，340 00 |
|  | 2，334 60 |
|  | 1，305 00 |
|  | 1，787 10 |
|  | 2，160 00 |
|  | 1.48500 |




FIRST CLASS - - Continued.


| Mason | 6 | 115 | 113 | 228 | 102 | 86 | 188 | 2 | 7 | 9 | 3,375 00 | 33500 | 15000 | 2000 |  | 78000 | 4,660 00 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| McFarland | 3 | 43 | 37 | 80 | 35 | 29 | 64 | 2 | 3 | 5 | 1,485 00 | 636 | 2785 | 5953 |  | 39174 | 1,970 48 |
| Melrose | 3 | 58 | 62 | 120 |  |  |  | 1 | 3 | 4 | 1,485 00 | 1370 | 15412 | 16335 |  | 95150 | 2,767 67 |
| Merrimac | 3 | 35 | 41 | 76 | 32 | 36 | 68 |  |  | . | 1,413 00 |  | 700 | 2925 |  | 63654 | 2,085 79 |
| Middleton | 4 | 82 | 72 | 154 | 66 | 59 | 125 | 5 | 1 | 6 | 1,980 00 | 20336 | 1853 | 600 | 11,158 00 | 1,577 57 | 14,943 46 |
| Mifflin | 3 | 59 | 56 | 115 | ...... | . . . . | 88 | 1 | 1 | 2 | 1,51500 | 20322 | .......... | . . . $\cdot$. | 1,050 00 | 8700 | 2,855 22 |
| Milford | 3 | 46 | 40 | 86 | 35 | 28 | 63 | 3 | 3 | 6 | 1,260 00 | 10570 | 3761 | 3339 |  | 27088 | 1,707 58 |
| Milladore | 3 | 48 | 55 | 103 | 35 | 47 | 82 | 4 | 3 | 7 | 1,215 00 | 2800 | 3500 | 500 |  | 33352 | 1,616 52 |
| Milton | 4 | 67 | 74 | 141 | 49 | 59 | 108 | 11 | 7 | 18 | 1,800 00 |  | 5250 | 40973 |  | 2,262 23 | 4, ${ }^{\text {2 }} 446$ |
| Milton Junct | 5 | 86 | 99 | 185 | 72 | 84 | 156 | 9 | 9 | 18 | 2,317 50 |  |  | 88624 |  | 95783 | 4,16157 |
| Milwaukee | 6 | 131 | 118 | 249 | 91 | 76 | 167 | 5 | 6 | 11 | 4,498 00 | 2597 | 857 | 23695 |  | 1,424 15 | 6,193 64 |
| Milwaukee | 14 | 362 | 297 | 659 |  |  | 486 | 14 | 12 | 26 | 10,307 50 |  |  | 93818 |  | 4,797 16 | 16,042 84 |
| Milwaukee | 12 | 257 | 274 | 531 | 210 | 211 | 421 | 7 | 11 | 18 | 12,377 50 |  | 10500 | 17021 |  | 2,643 61 | 15,296 32 |
| Milwaukee | 6 | 160 | 138 | 298 | 130 | 110 | 240 | 9 | 5 | 14 | 5,500 00 |  |  |  |  | 3,873 31 | 9,373 31 |
| Milwaukee | 4 | 67 | 61 | 128 | 46 | 48 | 94 | 2 | 4 | 6 | 3,080 44 | 270 | 4789 | 1848 |  | 3,716 71 | 6,866 22 |
| Minocqua | 4 | 70 | 65 | 135 | 57 | 53 | 110 | 3 | 3 | 6 | 1,980 00 | 5000 | 15000 | 2500 |  |  | 2.40500 |
| Minong | 3 | 42 | 58 | 100 | 30 | 43 | 73 |  |  |  | 1,530 00 | 1668 | 2600 | 2753 |  | 74653 | 2,346 74 |
| Mishicot | 3 | 47 | 56 | 103 | 39 | 44 | 83 | 8 | 11 | 19 | 1,73100 |  | 6745 | 21095 |  | 1,212 23 | 3,221 63 |
| Monico | 3 | 48 | 43 | 91 | 34 | 30 | 64 | 2 | 2 | 4 | 1,530 00 | 30000 | 13598 | 20091 |  | +434 12 | 2,601 01 |
| Montfort | 4 | 62 | 52 | 114 | .... |  | 99 | 5 | 2 | 7 | 1,63500 | 6810 | 12688 | 1700 |  | 1,274 87 | 3,151 85 |
| Morrisonville | 3 | 44 | 40 | 84 | 36 | 33 | 69 | 4 | 2 | 6 | 1,350 00 |  | 1500 | 13433 |  | 32268 | 1,822 01 |
| Mountain | 4 | 64 | 74 | 138 | 41 | 48 | 89 |  | 5 | 5 | 1,886 15 | 11493 | 3154 |  |  | 1,291 67 | 3,324 29 |
| Mt. Horeb | 8 | 116 | 134 | 250 | 96 | 115 | 211 | 9 | 16 | 25 | 3,645 00 | 5000 | 1200 | 69200 |  | 1,396 94 | 5,795 94 |
| Nekoosa | 6 | 137 | 128 | 265 | 108 | 102 | 20 | 3 | 5 | 8 | 4,217 50 |  | 16252 | 1,041 30 |  | 1,148 02 | 6,569 34 |
| Neshkora | 4 | 66 | 55 | 121 | 44 | 41 | 85 | 2 | 2 | 4 | 1,935 00 | 29795 | 4020 | 216.00 |  | 21700 | 2,706 15 |
| Neva | 3 | 50 | 58 | 108 | 40 | 48 | 88 | 2 | 2 | 4 | 1,507 50 |  | 4590 | 23061 |  | 45372 | 2,237 73 |
| New Auburn | 3 | 54 | 53 | 107 |  |  | 80 | 5 | 3 | 8 | 1,395 00 | 1125 | 12036 | 1135 |  | 21777 | 1,755 73 |
| New Diggings | 3 | 50 | 45 | 95 | 34 | 30 | 64 | 1 | 2 | 3 | 1,305 00 | 367 | 7153 | 17125 |  | 22283 | 1,774 28 |
| New Glarus | 6 | 120 | 104 | 224 | 95 | 86 | 181 | 2 | 1 | 3 | 3,312 62 | 4255 | 18144 | 8486 |  | 1,041 58 | 4,663 05 |
| Niagara | 9 | 208 | 206 | 414 | 171 | 176 | 347 | 3 | 1 | 4 | 5,304 75 | 1750 | 10918 | 19433 |  | 1,278 43 | 6,904 19 |
| North Crandon | 4 | 72 | 69 | 141 | 47 | 51 | 98 | 3 | 2. | 5 | 1,113 00 |  |  | 8886 |  | 5,066 98 | 6,268 84 |
| North Freedom | 4 | 84 | 75 | 159 | 68 | 63 | 131 | 3 | 8 | 11 | 2,646 00 | 1435 | 3725 | 2609 |  | 56006 | 3,283 75 |
| North Milwaukee | 11 | 296 | 219 | 515 | 232 | 170 | 402 | 15 | 16 | 31 | 7,841 45 | 3552 | 9093 | 17683 | 1134 | 6,306 34 | 14,462 41 |
| Odanah | 3 | 64 | 49 | 113 |  |  |  |  |  |  | 1,485 00 |  | 1021 | 83105 |  | 8600 | 2,412 26 |
| Oostburg | $?$ | 35 | 46 | 81 |  |  | 68 | 2 |  | 2 | 1,395 00 | 16958 |  |  | - 11,242 75 | 43311 | 13,240 44 |
| Orfordville | 3 | 48 | 49 | 97 | 41 | 39 | 80 | 1 | 6 | 7 | 1,619 50 | 800 | 7435 | 735 |  | 1,490 38 | 3,199 58 |
| Osseo | 4 | 76 | 95 | 171 | 57 | 77 | 134 | 1 | 6 | 7 | 2,535 00 |  | 19300 | 23196 |  | 91945 | 3,879 41 |
| Oxford | 4 | 52 | 81 | 133 |  |  |  | 2 | 5 | 7 | 1,899 00 | 14849 | 1513 | 2205 |  | 26748 | 2,352 15 |
| Packwaukee | 3 | 56 | 45 | 101 | 35 | 18 | 53 | 3 |  | 3 | 1,470 50 |  |  |  |  | 1,106 35 | 2,576 85 |
| Park Falls | 3 | 76 | 63 | 139 | 38 | 34 | 72 |  | 2 | 2 | 1,305 00 | 15000 | 7885 | 800 | 57600 | 15500 | 2,272 80 |
| Patch Grove | 3 | 32 | 42 | 74 | 27 | 38 | 65 | 2 | 7 | 9 | 1,300 00 | 2791 | 8078 | 11115 |  | 2,672 87 | 4,192 71 |
| Pembine | 3 | 35 | 42 | 77 | 28 | 25 | 53 |  | 2 | 2 | 1,922 37 |  | 29247 | 6697 |  | 45814 | 2,739 95 |
| Port Edwards | 5 | 72 | 98 | 170 | 65 | 77 | 142 | 2 | 2 | 4 | 2,706 50 | 23500 |  | 28225 |  | 1,09134 | 4,315 09 |
| Port Wing | 5 | 85 | 60 | 145 | 72 | 52 | 124 | 5 | 2 | 7 | 2,520 00 | 32446 | 27322 | 64220 |  | 2,352 34 | 6,112 22 |

STATE GR.ADED SCHOOLS, 1911-1912_Continued.
FIRST CLASS-Continued.



SECOND Class．

| Location． | No．of departments． | Enrollment． |  |  | Average <br> Attendance． |  |  | Graduates this Year． |  |  | Financial Report． |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 袻 |  | － | 家 | 熍 | － | $\stackrel{\text { ¢ }}{\substack{\text { ® }}}$ | 边 | － | Teachers＇ wages． | Appa－ ratus． | Books． | Repairs． | New build－ ings． | All other purposes． | Total． |
| Totals | 644 | 11，306 | 11，091 | 22，337 | 6，572 | 6，548 | 14，443 | 448 | 545 | 993 | \＄291，344 36 | \＄12，085 82 | \＄7，907 66 | \＄20，044 78 | \＄44，328 10 | \＄104，780 01 | \＄480，490 73 |
| Abrams， | 2 | 59 34 | 40 | 99 79 | 44 | 24 | 68 | 5 | 1 | 6 | $\$ 97200$ |  | \＄46 87 | \＄57 65 |  | \＄715 22 | \＄1，791 74 |
| Advance ． | 2 2 | 34 45 | 45 37 | 79 82 | 21 | 29 23 | 50 | 1 | 4 | 5 | 1，03500 |  |  | 29356 | ．．．．．．．．．． | 31757 | 1，646 12 |
| Afton | 2 | 23 | 17 | 40 | 16 | 11 | 27 | 1 | 1 | 1 | 81000 | 2405 | 9874 | 2350 1663 | ．．．．．．．．．． | 7477 45185 | 1，165 75 |
| Albion | 2 | 23 | 21 | 44 | 19 | 18 | 37 | 両． | 3 | 3 | 90000 | 2500 | 2800 | 1603 |  | 45185 | 1，302 53 |
| Algoma | 2 | 25 | 33 | 58 | 15 | 22 | 37 | 2 | 2 | 4 | 81000 | 25 | 1700 | 4000 |  | 13961 45682 | 1，102 61 |
| Allen Grove | 2 | 35 | 26 | 61 | 22 | 20 | 42 | 3 |  | 3 | 99000 |  | 1500 | 16800 |  | 43363 | 1，323 81406 |
| Alma ．．．．．．．．．．．．． | 2 | 35 | 37 | 72 |  |  | 52 | 2 | 1 | 3 | £60 00 | 1500 | 4000 | 10000 |  | 23363 1,25165 | 1,406 2,266 65 |
| Amherst Junction | 2 | 33 | 43 | 76 | 22 | 30 | 52 | 1 | 4 | 5 | 76500 |  |  |  |  | －33180 | 1，096 80 |
| Aniwa | 2 | 40 | 29 | 69 | 26 | 18 | 44 | 1 | 1 | 2 | 95500 | 19884 | 2843 | 2838 |  | 45237 | 1，663 02 |
| Arcadia Arkansaw | 2 | 33 | 26 | 59 | 19 | 15 | 34 |  |  |  | 85500 | 4500 | 1128 | － 1250 | ．．．．．．．．．．．．． | 454 350 | －1，673 02 |
| Arkansaw | 2 | 33 | 34 | 67 | 19 | 25 | 44 | 1 | 4 | 5 | 90000 | 3682 |  | 700 |  | 6485 | 1，008 67 |
| Arthur | 2 | 24 | 30 | 54 | 18 | 21 | 39 | 2 | 1 | 3 | 833 13 | 773 | 2510 | 1868 | ．．．．．．．．．． | 24107 | 1，125 71 |
| Athelstane | 2 | 24 | 18 | 40 | 23 | 16 | 39 32 |  |  |  | 1,03500 93600 | 1400 21000 | 5851 8400 | $\begin{array}{r}237 \\ 50 \\ \hline 0\end{array}$ | ．．．．．．．．．． | 16567 | 1，510 47 |
| Augusta | 2 | 32 | 21 | 53 | 18 | 19 | 37 | 3 |  |  | 83600 | 21000 18500 | 8400 5000 | 5000 4000 | ．．．．．．．．．．．． | 4065 51501 | 1．320 65 |
| Aurorahville ．．． | 2 | 31 | 19 | 50 | 17 | 12 | 29 | 3 |  | $\cdots$ | 78750 | 18500 | 5000 | 4000 13628 | ． | 51501 20253 | 1,600 1,126 1,61 |
| Bailey＇s Harbor | 2 | 29 | 30 | 59 |  |  |  | 3 |  | 3 | 1，350 00 |  |  | － 2830 | ． | 20253 22902 | $\begin{aligned} & 1,12631 \\ & 1,60732 \end{aligned}$ |
| Bancroft | 3 | 60 | 61 | 121 |  |  | 41 | 2 | 1 | 3 | 1，855 00 |  |  | 125 | ．．．．．．．．．．．． | 19313 | $\begin{aligned} & 1,60732 \\ & 1,04938 \end{aligned}$ |
| Baraboo | 2 | 35 | 29 | 64 | 28 | 25 | 53 | 3 | 1 | 4 | 85500 | 3804 | 1295 | 4123 |  | 19515 | $\begin{aligned} & 1,04938 \\ & 1,20375 \end{aligned}$ |
| Bassett | 2 | 26 | 24 | 50 | 17 | 17 | 34 |  | 1 | 1 | 99000 | 6817 | 2216 | 1120 | \＄599 00 | 54893 | 2，239 46 |
| Bay City | 2 | 36 | 37 | 73 | 23 | 26 | 49 | 1 |  | 1 | 99000 | 1510 | 1076 | 7265 |  | 19648 | 1，284 99 |
| Beetown | 2 | 40 | 44 | 89 83 | 34 23 | 32 32 | 66 55 | 2 | 3 | 5 | 85500 | 7653 | 2700 | 1530 | ．．．．．．．．．． | 36908 | 1，315 91 |
| Beldenville | 2 | 36 | 41 | 77 | 23 | 32 | 55 | 1 | $\cdots$ | 3 | 81000 85500 | 440 | 2700 678 | 1600 |  | 44647 6449 | 1，299 47 |




| 76500 |  | 679 | 11401 |  | 11903 | 1,004 83 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 85500. |  | 8750 | 7200 |  | 82100 | 1,835 50 |
| 99000 | 2960 | 1952 | 4080 |  | 26540 | 1,345 32 |
| 85500 |  | 2202 | 8910 |  | 9137 | 1,057 59 |
| 72000 | 727 | 675 | 8213 |  | 10379 | 91994 |
| 832501 | 1820 | 5661 | 1525 |  | 8452 | 1,007 08 |
| 90000 | 1500 | 5246 | 6932 |  | 11458 | 1,151 36 |
| 94500 | 368 | 1332 | 1580 |  | 17304 | 1,150 84 |
| 84000 | 3904 |  | 5606 |  | 19934 | 1,134 44 |
| 1,035 00 | 1325 |  |  |  | 15616 | 1,204 41 |
| 94950 | 800 | 506 | 2753 | 46715 | 18466 | 1,641 89 |
| 81000 | 6979 | 6382 | 4950 |  | 23825 | 1,231 36 |
| 94500 |  | 2720 | 18040 |  | 1,023 09 | 2,175 69 |
| 1,035 00 |  |  | 25000 |  |  | 1,285 00 |
| 94500 |  |  |  |  |  | 94500 |
| 1,025 00 | 15639 | 7197 | 1000 |  | 20678 | 1,470 14 |
| 78750 |  |  | 16375 |  | 36261 | 1,213 86 |
| 99000 | 716 | 2000 |  |  | 14986 | 1,167 02 |
| 81000 |  | 2829 | 6802 |  | 19077 | 1,097 08 |
| 81000 | 4000 | 4748 | 4192 |  | 13167 | 1,071 07 |
| 87975 |  | 2500 | 12500 |  | 17168 | 1,201 43 |
| 92700 |  | 1938 | 3035 |  | 24448 | 1,221 21 |
| 1,012 50 |  |  |  |  | 11946 | 1,131 96 |
| 1,035 00 | 1371 | 1731 | 4069 |  | 30264 | 1,409 35 |
| 86000 | 4529 |  | 8154 |  | 11851 | 1,105 34 |
| 85500 |  |  |  |  | 28270 | 1,137 70 |
| 88500 | 225 | 3207 | 600 |  | 22673 | 1,152 05 |
| 99000 |  | 21761 | 13583 |  | 20745 | 1,550 89 |
| 85500 | 4900 | 960 | 1175 |  | 46542 | 1,390 77 |
| 86400 | 3800 | 600 | 600 |  | 12741 | 1,041 41 |
| 73800 |  | 2397 | 300 |  | 50035 | 1,265 32 |
| 1,000 50 |  | 2082 | 5600 |  | 39367 | 1,470 99 |
| 76500 |  | 3966 | 2120 |  | 9813 | 92399 |
| 90000 | 1900 | 3830 | 10294 |  | 24635 | 1,306 59 |
| 76500 | 1074 | 3200 |  |  | 12770 | 93544 |
| 87750 |  | 3552 | 21460 |  | 11978 | 1,247 40 |
| 76500 | 65 |  | 1500 |  | 11418 | 89483 |
| 75000 | 1000 | 5000 | 7500 | 1,500 00 | 11631 | 2,501 31 |
| 80550 | 1653 |  | 9279 |  | 11496 | 1,029 78 |
| 76500 | 13518 |  | 1795 |  | 10455 | 1,022 68 |
| 94500 | 26100 | 3985 | 440 |  | 69380 | 1,944 05 |
| 94500 | 21446 | 7738 | 465 |  | 15589 | 1,397 38 |
| 99000 |  |  | 1035 |  | 12775 | 1,128 10 |
| 85000 | 1041 |  | 29092 |  | 17122 | 1,333 55 |

STATE GRADED SCHOOLS, 1911-1912-Continued.
SECOND CLASS-Continued.


| , Fredonia |  |
| :---: | :---: |
| Fremont |  |
| Fulton |  |
| Genesee |  |
| Genoa |  |
| Germania GGibbsville |  |
|  |  |
| \|Gillett . . |  |
| $\sim_{2}$ Gilman |  |
| -Gilmanton |  |
| -GGleason |  |
| Glen Haven |  |
| Glendale . |  |
| Glenmore |  |
| Glen Rock |  |
| Glenwood |  |
| Glenwood |  |
| Gotham |  |
| Grand Rapids |  |
| Grandview . |  |
| Grantsburg |  |
| Grantsburg |  |
| Grantsburg |  |
| Grantsburg |  |
| Green Bay |  |
| Green Bay |  |
| Green Bay |  |
| Green Bay |  |
| Green Bay |  |
| Green Bay |  |
| Green Bay |  |
| Greenleaf |  |
| Greenwood |  |
| Gresham |  |
| Grimms |  |
| Halder |  |
| Hales Corners |  |
| Hannibal .... |  |
| Hanover |  |
| Harrison |  |
| Harrisville |  |
| Hayes |  |
| Hebron |  |
| Hersey |  |
| Highland Hingham |  |
|  |  |

STATE GRADED_SCHOOLS, 1911-1912—Continued.
SECOND CLASS.-Continued.


| Luxembourg | 2 | 52 | 31 | 83 | 39 | 26 | 65 |  |  | $\cdots$ | 94500 | 675 | 556 | 14169 |  | 65237 | 1,751 37 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lynxville | 2 | 42 | 34 | 76 | 31 | 23 | 54 | 2 |  | 2 | 90000 |  |  |  |  | 18350 | 1,083 50 |
| Lyons | 2 | 29 | 25 | 54 | 20 | 22 | 42 | 1 | 3 | 4 | 90000 |  | 976 | 14430 |  | 22242 | 1,276 48 |
| Manchester | 2 | 39 | 34 | 73 | 26 | 26 | 52 | 4 | 1 | 5 | 85500 |  | 793 | 4281 |  | 15799 | 1,063 73 |
| Manitowoc | 2 | 39 | 37 | 76 |  |  | 54 | 2 | 3 | 5 | 1,032 00 |  | 455 |  |  | 80982 | 1,846. 37 |
| Manitowoc | 2 | 32 | 35 | 67 |  |  |  | 1 | 2 | 3 | 98530 | 2895 |  |  |  | 28817 | 1,302 42 |
| Marathon | 2 | 26 | 36 | 62 | 28 | 27 | 55 | 4 | 4 | 8 | 1,170 00 | 1370 | 5190 | 3614 |  | 1,381 57 | 2,653 31 |
| Marcellon | 2 | 43 | 23 | 66 | 26 | 17 | 43 | 1 | 2 | 3 | 79200 |  | 525 | 100 |  | 6490 | 86315 |
| Marcy | 2 | 43 | 56 | 99 | 29 | 34 | 63 |  | 1 | 1 | 99000 |  | - 795 | 3828 |  | 20082 | 1,237 05 |
| Marquette | 2 | 26 | 25 | 51 |  |  |  |  |  |  | 94500 |  |  | 24188 |  | 71415 | 1,901 03 |
| Medford | 2 | 42 | 33 | 75 | 25 | 23 | 48 |  |  |  | 67322 | 5241 | 7038 | 4323 |  | 31493 | 1,154 17 |
| Meeme | 2 | 31 | 33 | 64 | 25 | 25 | 50 | 2 | 2 | 4 | 92700 | 1270 |  | 1490 |  | 33329 | 1,287 89 |
| Melrose | 2 | 30 | 20 | 50 | 21 | 15 | 36 | 1 | 2 | 3 | 67500 |  | 4455 |  |  | 10655 | 82610 |
| Merton | 2 | 28 | 27 | 55 |  |  | 45 |  | 2 | 2 | 1,125 00 | 1608 |  | 2302 |  | 27655 | 1,440 65 |
| Milltown | 2 | 37 | 32 | 69 | 26 | 22 | 48 |  |  |  | 82800 | 3411 | 9067 | 3490 | 26793 | 20100 | 1,456 61 |
| Milwaukee | 2 | 49 | 50 | 99 | 32 | 27 | 59 |  |  |  | 1,139 50 |  | 561 | 6485 |  | 92850 | 2,138 46 |
| Milwaukee | 2 | 24 | 36 | 60 | 19 | 28 | 47 | 1 | 2 | 3 | 1,336 25 |  |  | 1024 |  | 21992 | 1,566 41 |
| Milwaukee | 2 | 31 | 28 | 59 | 24 | 19 | 43 | 2 | 3 | 5 | 1,50000 | 3300 | 811 | 1260 |  | 1,029 22 | 2,582 93 |
| Milwaukee | 2 | 53 | 56 | 109 | 22 | 23 | 45 |  |  |  | 1,150 00 | 1690 |  | 1467 |  | 50807 | 1,689 64 |
| Milwaukee | 2 | 24 | 29 | 53 | 19 | 23 | 40 |  |  |  | 1,256 00 |  |  |  |  | 36128 | 1,617 28 |
| Milwaukee | 2 | 46 | $4 i$ | 93 | 29 | 3. | 61 |  |  |  | 1,080 00 | 22130 |  | 1550 |  | 54932 | 1,866 12 |
| Mindoro | 2 | 42 | 66 | 108 | 31 | 52 | 83 |  |  |  | 99000 |  | 7640 | 4390 |  | 16952 | 1,279 82 |
| Modena | 2 | 53 | 39 | 92 | 28 | 27 | 55 | 2 | 1 | 3 | 1,01700 | 1695 | 2469 | 250 |  | 39459 | 1,455 73 |
| Mondovi | 2 | 44 | 41 | 85 | 27 | 27 | 54 | 1 | 2 | 3 | 81000 | 31254 | 8531 |  | 1,269 27 | 15180 | 2,628 92 |
| Moon | 2 | 40 | 38 | 78 | 26 | 22 | 48 | 1 | 1. | 2 | 94500 |  | 3564 | 5450 |  | 20767 | 1,242 81 |
| Mosel | 2 | 38 | 21 | 59 | 31 | 17 | 48 | 2 | 3 | 5 | 99000 | 2000 | 1055 | 2546 |  | 8205 | 1,128 06 |
| Mosel | 2 | 40 | 39 | 79 | 33 | 33 | 66 | 3 | 2 | 5 | 1,035 00 | 4161 |  | 7946 |  | 16360 | 1,319 67 |
| Mt. Hope | 2 | 32 | 34 | 66 | 15 | 16 | 31 | 2 | 4 | 6 | 87500 |  | 990 | 3959 |  | 22172 | 1,146 21 |
| Mt. Sterling | 2 | 32 | 47 | 79 |  |  | 25 | 3 | 1 | 4 | 90000 |  | 10426 | 5876 |  | 15070 | 1,213 72 |
| Mt. Vernon | 2 | 21 | 36 | 57 | 12 | 25 | 37 | $\cdots$ | 1 | 1 | 85500 |  |  | 4188 | 92500 | 18059 | 2,002 47 |
| Nelson | 2 | 28 | 27 | 55 |  |  | 43 | 3 | 3 | 6 | 90000 |  |  | 1625 |  | 17533 | 1,091 58 |
| Nelsonville | 2 | 21 | 39 | 60 | 14 | 30 | 44 | 2 | 1 | 3 | 76500 |  | 7139 | 1400 |  | 37976 | 1,230 15 |
| Neosho | 2 | 40 | 24 | 64 | 27 | 16 | 43 |  | 1 | 1 | 94500 |  |  | 621 |  | 21521 | 1,166 42 |
| Neva | 2 | 30 | 25 | 55 |  |  |  | 1 | 2 | 3 | 91800 |  |  | 21720 |  | 10844 | 1,243 64 |
| New Lisbon | 2 | 29 | 21 | 50 | 20 | 15 | 35 | 1 |  | 1 | 81000 | 1125 | 1231 |  |  | 8360 | 91716 |
| Norrie | 2 | 33 | 27 | 60 | 25 | 21 | 46 | 1 | 2 | 3 | 80640 | 3780 | 538 | 6260 |  | 21207 | 1,124 25 |
| North Hudson | 2 | 31 | 49 | 80 | 21 | 34 | 55 | 3 | 3 | 6 | 86750 |  | 1579 | 2380 |  | 23509 | 1,142 18 |
| North Prairie | 2 | 37 | 40 | 77 | 24 | 30 | 54 | 1 | 3 | 4 | 1,035 00 | 15158 | 6413 | 3800 | 74050 | 41898 | 2,448 19 |
| North Milwaukee | 2 | 38 | 28 | 66 |  |  | 52 |  |  |  | 1,260 00 |  |  | 5450 |  | 18377 | 1,498 27 |
| Oconomowoc | 2 | 27 | 25 | 52 | 22 | 21 | 43 |  |  |  | 1,150 00 |  |  |  | 8,000 00 | 44583 | 9,595 83 |
| Oconto | 2 | 30 | 38 | 68 | 21 | 27 | 48 |  | 2 | 2 | 80000 | 20000 | 9500 |  | 2,464 00 | 59175 | 4,150 75 |
| Oconto | 2 | 37 | 42 | 79 | 28 | 31 | 59 |  | 3 | 3 | 81000 | 31990 | $24 \quad 29$ | 1025 | 2,986 57 | 20034 | 4,351 35 |
| Ogdensburg | 3 | 55 | 60 | 115 | 40 | 42 | 82 | 2 | 7 | 9 | 1,395 00 | 12737 | 936 | 19200 |  | 66560 | 2,389 33 |
| Ogema | 2 | 29 | 24 | 53 | 23 | 17 | 40 |  | 6 | 6 | 81000 |  | 387 | 8158 |  | 93600 | 1,831 45 |
| Olivet | 2 | 20 | 30 | 50 | 17 | 21 | 38 |  | 3 | 3 | 81000 |  | 1200 | 4200 |  | 11161 | 97561 |
| Otjen .. | 2 | 48 | 46 | 94 |  |  | 63 | 1 | 3 | 4 | 1,200 00 | 4952 |  | 5911 |  | 27811 | 1,586 74 |

STATE GRADED SCHOOLS，1911－1912－Continued．
SECOND CLASS．－Continued．

| Location． |  | Enrollment． |  |  | Average Attendance． |  |  | Graduates this Year． |  |  | Financial Report． |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Amount expended from June 30， 1911 to June 30， 1912. |  |  |  |
|  |  |  |  | $\begin{aligned} & \text { ت゙ } \\ & \stackrel{0}{0} \\ & \stackrel{1}{1} \end{aligned}$ |  |  |  | $\underset{\sum_{B}^{\infty}}{\dot{\infty}}$ |  | $\begin{aligned} & \underset{\sim}{\tilde{1}} \\ & \stackrel{1}{0} \\ & \hline \end{aligned}$ | 家 | 范 | ञ゙̇ $\stackrel{0}{\circ}$ ¢ | Teacher＇s wages． | Appa－ ratus． | Books． | Repairs． | New build－ ings． | All other purposes． | Total． |
| Oulu | 2 | 38 | 33 | 71 | 31 | 26 | 57 |  | 2 | 2 | 76500 | 2790 | 1424 | 15808 |  | 7600 | 1，041 22 |
| Paoli | 2 | 27 | 22 | 49 | 18 | 15 | 33 |  |  |  | 81000 |  |  | 7287 | ．．．．．．．．． | 14407 | 1，026 94 |
| Parrish | 2 | 31 | 30 | 61 | 21 | 19 | 40 | 1 | 2 |  | 87750 | 2500 | 6200 | 3500 |  | 57747 | 1，576 97 |
| Peebles | 2 | 21 | 31 | 52 | 24 | 17 | 41 | 1 | 6 | 7 | 90000 | …… |  | 13000 |  | 23642 | 1，266 42 |
| Pella | 2 | 47 | 28 | 75 | 23 | 12 | 35 | 1 | $\cdots$ | 1 | 94500 | 1099 | 796 | 15951 | ．．．．．．．． | 78941 | 1，912 87 |
| Peshtigo | 2 | 41 | 28 | 69 |  |  | 46 | 1 | 4 | 5 | 85500 | 325 | 6939 |  |  | 22680 | 1，151 19 |
| Pine River | 2 | 28 | 38 | 66 | 18 | 28 | 46 | 2 | 3 | 5 | 85500 | 325 | 675 | 450 |  | 16430 | 1，033 80 |
| Plat ．．．．．． | 2 | 34 | 35 | 69 | 23 | 26 | 49 | 4 | 1 | 5 | 1，054 75 | 6600 | 1500 | 1300 |  | 17982 | 1，328 57 |
| Pleasant Prairie | 2 | 30 | 51 | 81 | 20 | 32 | 52 | $\cdots$ | 3 | 3 | 94595 |  |  | 28450 |  | 15800 | 1，388 45 |
| Plover | 2 | 49 | － 34 | 83 | 25 | 23 | 48 | 2 | 2 | 4 | 90000 | 17．．． | 650 80 | 19110 | 45 | 39761 | 1，495 21 |
| Polar | 2 | 50 | 45 | 95 |  |  |  | 4 | 3 | 7 | 90000 | 175 | 3028 | 3032 | 4548 | 37295 | 1，380 78 |
| Poplar | 2 | 52 | 39 | 91 | 39 | 29 | 68 | 3 | 6 | 9 | 94500 | 2000 | 3000 | 7500 | ．．．．．．．．．． | 27500 | 1，345 00 |
| Pound | 2 | 31 | 43 | 74 | 23 | 31 | 54 |  |  |  | 81000 | 20000 | 5000 | 2500 | 40000 | 30956 | 1，794 56 |
| Poynette | 2 | 23 | 20 | 43 | 24 | 12 | 36 | 1 | 1 | 2 | 83250 | 550 | 2500 | 25000 |  | 27200 | 1，38500 |
| Prairie F＇arm | 2 | 24 | 27 | 51 | 15 | 20 | 35 |  | 1 | 1 | 72000 | $\cdots$ | 2297 |  |  | 20582 | 94879 |
| Pulaski ．．． | 2 | 66 | 53 | 119 | 24 | 20 | 44 |  | 1 | 1 | 1，165 00 | 3084 |  | 21399 |  | 40890 | 1，818 73 |
| Pulaski | 2 | 44 | 35 | 79 | 26 | 20 | 46 |  |  |  | 93600 | 20609 | 2071 | 2050 | 1，863 80 | 30473 | 3，351 74 |
| Pulcifer | 2 | 53 | 33 | 86 | 36 | 19 | 55 | 7 |  | － 7 | 94500 | 3400 | 4000 | 9000 | － $1 . . .10$ | 20711 | 1，316 11 |
| Racine | 2 | 32 | 33 | 65 | 22 | 22 | 44 |  |  | 5 | 97185 | 2988 | 1188 | 3647 | 1，402 50 | 30810 | 2，760 68 |
| Racine | 2 | 28 | 28 | 56 |  |  | 43 |  | 5 | 5 | 81600 |  |  | 13203 |  | 22745 | 1，175 48 |
| Radisson | 2 | 22 | 19 | 41 |  |  | 24 |  |  |  | 98500 | 2500 | 1600 | 3916 |  | 21663 | 1，281 79 |
| Randolph | 2 | 37 | 36 | 73 | 26 | 20 | 46 |  |  |  | 81000 | 5063 |  | 2831 |  | 6142 | 95036 |
| Random Lake | 2 | 23 | 24 | 47 | 18 | 18. | 36 | 5 | 3 | 8 | 1，080 00 | 750 | 214 | 14637 |  | 24765 | 1，483 66 |
| Rice Lake | $\underline{2}$ | 33 | 47 | 80 | 32 | 29 | 61 |  |  |  | 76500 | 28153 | 14461 |  | 95855 | 20274 | 2，352 43 |
| Richfield | 2 | 44 | 21 | 65 | 28 | 16 | 44 | 3 |  | 3 | 86400 | 11500 | 450 | 1015 | ．．．．．．．．．． | 13149 | 1，125 14 |
| Rochester | 2 | 23 | 21 | 44 | 20 | 19 | 39 | 1 | 4 | $\overline{5}$ | 80000 | 1735 | 157 | 9006 |  | 30167 | 1，210 65 |
| Rockdale | 2 | 44 | 32 | 76 | 33 | 28 | 61 | 2 | 2 | 4 | 90000 |  | 9899 | 11753 |  | 52802 | 1，545 55 |
| Rock Elm | 2 | 35 | 36 | 71 | 30 | 26 | 56 | 2 | 3 | 5 | 92800 |  | 2899 | 11575 |  | 31277 | 1，485 51 |
| Rome | 2 | 23 | 35 | 58 | ．．．．． |  | 45 | 2 | 2 | 4 | 1，170 00 | $\cdots$ | 465 | …… |  | 48855 | 1，663 20 |
| Ruby | 2 | 38 | 34 | 72 | 28 | 24 | 52 | 5 | 1 | 6 | 76500 | 4718 | 732 | 3200 | ．．．．．．．．． | 27115 | 1，122 65 |


| St. Croix FallsSalem |  |
| :---: | :---: |
|  |  |
|  |  |
| Saukville |  |
| Seneca . |  |
| Seymour |  |
| Shanagold¢n |  |
| Sheboygan |  |
| Sheboygan |  |
| Sheboygan |  |
| Sheboygan |  |
| Sheboygan Falls |  |
| Sheldon ........ |  |
| Sherry |  |
| Shopiere |  |
| Silver Creek |  |
| Silver Lake |  |
| Sister Bay |  |
| Solon Springs |  |
| Somerset .... |  |
| Somerset |  |
| South Germantown. |  |
|  |  |
| Spruce |  |
| Stanley |  |
| Star Prairie |  |
| Stetsonville |  |
| Steuben |  |
| Stiles . |  |
| Stitzer ... |  |
| Stonebank |  |
| Stoughton |  |
| Suring ... |  |
| Sullivan |  |
| Sussex |  |
| Symeo |  |
| Tell . |  |
| Tess Corners |  |
| Theresa .... |  |
| Thorp |  |
| Thorp |  |
| Tilleda |  |
| Trevor |  |
| Tripoli |  |





 NNN世NN世NO



| 91200 | 7937 | 7168 | 3132 |  |
| :---: | :---: | :---: | :---: | :---: |
| 1,12500 | 2000 | 1000 | 2500 |  |
| 79750 | 13927 | 10061 | 18561 | 30000 |
| 1,248 98 |  | 120 | 865 |  |
| S10 0, | 750 | 730 |  |  |
| 81000 | 1749 |  | 3350 | 739 |
| 99000 | 1350 | 4800 | 40245 |  |
| 86250 | 24589 | 2354 | 6368 |  |
| 1,09800 | 4985 | 4196 | 906 |  |
| 99000 |  | 3500 | 2884 |  |
| 1,050 00 | 1825 | 9967 |  |  |
| 1,080 00 | 2910 | 3744 |  |  |
| 81000 | 10000 | 4000 | 13737 |  |
| 81000 | 3078 | 3400 | 500 |  |
| 82250 | 4098 | 5565 | 22001 |  |
| 94500 | 3981 | 1225 | 3364 |  |
| 79500 | 8695 | 390 | 3952 |  |
| 90000 |  |  |  |  |
| 1,03500 | 2600 | 4031 | 7093 |  |
| 864 C0 |  | 2093 | 2000 |  |
| 900 c0 |  | 2407 | 7115 |  |
| 1,10500 |  |  | 1430 |  |
| 76500 |  | 2999 |  |  |
| 74250 | 2900 | 4032 | 5650 |  |
| $720 \mathrm{C0}$ |  |  | 1185 |  |
| 90538 | 1243 | 467 | 4710 |  |
| 81000 | $106 \cdot 30$ | 9722 | 17140 |  |
| 76500 | 990 |  | 21624 |  |
| 83250 | 2595 | 5466 | 4450 |  |
| 81000 | 500 | 1250 | 5500 |  |
| 90000 |  |  | 15705 |  |
| 80750 | 2400 |  | 805 |  |
| 85500 |  | 3570 | 1000 |  |
| 66780 | 878 |  |  | 3,950 46 |
| 1,260 00 |  | 8860 |  |  |
| 99000 |  |  | 4000 |  |
| 85500 |  | 2440 | 7503 |  |
| 79000 | 200 | 405 | 16.14 |  |
| 1,254 00 |  | 2200 | 4600 |  |
| 72000 | 18902 | 4443 | 6950 | 59960 |
| 81900 | 5730 | 2800 | 14150 |  |
| 88200 | 2961 | 1272 | 200 |  |
| 76500 | 10689 | 617 | 14153 |  |
| 85500 |  | 4488 | 10044 |  |


| 27071 | 1,365 08 |
| :---: | :---: |
| 14373 | 1,323 73 |
| 29964 | 1,822 63 |
| 22113 | 1,479 96 |
| 54428 | 1,459 08 |
| 18384 | 1,052 22 |
| 27544 | 1,729 39 |
| 12567 | 1,321 28 |
| 24616 | 1,445 03 |
| 22925 | 1,283 09 |
| 29343 | 1,391 35 |
| 43395 | 1,580 49 |
| 33740 | 1,424 77 |
| 13965 | 1,019 43 |
| 20680 | 1,445 94 |
| 17702 | 1,207 72 |
| 25007 | 1,175 44 |
| 22486 | 1,124 86 |
| 47454 | 1,646 78 |
| 22438 | 1,129 31 |
| 29343 | 1,288 65 |
| 13716 | 1,256 46 |
| 12938 | 92437 |
| 24975 | 1,118 17 |
| 18400 | 91585 |
| 58261 | 1,552 19 |
| 13960 | 1,324 52 |
| 20683 | 1,197 97 |
| 17041 | 1,128 02 |
| 18792 | 1,070 42 |
| 19790 | 1,254 95 |
| 10538 | 94493 |
| 2,369 32 | 3,270 02 |
| 41250 | 5,039 54 |
| 23893 | 1,587 53 |
| 14628 | 1,176 28 |
| 63470 | 1,589 13 |
| 21971 | 1,031 90 |
| 46531 | 1,787 31 |
| 20179 | 1,824 34 |
| 14196 | 1,187 76 |
| 62079 | 1,547 12 |
| 2261 | 1,042 20 |
| 14281 | 1,143 13 |

[^8]STATE GRADED SCHOOLS, 1911-1912—Continued.

| Location. |  | Enrollment. |  |  | Average Attendance. |  |  | Graduates ithis Year. |  |  | Financial Report. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Amount expended from June 30, 1911 to June 30, 1912. |  |  |  |
|  |  | $\frac{\dot{\sim}}{\underset{\sim}{\pi}}$ |  | $\begin{aligned} & \text { تे } \\ & \text { T } \end{aligned}$ |  |  |  | $\stackrel{\dot{\otimes}}{\underset{\sim}{x}}$ |  | $\begin{gathered} \text { ت゙ } \\ \stackrel{y}{0} \end{gathered}$ | $\stackrel{\text { ® }}{\stackrel{y}{z}}$ |  | $\begin{gathered} \text { ت゙ } \\ \stackrel{0}{0} \end{gathered}$ | Teachers' wages. | Apparatus. | Books. | Repairs. | New buildings. | All other purposes | Total. |
| Troy Center | $\stackrel{ }{2}$ | 24 | 17 | 41 | 23 | 13 | 36 | 4 | 3 | 7 | 76500 | 1401 | 800 | 375 |  | 19338 | 98414 |
| Two Creeks | 2 | 54 | 45 | 99 | 42 | 37 | 79 | 1 | 5 | 6 | 97200 | 295 | 1347 | 680 | 48500 | 28750 | 1,767 72 |
| Twin Lakes | 2 | 36 | 24 | 60 | 30 | 18 | 48 |  |  |  | 80575 | 20050 |  | 15000 |  | 1,061 09 | 2,21734 |
| Union Center | 2 | 39 | 55 | 94 |  |  | 63 | 2 | 1 | 3 | 1,035 00 | 16221 |  | 6596 |  | 29820 | 1,561 37 |
| Valders | 2 | 33 | 43 | 76 | 20 | 30 | 50 |  |  |  | 93900 | 100 co |  | 13500 |  | 73428 | 1,908 28 |
| Valley | 2 | 43 | 35 | 78 | 24 | 15 | 39 | 1 | 3 | 4 | 85500 | 1000 | 1390 | 27215 |  | 19520 | 1,346 25 |
| Verona | 2 | 37 | 27 | 64 | 31 | 26 | 57 | 2 | 1 | 3 | 96250 | 3790 | 1600 | 11812 |  | 32198 | 1,456 50 |
| Vesper | 2 | 44 | 36 | 80 | 25 | 18 | 43 |  |  |  | 90000 | 1038 | 3082 | 36752 | 12500 | 1,044 23 | 2,477 95 |
| Waukesha | ${ }_{2}^{2}$ | 34 | ${ }_{3} 36$ | 70 | 22 | 25 | 47 |  |  |  | 900 00 1.700 |  |  | 4394 |  | ${ }^{462} 03$ | 1,405 97 |
| Waunakee | 2 | 27 | 24 | 51 | 21 | 21 | 42 | 3 |  | 3 | 1,120 50 | 1400 | 2216 | 2020 |  | 22180 | 1,398 68 |
| Wausau | 2 | 26 | 36 | 62 | 19 | 25 | 44 | 1 | 4 | 5 | 81900 | 1269 |  | 6106 |  | 21750 | 1,110 25 |
| Westby ... | 2 | 31 | 31 | 62 | 17 | 18 | 35 |  |  |  | 81000 | 18040 | 1316 |  | 68270 | 14419 | 1,83045 |
| West Kewaunee | 2 | 41 | 20 | 61 |  |  |  | 3 |  | 3 | 96750 |  | ${ }_{6}^{6} 09$ | 3679 |  | 38535 | 1,395 73 |
| West Lima | 2 | 41 | 31 | 72 | 27 | 18 | 45 |  | ${ }_{3}^{2}$ | 2 | 85500 |  | $\begin{array}{r}475 \\ 89 \\ \hline 14\end{array}$ | ${ }_{6}^{6} 25$ |  | 18993 | 1,055 93 |
| Weston .... | 2 | 32 | 37 | 69 |  |  |  | 1 | 3 | 4 | 96300 | 295 | 8914 | 275 |  | 14002 | 1,197 86 |
| Weyauwega | $\stackrel{2}{2}$ | 34 | 34 | 68 | 24 | 21 | 45 | 2 | 3 | 5 | 93500 |  | 1296 | 8626 |  | 86229. | 1.896 51 |
| Wheeler ... | 2 | 45 | 26 | 71 | 30 | 13 | 43 |  |  |  | 68410 | 20555 | 4983 |  | 1,082 28 | 34162 | 2,363 38 |
| Willow Springs | 2 | 35 | 30 | 65 | 23 | 25 | 48 | 2 | 2 | 4 | 72000 | 2835 |  | 2180 |  | 8775 | 85790 |
| Wilmot ... | $\stackrel{2}{2}$ | 32 | ${ }_{26}^{23}$ | 55 | 18 | 15 | 33 | $\stackrel{2}{2}$ | 1 | $\stackrel{3}{3}$ | 85500 |  | 3056 | 31516 |  | 32435 | 1,525 07 |
| Wilson | 2 | 42 | 26 | 68 | 33 | 20 | 53 | 2 |  | 2 | 99000 | 1457 | 4190 | 1658 |  | 14460 | 1,20765 |
| Winchester | 2 | 26 | 31 | 57 | 19 | 24 | - 43 | 1 | 2 | 3 | 76500 |  |  | 4838 |  | 15434 | 96772 |
| Windsor | 2 | 41 | 18 | 59 | 26 | 15 | 41 | 1 | 1 | 2 | 1,125 00 | 2383 | 6547 | 8940 |  | -20 16 | 1,833 86 |
| Winter | 2 | 28 | 30 | 58 | 17 | 21 | 38 |  | 2 | 2 | 2,260 08 | 16590 | 11640 | 30716 |  | 1,356 50 | 4,206 04 |
| Withee | 2 | 43 | 48 | 91 | 34 | 38 | 72 | - 1 | $\stackrel{2}{2}$ | 3 | $81000$ | 1111 | 5058 | 16650 | 80000 | 51034 | 2,348 53 |
| Woodford | 2 | ${ }_{32}^{26}$ | 40 | ${ }_{5}^{66}$ |  |  |  |  | 3 | 3 | 1.03500 | 1630 | 1333 | 1161 125 00 |  | 13126 | 1,20750 |
| Wrightstown | $\stackrel{2}{2}$ | ${ }_{34}^{32}$ | $\stackrel{22}{ }$ | ${ }_{63} 5$ | ${ }_{25}^{23}$ | ${ }_{23}^{17}$ |  | 2 | 1 | 3 | 80000 |  |  | 12500 2140 |  | -186 91 | 1.11191 |
| Zenda | 2 | 84 | 29 | 63 | 25 | 23 | 48 |  |  |  | 94500 | 1940 | 2233 | 2140 | $\ldots$ | 3,231 52 | 4,239 65 |

County training schools for teachers, 1911-1912.

| Location. | No. teachers. |  | No. pupils enrolled |  |  | $\begin{gathered} \text { No. graduates } \\ \text { fur year end- } \\ \text { ing June } \\ 30,1912 . \end{gathered}$ |  | No. persons enrolled who have previously taught. |  | No. nonresi dent pupils enrolled. |  | Solary of piicipal | Total salary of assistants. | Total amount expended for support of schools. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Fem. | Male. | Fem. | Total. | Male. | Fem. | Male. | Fem. | Male. | Fem. |  |  |  |
| Totals | 28 | 52 | 181 | 1,276 | 1,457 | 44 | 478 | 4 | 97 | 9 | 165 | \$46,248 85 | \$48,115 90 | \$134,709 50 |
| Algoma | 1 | 2 | 19 | 32 | 51 | 6 | 18 |  |  |  |  | \$1,700 00 | \$2,308 50 | \$5,309 03 |
| Alma . | 1 | 1 | 11 | 38 | 49 | 2 | 17 |  | 2 | 1 | 3 3 | 1,800 1,800 000 | 1,100 1,200 00 | 3,682 3,899 09 |
| Antigo | 1 | 1 | 52 | 42 | 42 | $\cdots$ | 19 18 | 3 | 2 | 3 | 20 | 2,100 00 | 2,250 50 | 5,978 80 |
| Berlin | 2 | 1 | 52 | 10 | 62 47 | 1 | 17 | 3 | 2 | 3 | 3 | 1,900 00 | 2,550 00 | 7,154.37 |
| Columbus | 1 | 3 | 4 | 43 | 47 75 | 1 | 15 |  | 1 |  | 30 | 1,900 00 | 2,300 00 | 6,161 02 |
| Eau Claire | 1 | 2 | 7 3 | 68 34 | 75 37 | 1 | 15 7 |  | 1 | 1 |  | 1,700 00 | 1,100 00 | 3,196 99 |
| Gays Mills .. | 1 | 1 | 3 | 34 93 | 96 | 1 | 36 |  | 5 |  | 12 | 2,000 00 | 2,077 00 | 6,498 61 |
| Grand Rapids | 1 | 1 3 3 | 3 2 | 93 | 94 | 1 | 14 | 1 | 19 |  | 5 | 1,800 00 | 1,770 00 | 6,713 56 |
| Janesville | 1 1 | 3 2 | 4 | 48 | 54 |  | 26 |  | 2 |  | 6 | 1,700 00 | 1,800 00 | 5,425 31 |
| Ladysmith | 1 | 2 2 | 18 | 48 | 56 | 7 | 16 |  |  |  |  | 2,000 00 | 2,000 00 | 5,039 24 |
| Manitowoc | 1 | 2 2 | 18 8 | 54 | 62 | 3 | 14 |  |  | 3 | 10 | 2,000 00 | 1,917 50 | 5,384 72 |
| Marinette | 1 | 2 3 | 8 9 | 54 77 | 86 | 3 3 | 22 |  |  |  | 2 | 2,100 00 | 3,663 75 | 7,684 96 |
| Menomonie | 1 | 3 2 | 9 | 77 54 | 86 54 | 3 | 22 |  | 21 |  | 1 | 2,000 00 | 2,000 00 | 5,658 34 |
| Merrill | 1 | 2 3 |  | 64 | 64 |  | 21 |  | 4 |  | 16 | 1,800 00 | 2,400 00 | 5,801 04 |
| Monroe ..... | 1 | 3 2 2 | 1 4 | 62 52 | 53 | 2 | 25 |  | 1 | 1 | 13 | 1,700 00 | 2,050 00 | 4,708 87 |
| New London | 1 | 1 | 4 2 | 42 | 56 44 |  | 10 |  | 6 |  | 4 | 1,581 43 | 1,403 50 | 4,993 82 |
| Phillips : | 1 | 1 3 | 2 | 42 37 | 44 37 |  | 13 |  | 1 |  | 6 | 1,955 00 | 2,740 00 | 7,409 64 |
| Reedsburg | 1 | 1 1 | 2 | 37 55 | 37 57 |  | 12 | $\cdots$ | 21 |  | 6 | 1,800 00 | 1,200 00 | 5,112 13 |
| Rhinelander | 1 | $\underline{1}$ | 2 | 65 | ${ }_{62} 6$ |  | 30 |  | 6 |  | 11 | 1,800 00 | 1,427 50 | 4,783 86 |
| Rice Lake ...... | 1 | 2 |  | 62 56 | 68 |  | 28 | . | 2 |  | 6 | 2,000 00 | 2,282 65 | 6,172 32 |
| Richland Center | $\bigcirc 1$ | 5 2 | 12 | 56 39 | $\stackrel{68}{41}$ | 2 | 15 |  |  |  | 1 | 1,600 00 | 1,370 00 | 4,256 90 |
| St. Groix Falls. | 1 1 | 2 | 2 9 | 39 53 | 62 | 2 3 | 15 |  |  |  | 1 | 2,012 50 | 1,530 00 | 4,488 53 |
| Viroqua | 1 | 2 | 9 9 | 53 52 | 61 | 3 3 | 21 |  |  |  |  | 1,999 92 | 2,775 00 | 5,873 72 |
| Wausau . | 1 | 2 | 9 | 42 | 61 43 | 3 | 20 |  | 2 |  | 6 | 1,500 00 | 90000 | 3,321 73 |

COUNTY SCHOOLS OF AGRICULTURE AND DOMESTIC SCIENCE, 1911—1912.

| LOCATION. | N . teachars. |  | No. pupils enrolled. |  |  | No. graduates for year ending June 30, 1912. |  | No. persons eurolled who have previously taught. |  | No. nonresident pupils enrolled. |  | Salary of principal. | Total salary of assistants. | Total amount expended for support of schools. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Fem. | Male. | Fem. | Total. | Male. | Fem. | Male. | Fem. | Male. | em. |  |  |  |
| Totals | 14 | 9 | 173 | 157 | 330 | 34 | 47 |  | 2 | 20 | 55 | \$9,049 94 | \$16,622 52 | \$48,623 45 |
| Marinette | 2 | 1 | 12 | 29 | 41 | 3 | 10 |  |  | 3 | 4 | 1,583 34 | 2,500 00 | 7,304 51 |
| Menomonie | 3 | 2 | 51 | 34 | 85 | 12 | 8 |  |  | . | 34 | 1,800 09 | 4,430 00 | 10,792 48 |
| Onalaska | 4 | 4 | 43 | 40 | 83 | 13 | 11 |  | 2 | 9 | 12 | 1,636 60 | 4,464 85 | 14,471 88 |
| Wausau | 2 | 1 | 26 | 23 | 49 | 4 | 9 |  |  | 1 | 2 | 2,000 00 | 2,300 00 | 6,800 27 |
| Winneconne | 3 | 1 | 41 | 31 | 72 | 2 | 9 |  |  | 7 | 3 | 2,000 00 | 2,927 67 | 9,254 31 |

COLLEGES, ACADĖMIES AND SEMINARIES 1911-1912.


APPORTIONMENT OF SCHOOL FUND INCOME.

| Counties. | $\begin{gathered} \text { December } \\ 1910 . \end{gathered}$ | $\begin{aligned} & \text { December } \\ & 1911 . \end{aligned}$ | Counties. | $\begin{gathered} \text { December } \\ 1910 . \end{gathered}$ | $\begin{gathered} \text { December } \\ 1911 . \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Totals..... | \$1,888, 28419 | \$2,087,077 93 | Lincoln.. | 16,612 09 | 18,032 47 |
|  |  | \$2,087,07 9 | Marathon....... | 16,1453051,48197 | 42,06257,98232 |
| Adam |  |  |  |  |  |
| Ashland | $\begin{aligned} & \$ 7,47737 \\ & 20,56884 \end{aligned}$ | \$7,968 51 | Marquette.... | 31,923 06 | 34,575 83 |
| Barron | 27,377 46 | 20,959 <br> 30,511 <br> 107 |  | 327,781 04 | 369,837 18, |
| Bayfield | 13,798 99 | 15,937 02 |  | 22,691 39 |  |
| Brown | 45,002 41 | 51,044 07 | $\begin{aligned} & \text { Monroe ....... } \\ & \text { Oconto....... } \end{aligned}$ | 23,845 59 | $\begin{array}{r} 24,64071 \\ 27,50613 \end{array}$ |
| Buffalo | 14,242 40 | 15,537 27 | Oneida......... | 9,15141,47448 | 10,246 40 |
| Burnett. | 18,366 62 | 9,23215,48210 | Outagamie.. Ozaukee. |  | 47,038 35 |
| Calumet. |  |  |  | 14,639 79 | 16,119 47 |
| Chippewa | 14,237 <br> 28,174 <br> 55 | 15,482 31,007 43 | Ozaukee Pepin | 6,8231618,31788 |  |
| Columbia | -28,652 99 | 31,265 25,324 05 | Pierce .......... |  | 19,760 29 |
| Crawford | 23,486 15 | 14,987 26 | Portage........ | $\begin{aligned} & 19,25558 \\ & 20,0353 \end{aligned}$ |  |
| Dane | 13,678 58 |  |  | $\begin{array}{ll} 29,003 & 32 \\ 11,945 & 40 \end{array}$ | 31,755 99 , |
| Dodge. | 37,02588 | 40,062 <br> 17 <br> 17 <br> 1888 <br> 80 | Racine......... | 41,002 00 | 13,796 01. |
| Door | 16,378 <br> 29,255 <br> 20 |  |  | 14,782 74 | 46,26031 16,809 02 |
| Dougla |  | 172,107 48 | Rock........... | 140,255 73 | 45, 19784 8 |
| Dunn | 22,420 03 | 23,787 51 | Rusk............ | $\begin{array}{r}9,602 \\ 2,35 \\ 2,327 \\ \hline 1\end{array}$ | 11,397 41 |
| Eau Clair | 27,321 75 | 29,928863,30278 |  |  |  |
| Florence. |  |  | St. Croix....... Sauk.......... | 22,327 <br> 24,489 <br> 26 | 27,40148. |
| Fond du L | 42,412 20 | 41,001 62 | Sawyer.......... | 4,923 54 | 5,7553030 |
| Forest. | $\begin{array}{r} 5,073 \\ 29,407 \\ \hline \end{array}$ | 6,297 00 | Shawano. Shehoygan... | $\begin{aligned} & 28,41938 \\ & 45,050 \\ & 84 \end{aligned}$ |  |
| Grant |  | 32,429 <br> 17,286 <br> 1 |  |  | 30,42254 <br> 49,834 <br> 18 |
| Green. | 15,751 <br> 12,560 <br> 8 |  | Shehoygan..... | $\begin{array}{lll} 45,050 & 84 \\ 12,970 & 34 \end{array}$ | 14,270 87 |
| Green Iow |  | $\begin{array}{r}17,843 \\ 19,054 \\ 7 \\ 748 \\ \hline 189\end{array}$ | Trempealeau.. | 20,602 77 |  |
| Iron. | $\begin{array}{r}17,547 \\ 6,544 \\ \hline 28\end{array}$ |  | Vilas........... | 24,263 3,770 3 | 4,14525 |
| Jackison. | 15,165 57 | 115,79480 <br> 31,544 <br> 05 |  | 19,4088,04439 |  |
| Jefferson | 27,534 <br> 1699 <br> 16,784 <br> 17 |  | Washburn...... |  | $\begin{array}{r} 21,56598 \\ 0,065 \end{array}$ |
| Juneau. |  | 18,367 85 |  | 19,13226,48340 | $\begin{aligned} & 91,13400 \\ & 200 \end{aligned}$ |
| Kenosha | 25, 15317 | 26,357 80 | Waukesha..... |  | 29,005 91 |
| Kewaune |  | 16,280 <br> 37,929 <br> 1 |  | 27,098 83 |  |
| La Crosse | 33,485 85 |  | Waupaca..... | 15,703 47 | 16,833 15 |
| Lafayet | 16,146 <br> 16,430 <br> 6 | 17,206 08 | Winnebago. Wood........... | $\begin{aligned} & 48,140 \\ & 48 \\ & 28,635 \\ & \hline \end{aligned}$ | $\begin{aligned} & 53,01245 \\ & 31,27306 \\ & 31,510 \end{aligned}$ |
| Lang |  |  |  |  |  |

EN ROLLMENT, DOMESTIC AND PROFESSIONAL STATISTICS OF DAY SCHOOLS FOR DEAF, 1911-1912.

|  | $\begin{gathered} \text { Number } \\ \text { en- } \\ \text { rolled. } \end{gathered}$ | Number of congenitally deaf. | Number of pupils totally deaf. | Number <br> who read lips readil.v. | Number who read books readily. | Number taught speech. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Antigo.. | 13 | 1 | 4 | 9 | 9 | 13 |
| Appleton. | 12 | 3 | 2 | 4 | 1 | 12 |
| Ashland..... | 15 | 5 | 7 | 14 | 8 | 14 |
| Black River | 10 |  | 7 | 9 | 7 | 10 |
| Eau Claire... | 8 36 | ${ }_{13}^{2}$ | ${ }_{21}^{2}$ | 5 | 4 | 2 |
| Fond du Lac. | 15 | 17 | 3 | 11 | 6 | 36 15 |
| Green Bay. | 26 | 9 | 9 | 26 | 6 | 26 |
| La Crosse. | 6 | 2 | 4 | 3 | 2 | 6 |
| Madison.. | 14 | 6 | 6 | 13 | 9 | 13 |
| Marinette. | 9 | 4 | 7 | 6 | 3 | 9 |
| Milwaukee | 276 * | 50 | 50 | 135 | 245 | 276 |
| New London. | 10 | 3 | 3 | 7 | 7 | 9 |
| Oshkosh ..... | 11 | - | 3 | 4 | 9 | 11 |
| Platteville. | 11 | 5 | 3 | 5 |  | 9 |
| Racine... | 16 | 3 | 7 | 6 |  | 16 |
| Rice Lake.. | 12 |  | , | 2 | 1 | 2 |
| Sheboygan. | 13 | 6 | 6 | 10 | 9 | 13 |
| Stevens Point | 12 | 2 | 5 | 11 | 8 | 12 |
| Superior | 7 | 3 | 2 | 4 | 4 | 7. |
| Wausau. | 11 | 2 | 6 | 3 | 3 | 10 |
| Total.. | 543 | 132 | 159 | 322 | 352 | 521 |

[^9]
## EXPENSES OF DAY SCHOOLS FOR THE DEAF AS SHOWN BY ITEMIZED STATEMENTS FOR THE YEAR 1911-1912.

| Cities. | Teachers' salaries. | Board and transportation. | $\begin{gathered} \text { Books } \\ \text { and } \\ \text { stationery. } \end{gathered}$ | Fuel. | Janitor. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Antigo... | \$1,375 00 | \$1,025 75 |  |  |  |
| Appleton. | 85000 | 10829 1,05829 |  | $\$ 3000$ |  |
| Ashland | 1,92000 | 1,058 969 | $\$ 22$ | \$30 $0 .$. | 18000 |
| Black River F | 1,260 760 | 10000 |  | 5000 | 3800 |
| Eloumington., | 3,626 60 | 2,477 95 |  | 8322 | 36350 |
| Fond du Lac | 1,564 93 | 11963 | 1034 |  |  |
| Green Bay. | 3,525 00 | 1,168 35 | 3960 |  | 14000 |
| La Crosse. | -79850 | 250 <br> 678 <br> 17 |  | 7500 | 14000 |
| Madison,. | 1,58981. | 678 479 00 |  | 7125 | 6000 |
| Milwaukee | 20,332 14 | 1,161 16 | 2575 | 35835 | 65201 |
| New London | 85000 | 21250 |  |  |  |
| Oshkosh... | 1,337 50 | 10108 |  |  | 2500 |
| Platteville | 1,04925 1,47500 | 23385 | 13 176 |  |  |
| Rice Lake | 79500 | 34779 |  |  | 2500 |
| Sheboygan. | 1,40000 1,546 | 74888 | 9000 | 10761 | 10000 |
| Stevens Point Superior | 1,54626 9500 | 74888 | 90 | 107 |  |
| Wausau. | 88500 | 22600 |  |  | 4500 |
| Total | \$48,789 99 | \$11, 466.76 | \$183 22 | \$775 43 | \$1,678 51 |

EXPENSES OF DAY SCHOOLS FOR THE DEAF AS SHOWN BY ITEMIZED STATEMENTS FOR THE YEAR 1911-1912.


Statistics of the Day Schools for the Blind for the Year ending June 30, 1912.


## COMPARISON OF AVERAGE WAGES.

Number of teachers and enrollments of pupils in counties outside of cities under city superintendents from 1885 to 1912 , inclusive.

| Years. | $\begin{gathered} \text { Av. wages } \\ \text { male } \\ \text { teachers. } \end{gathered}$ | Av. wages female teachers. | $\begin{aligned} & \text { Number } \\ & \text { male } \\ & \text { teachers. } \end{aligned}$ | Number female teachers. | Total enrollment pupils between 4 and 20 years of age. | Total number of teachers employed. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 885 | \$4475 | \$28 20 | 2,296 | 7,504 | 259, 372 | 9,800 |
| 1886. | 4264 | 2815 | 2,214 | 7,718 | 268, 351 | $\begin{array}{r}9,932 \\ \hline 10,070\end{array}$ |
| 1887. | 4225 | 2958 | 4 | 7,846 | 262, 477 | 10,118 |
| 1888. | 4394 | 2891 | 2,300 | 7, | 265,477 | 10,118 |
| 1889. | 4450 | 2900 | 2,216 | 8,273 | 2 | 9 |
| 1890. | 4350 | 2900 | 2,222 | 8, 302 | 273, 261 | 10,524 |
| 1891. | 4496 | 2965 | 1,158 | 8,549 | 274,807 | 9,707 |
| 1892. | 4500 | 2940 | 2, 089 | 8,443 | 270,325 | 10,532 |
| 1893. | 4870 | 2948 | 2,003 | 8,478 | 275,840 | 10,481 |
| 1894. | No av. | reported | 2,081 | 8,351 | 288,717 | 10,432 |
| 1895. | 4468 | 2978 | 2,107 | 7,972 | 309,257 | 10,079 |
| 1896.. | 4704 | 310 | 2,176 | 7,712 | 298,530 | 9,888 |
| 1897. | 4450 | 3038 | 2,218 | 7,582 | 306,644 | 9,800 |
| 1898. | 4100 | 2950 | 2,366 | 7,434 | 306,574 | 9.800 |
| 1899.. | 4189 | 2978 | 2,247 | 7,496 | 314,150 | 9,743 |
| 1900. | 4384 | 3179 | 2,076 | 8,126 | 316,465 | 10,202 |
| 1901 | 4799 | 3267 | 1,908 | 8,284 | 316,159 | 10,192 |
| 1902. | 5093 | 3319 | 1,819 | 8,485 | 321,607 | 10,304 |
| 1903. | 5246 | 3411 | 1,690 | 8,649 | 321, 054 | 10,339 |
| 1904. | 5550 | 3526 | 1,555 | 8,704 | 322, 142 | 10,259 |
| 1905. | 5721 | 3704 | 1,518 | 8,859 | 320, 684 | 10,377 |
| 1906. | 5887 | 3865 | 1,510 | 8,919 | 323,416 | 10,429 |
| 1907. | 6234 | 3975 | 1,397 | 9,174 | 313,928 | 10,571 |
| 1908. | 6427 | 4081 | 1,291 | 9,290 | 312,338 | 10,581 |
| 1909. | 6451 | 4329 | 1,307 | 9,196 | 312,062 | 10,503 |
| 1910. | 6669 | 4429 | 1,272 | 9,193 | 305,469 | 10,465 |
| 1911. | 6965 | 4460 | 1,189 | 9,266 | 301,754 | 10,455 10,138 |
| 1912. | 7016 | 4188 | 1,091 | 9,047 | 283, 221 | 10,138 |

GENERAL SUMMARY.

| CENSUS. | 1909-1910. | 1910-I911. | 1911-1912. |
| :---: | :---: | :---: | :---: |
| Number between 4 and 20 reported in the state. | 780,008 | 772.096 | 775,472 |
| Number between 7 and 14 reported in the state...... | 351,591 | 346, 256 | 303,924 |
| schools <br> Counties 24 weeks or more <br> Cities 32 weeks or more | 139,554 | 133,426 |  |
| Number between 7 and 14 who attended private schools: | 99,272 | 100,502 |  |
| Counties 24 weeks or more. <br> Cities 32 weeks or more | 41,304 | 16,539 |  |
| ENROLLMENT IN PUBLIC SCHOOLS. |  |  |  |
| Number between 4 and $20 \ldots$ | 460,065 | 460,189 |  |
| Number under 4 years of age | 146 | -187 | 435,204 |
| Number over Total number................ | 259 | 418 | $\cdots$ |
| SOME PERCENTAGES. |  |  |  |
| Per cent of whole number of persons in the state between 4 and 20 enrolled in public schools.... ... | 58.9 | 59.6 |  |
| Per cent of those between 7 and 14 who have at- |  | 59.6 |  |
| Per cent of those between 7 and $14 \ldots \ldots .$. | 67.9 | 67.5 |  |
| tended private schools............................ | 25.2 | 12.9 |  |
| Per cent of those between 7 and 14 who did not attend any school | 6.5 | 19.5 |  |
| SCHOOLHOUSES. |  |  |  |
| No. schoolhouses in the state. Seating caparity of all the schoolih | 7,769 575,439 | 7,912 | .... |
| TEACHERS. |  |  | , |
| Male teachers employed.. | 1,718 | 1,721 |  |
| Female teachers employed | 13,011 | 13,442 | 1,344 10,916 |
| Average monthly wages of male teachers outside | 14,729 | 15,163 | 12. 260 |
| Average monthly wages of female | - \$66.69 | \$69.65 | \$70.16 |
| of cities.................. | \$44.29 | \$44.60 | \$41.88 |
| TEACHERS' QUALIFICATIONS. |  |  |  |
| No. normal school teachers employed, graduates in counties. | 1,321 |  |  |
| No. undergraduates of colleges, universities and | 1,321 | 1,324 | 1,276 |
| normal schools in counties. | 1,856 | 2,860 | 1,357 |
| First grade certificates granted: | 1,837 | 1,500 |  |
| By county superintendents. | 610 | 456 |  |
| By city superintendents....... | 176 | 199 | 195 |
| Second gradecertificates granted: | 2,244 | 1,861 |  |
| Third gy city superintendents...... | 101 | 1,84 | 1.79 $-\quad 90$ |
| By county superintendents. . | 4,566 | 3,594 | 3,307 |
| Certificates granted for less than one year, | 154 | 3,503 | 3,307 42 |
| S. | 381 | 222 | 152 |
| Total number of certificates granted Applicants refused certificates by county superintendents | 8,232 | 6,519 | 5,990 |
|  | 1,717 | 1,573 | 1,338 |

SUMMARY OF FREE HIGH SCHOOLS.

| FOUR YEARS COURSE. |  |
| :--- | ---: | ---: | ---: |
|  |  |
|  |  |

## SUMMARY OF INDEPENDENT HIGH SCHOOLS.

| Independent Schools. | 1909-1910. | 1910-1911. | 1911-1912. |
| :---: | :---: | :---: | :---: |
| Number of such schools | 13 | 12 | 12 |
| Number of teachers employed | 306 | 315 | 353 |
| Number of pupils under 20 years e | 7,040 | 8,016 | 8.355 |
| Number of pupils over 20 enrolled. | 64 | 36 | 112 |
| Number of pupils in English branches only | 2,601 | 3,375 | 4,189 |
| Number of pupils in German | 2,379 | 2,604 | 2,875 |
| Number of pupils in Latin. | 1,748 | 1,680 | 1,700 |
| Number of pupils in Greek.. | 68 | 43 | 45 |
| Number of graduates this year | 891 | 944 | 1,036 |
| Number of graduates since organization. | 9,291 | 6,449 | 9,997 |
| Number of nonresident pupis enrolled. | 311 | 370 | 394 |
| A verage salary of assistants. | \$971.07 | \$1,002.25 | \$94178 |
|  | \$2,192.30 | \$2,239.50 | \$2,333 33 |
| Number of principals with salary of $\$ 1,000$ or more. Number of pupils in manual training. | 13 | $\xrightarrow{.12} 91$ | 1,795 |
| Number of pupils in domestic science. |  | - 716 | 927 |

SUMMARY OF CITIES HAVING CITY SUPERINTENDENTS.

|  | 1909-1910. | 1910-1911. | 1911-1912. |
| :---: | :---: | :---: | :---: |
| Number of children between 4 and 20 years of age.. | 301,925 | 306,244 | 307, 348 |
| Number of children between 7 and 14 years of age.. | 125,883 | 133,280 | 122,241 |
| Number of children between 7 and 14 who have attended public school 32 weeks or more. | 80,321 | 81,310 | 25,206 |
| Enrollment of children between 4 and 20 in public | 154,596 | 158,435 | 151,683' |
| Number of school buildings | 154,592 432 | 108,435 | 151,683 |
| Seating capacity. | 161,328 | 158,195 | -7... |
| Teachers enployed...... | - 4,264 | 4,708. | 4,584 |
| Average salary of male teachers. | \$1,089.46 | \$1,170.00 | ........ |
| Number of public kindergartens maintained......... | 221 | ${ }^{2} 240$ | 247 |
| Number of children enrolled in public kindergartons | 18,337 | 15,827 | 16,453 |

COMMON SCHOOL FINANCES.

| RECEIPTS. | 1909-1910. | 1910-1911. | 1911-1912. |
| :---: | :---: | :---: | :---: |
| Amount on hand June 30, 1910, 1911, $1912 .$. | \$3,492, 27050 | \$3,597, 88889 | \$3,724,911 22 |
| From local taxes....................... .... | 5,771,325 98 | 6, 349, 91324 | 6,473,008 87 |
| From taxes levied by county boa | 1,717,985 10 | 1,841,461 82 | 1,858,538 76 |
| From other sources. <br> Total | 1,800,709 96 | 1,832,913 50 | 2,004,706 49 |
|  | 2,103,027 18 | 1,881,313 43 | 2,705,345 86 |
|  | \$14,885, 31872 | \$15,503,490 88 | \$16,766,511 20 |
| DISBURSEMENTS. |  |  |  |
| For building and repairing | \$1,517, 38402 | \$1,566,967 11 | \$1,678, 02202 |
| For apparatus, furniture, | 256, 97232 | 270,509 00 | 402,862 19 |
| For old indebtedness | 446,534 35 | 487,297 63 | 707,959 93 |
| For teachers' wages | 6,719,059 45 | 7,001,945 84 | 7,607,612 70 |
| For all other purposes | 2,295,820 87 | 2,467,430 38 | 2,075,381 19 |
| Total | \$11,235,771 01 | \$11,794,149 96 | \$12,471, 83803 |
| Deficit, June 30, 1911........................ |  |  |  |
| Balance on hand June 30, 1910 1911, $1912 . .$. | 3,649,547 71 | 3,709.340 92 | $\begin{array}{r} 4,361,544 \\ 95,459 \\ \hline 66 \end{array}$ |
| EXPENDITURES PER INDIVIDUAL. |  |  |  |
| Per capita of those between 4 and 20 years: <br> In cities-having superintendents <br> ,........ | \$1651 | \$18 05 | \$18 63 |
|  | 1307 | 1310 | 1441 |
| Per capita for those enrolled between 4 and 20: <br> In cities having superintendents $\qquad$ |  |  |  |
|  | 3222 | 3489 | 3775 |
| In counties outside cities. | 2044 | 2076 | 2380 |
| Per capita for teachers' wages only base on those enrolled between 4 and 20: In cities having superintendents.. In counties outside cities. |  |  |  |
|  | 1907 | 1990 | 2386 14 |
|  | 1201 | 1275 | 1405 |
| COMMON SCHOOL FUND. |  |  |  |
| Amount of common school fund | \$3,926,226 19 | \$4,048,191 06 | \$4,058,200 32 |
| Income of common school fund. | 200,573 62 | 207,984 74 | 215,808 04 |
| Income from seven-tenths of mill tax (Chapter 313, Laws of 1903) | 1,621,784 00 | 1,720,226 00 | 1,858,989 00 |
| Income from license fees. taxes upon corporations.. | 196,946 28 | 196,908 29 | 196,969 04 |

## STATE CERTIFICATES ANI DIPLOMAS.

|  | During biennial period from July 1, 1908. to July 1, 1910. | $\begin{aligned} & \text { July } 1,1910, \\ & \text { June } 30,1911 . \end{aligned}$ | $\begin{aligned} & \text { July 1, 1911, } \\ & \text { June } 30,1912 . \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| Number of unlimited state certificates granted on examination. | 3 | 5 | 1 |
| Number of limited state certificates granted on examination | 10 | 5 | 5 |
| Number of county superintendents' certificates granted on examination. | 10 | 5 | 3 |
| Number of state certificates granted on diplomas of state university. | 188 | 102 | 89 |
| Number of state certificates granted on diplomas and certificates of state normal schools. | 1,079 | 588 | 668 |
| Number of state certificates granted on diplomas of colleges and universities of this state other than the University of Wisconsin | 98 | 41 | 59 |
| Number of state certiticates granted on state certificates from other states. |  |  |  |
| Number of state certificates granted on diplomas of colleges and universities outside of Wisconsin. | 62 | 28 | 35 |
| Number of stare kindergarten certificates granted on diplomas from institutions outside of Wisconsin. | 22 | 12 | 9 |
| Number of state kindergarten certificates granted on diplomas from institutions in Wisconsin. | 30 | 10 | 3 |
| Number of state certificates granted for manual training and d.mestic science.........: | 4.$)$ | 18 | 21 |

IDPLOMAS AND (ERTTIFICATES ISSUED ANI) COUNTERSIGNEI) BY STATE SUPERINTENDENT.


## RECAPITULATIUN OR GENERAL SUMMARY.

| DISBURSEMENTS. | 1910. | 1911. | 1912. |
| :---: | :---: | :---: | :---: |
| Amount expended in support of the university | \$1,669,920 06 | \$1,899,369 93 | \$2,053,786 67 |
| Amount expended for normal schools.......... | 671,305 72 | 577,823 37 | 682,010 10 |
| Amount expended for common schools, high schools and graded schools. | 11,235,771 01 | 11,794,149 96 | 12,475, 34902 |
| Amount for salaries and allowance to sounty superintendents.. | 97,004 50 | 99,964 99 | 101,672 05 |
| Amount for maintenance of teachers; institutes | 16,000 00 | 16,000 00 | 6,000 00 |
| Amount paid by the state for day schools for the deaf | 51,008 56 | 58,741 51 | 63,400 65 |
| Amount paid by the state for day schools for the blind | 7,860 01 | 9,663 32 | 11,816 13 |
| Amount paid by the state for manual training departments. | 9,700 00 | 13,950 00 | 18,176 75 |
| Amount paid by the state for agricultural schools. | 19,955 96 | 20,000 00 | 27,436 50 |
| Amount paid by the state for country training schools for teachers | 70,601 06 | 76,661 22 | 80,654 64 |
| Amount paid by the state for domestic science departments. |  |  | 17,432 46 |
| A mount paid by the state for agricultural departments in high schools. |  |  |  |
| Dictionaries furnished free to districts | 147 | 154 | 150 |
| Dictionaries sold to districts | 223 | 188 | 140 |
| Dictionaries sold to state officers, university, normal schools, etc | 32 | 2 |  |
| Amount received by the state for dictionaries | \$1,838 50 | \$1,330 00 | \$1,029 00 |
| Amount received by the state for codes, deaf charts, etc | 2115 | 115 | 1040 |




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L. S. KEELEY-President
e

C. C. PARLIN-resigned as President June 24

## PROCEEDINGS

of THE

## FIFTY-NINTH ANNUAL SESSION

OF THE

# Wisconsin Teachers' Association 

HELD AT

Milwaukee, November 9 to 11, 1911

Issued by the officers of the Association, and printed by the State Printing Board by authority of section 335e, Wisconsin Statutes, as amended by chapter 657, Laws of 1911.


MADISON, WIS.
Dhmochaf Printing Company, Etate Printer \$812

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M. A. BUSSEWITZ, Milwaukee member for 3 years
NELLIE MINEHAN, Milwaukee. member for 2 years
M. V. O'SHEA, Madison member for 1 year

[^10]
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ANWREW C. BROWN, Chairman 15th District School, No. 2, Milwaukee

## pROCEEDINGS

OF THE

## Wisconsin Teachers' Association

Fifty-Eighth Annual Meeting Milwaukee, November 9 to II, 1912.

## REPORT OF GENERAL SESSIONS

Auditorium, Thursday Morning, Nov. 9, 1911.
The fifty-ninth annual meetin'g of the Wisconsin Teachers' Association was called to order by President L.-S. Keeley in the Auditorium, Milwaukee, November 9, 1911, at 9:15 a. m.

Marquette University Orchestra, under the direction of Mr. Henry C. Winsauer, rendered the following program:

> 1. Overture--"Caliph of Bagdad,". . . . . . . . . . . . . . . . . . Boieldieu
> 2. Intermezzo-."Amina," . . . . . . . . . . . . . . . . . . . . . . . . . . . Lincke
> 3. Selections-""Martha," . . . . . . . . . . . . . . . . . . . . . . . . . . . . Flotow
> 4. Selection-"Frau Luna," . . . . . . . . . . . . . . . . . . . . . . . . . Lincke
> 5. March—"Liberty Bell," . . . . . . . . . . . . . . . . . . . . . . . . . . . . Sousa

The formal program was opened with an Address of Welcome by Hon. Francis E. McGovern, governor of Wisconsin. (All addresses are given in full elsewhere in this volume.)

This address was followed by another address, "Optimism, Inspiration and Constructive Suggestion," by Charles C. Parlin of Boston.

At the close of this address, President Keeley announced the following appointments:

U'pon the Council of Education, appointments for three years, E. C. Elliott of Madison, John A. H. Keith of Oshkosh, and Thos. R. Lloyd Jones of Madison.

Upon motion, duly seconded, the appointments were unanimously adopted.
Upon the Committee of Legislation, for three years, S. B. Tobey of Whusau.

Upon the Committee on Elections, H. L. Gardner of Viroqua, one year, resignation of Mrs. Bradford; two years, Myrtes E. Clark of Oshkosh, C. W. Smith of Portage, Thos. J. Berto of Watertown, L. N. Brooks of Racine, C. E. Slothower of Platteville.
Upon the Enrollment Committee, the following: A. D. Rose of Ft. Atkinson; D. D. Ernsberger of F't. Atkinson; F. W. Oldenburg of Brodhead; Fred W. Hein of South Milwaukee; George F. Loomis of Waukesha; T. J. Jones, West Allis; F. E. Ralph, Cuba City; Rollie A. Petrie, East Troy; F'rank O. Holt, Edgerton; George R. Ray, Elroy; Oscar Klang, Kendall; James F. Desmond, Mukwonago; E. M. Cox, Markesan; C. V. Nevins, Oshkosh; C. H. Bachhuber, Port Washington; O. R. Moyle, Racine; Henry D. Hill, Milwaukee; Rhinehard Runke, Milwaukee; William F. Sell, Milwaukee; Miss Helen Poole, Milwaukee; Miss Jane Stevenson, Milwaukee; Miss Mary Starkey, Milwaukee; George Carlin, West Bend; O. H. Bauer, Juneau; F. R. Nash, Waupun; L. F. Smith, Fox Lake; A. G. Althoff, Milwaukee; T. L. Bewick, Horicon; G. J. Zimmermann, Union Grove, J. J. Kerwin, Silver Lake; G. B. Rhoads, Waukesha, and Richard F. Beger, Fredonia.

The President appointed C. O. Marsh of Antigo, Dr. E. A. Birge of Madison, Hon. C. F. Viebahn of Watertown, and R. B. Dudgeon of Madison, as a committee to draw up resolutions on the death of John C. Bascom.

The following resolution was read: "In view of the fact that Wisconsin is now in the midst of a campaign for equal suffrage, and that we as a body of educators are deeply interested in this liberal and progressive move, be it resolved, that the State Teachers' Association of Wisconsin declares itself heartily in favor of equal suffrage, and be it further resolved, that whenever the State Teachers' Association is able to co-operate in bringing about equal suffrage for women it cordially pledges its support." Resolution referred for consideration and report to the Association, to the Council of Education.
The following is in the nature of a proposition to the Wisconsin State Teachers' Association: "I, Mrs. Charles Brown, of Neenah, Wisconsin, hereby offer to deed to the Wisconsin State Teachers' Association, free from all incumbrances, a house and lot in Neenah, Wisconsin, valued at $\$ 40,00$ c, to be lield in trust by the Association as a house for disabled and indigent Wisconsin public school teachers." This resolution is also referred to the Council of Education to report to the Association.

Superintendent Charles P. Cary made the following statement:
Black River Falls is now in need of $\$ 5,000$ to run its schools this year, and I would ask that the teachers here present would take up a little collection among the pupils and send it to State Treasurer A. H. Dahl, at Madison, for that purpose.

President Keeley called Charles C. Parlin to preside for the remainder of the morning session.

Address-"The Waste of War," by David Starr Jordan of California. Report of Legislative Committee, by C. E. Patzer, Chairman.

Auditorium, Thursday Evening, Nov. 9, 7:45.<br>7:45-8:30—Concert. Marquette University Quartette.<br>8:30-Address. "The Negro and the Application of Education to Life." Booker T. Washington of Tuskegee, Alabama.

Friday Morning, Nov. 10, 1911.
Report of Committee on Elections:- Result of nominatin's ballot for President:
Whole number of votes ..... 648
Necessary for a choice. ..... 325
Mrs. Mary Bradford ..... 462
A. E. Kagel ..... 91
Charles McKenney ..... 39
John Callahan ..... 29
Scattering ..... 27
Mrs. Bradford was declared elected.
Result of nominating ballot for Executive Committee for fouryears:
Whole number of votes ..... 242
Necessary for a choice. ..... 122
M. V. O'Shea ..... 122
F. S. Hyer ..... 10
Peter Zimmers ..... 9
Thos. Lloyd Jones ..... 8
Scattering votes ..... 93
Mr. O'Shea was declared elected.
Signed:Margaret Canty,

Chester W. Smith, H. L. Gardner, Thos. L. Berto, L. N. Brocks.

The formal program of the morning was opened by an address, "Jane and her Teachers," by Sarah Louise Arnold, of Boston.

Address-"F'inance," David Starr Jordan.
Announcement was made by Mr. Keeley that a Wisconsin branch of the School Peace League was formed by members of the Wisconsin Teachers' Assòciation this morning.

Address-"'Training of our Lower Nerve Centers," by Earl Barnes, of Philadelphia.
"Memorial to Albert Salisbury," by Duncan McGregor of Platteville.
Report of Council of Education, by J. B. Borden of Madison, as follows:

With reference to the resolution introduced yesterday morning, as follows: "I, Mrs. Charles Brown of Neenah, Wisconsin, hereby offer to deed, in trust, to the Wisconsin State Teachers' Association, a house and lot in Neenah, Wisconsin, valued at $\$ 40,000$, and free from all incumbrances, as a home for indigent and disabled teachers," the Council of Education reports and recommends as follows:
First. The Council of Education has appointed the following subcommittee of five to investigate the proposition submitted by Mrs. Brown: G. H. Landgraf, Supt. of Schools, of Marinette, Chairman; A. E. Krippene, President School Board of Oshkosh; M. K. Reilly, member of School Board of Fond du Lac; Miss Ellen McDonald, County Supt. of Schools of Oconto; and Miss Rose Swart, of the Oshkosh State Normal School.

Second. The committee recommends that upon the receipt of the report of the sub-committee, the Council of Education shall pass upon the desirability of accepting the property of Mrs. Brown, and shall report the findings of the sub-committee and its action to the Executive Committee of the Association.

Third. That upon receipt of the report of the Council of Education, the Executive Comnittee of the Wisconsin State Teachers' Association is hereby authorized to acquire the property in question on behalf of and in the name of the Wisconsin State Teachers' Association if, in its judgment, said acquisition shall be for the advantage of the teachers of Wisconsin and of the State Association.

It was moved and seconded that this report be adopted. The motion was carried. The report was adopted.

Mr. Borden: The Council of Education recommends the adoption of the following:
"Whereas, The legislature of Wisconsin has passed a bill providing that the voters of the state shall determine, in November, 1912, whether or not women shall be granted the right of suffrage on the same terms as men, be it

Resolved, That the State Teachers Association of Wisconsin declares itself in favor of full suffrage for women."

The resolution was adopted.
"Whereas, The business men of Milwaukee have by their generosity made possible the splendid entertainment provided for the members of the Wisconsin State Teachers' Association in attendance at the 1911 convention.

Now Therefore, Be It Resolved, that the thanks of the Wisconsin State 'Teachers' Association be tendered the Milwaukee business men for the interest they have shown in the welfare of the Association, for their contributions to the local entertainment fund, and for the many courtesies shown visiting teachers."

On motion the resolution was unanimously adopted.
The following music closed the program:
11:30-12:00-Concert. Lyric Tlee Club.

1. March-"Come Altogether," ............................... Becker



Ferdinand Bartlett and Club.

> Saturday Morning, November 11, 1911. Kilbourn Hall, Auditorium.

The Committee on Elections submitted the following nominations:First Vice President, B. E. McCormick. ............... La Crosse
Second Vice President, S. M. Thomas......................... Lodi
Third Vice President, Miss Isabella Welch......... Milwaukee
Treasurer, J. A. Hagemann. ............................. Att. Atkinson
The nominations submitted were unanimously adopted and the above nominees declared elected.

Superintendent C. G. Pearse presented his report as Wisconsin Director at the N. E. A. At the close of the report Mr. Pearse asked the personal and financial support of members of the W. T. A. in making the 1912 meeting a success.

Upon motion, duly seconded, the N. E. A. Director's report was accepted.

Mr. Bussewit\% moved: That the Association appropriate such sum, not to exceed two hundred dollars, as shall be necessary to maintain headquarters for Wisconsin delegates at the 1912 meeting of the National Education Association.

Mr: Ulrich seconded the motion. It was unanimously carried.
President Keeley announced the addresses for the morning,
"The George Junior Republic." Wm. R. George, of Freeville, New York.
"Educational Pioneering in the Southern Mountains." William Goodell Frost, of Berea, Ky.

Reports of Committees and Miscellaneous Business.
Mr. C. O. Marsh presented the following resolutions on the death of

## JOHN BASCOM

Whereas, It was with deep sorrow that many former students of the University of Wisconsin and members of this association learned of the death of ex-President John Bascom on the 3rd ult. and

Whereas, All who came to know him as the administrator of Wisconsin's greatest educational institution, or as an instructor in its class room, as an influential and helpful force in the pioneer days of this association or in his field of leadership in shaping the higher thought of this commonwealth through those beginning years of her civic evolution toward better ideals, have ever been ready to acknowledge the potent and lasting influence of his high attainments as a scholar, his sturdy moral fibre and his strong Christian character. Therefore be it

Resclved by the Wisconsin State Teachers' Association in annual convention assembled,

That in the death of John Bascom this association which has so often felt the uplift of his high ideals for the student and the teacher;

That the great institution of learning whose destinies be so wisely guided through thirteen critical years when, under the inspiration of his daily walk in the midst of her faculty and student body, its youthful aspirations were slowly but surely crystallizing into that lofty conception of its mission of "service to the state" which have dominated her later history;

That the scholar, striving for the best in scholarship, that the cause of education everywhere bas lost a friend most eminent for his scholarship, most worthy in his manhood.
Resolved further, That this commonwealth whose leadership among the states toward a better and more responsible citizenship is her greatest pride has lost him whose impress upon the young students of the ' 70 's and 80 's inspired to the ideals that lie back of this leadership, ideals that come across the vista of the years with ever increasing influence.

John Bascom was a great teacher, a kindly Christian gentleman, whose very presence was a constant appeal to the best that in one lay and the memory of whose ideals of scholarship and of the highest type of manhood perpetuated through the loyal student body of those Bascom days to those who shall come after them must long remain.
the richest tradition of the greatest of universities-a most valuable inheritance to the Badger state herself.

By the Committee:
C. O. Marsh.

Mr. Youker moved: That Article II. be changed so that it will read that the annual dues shall be $\$ 1.50$ for men and $\$ .75$ for women, payable at or before the annual meeting. The amendment was seconded.

Mr. Keeley: The resolution will be received and lie upon the table until that time.

Miss Sabin: I move that the amendment just proposed by Mr. Youker be amended, making the dues for all members $\$ 1.00$.

The amendment was seconded.
Mr. Keeley: That amendment will be received and lie upon the table.

Mr. Keeley in closing the business meeting addressed the members as follows: Ladies and Gentlemen: The time has come for the formal closing of this convention, and I want to say to those who are assembled here today that I have been told by those in attendance that this is indeed a remarkable meeting, that it is one of the best meetings in the history of this association, and it is indeed gratifying to hear those remarks from so many of the members who have been here in attendance.
The question has been asked-to whom is credit due for this remarkable meeting that we have here today? Let me say to you that all credit is due to Mr. Parlin, whose duty it was, under the constitution, to prepare this program, and from the number of those whom I saw shake his hand and congratulate him upon his efforts, I am sure that his efforts have received that rewari which properly belongs to them. Then, let me say to you that equal eredit is due to the work of your able executive committee. Upon the shoulders of that committee rests the responsibility for the future of this organization. It is their business to look after its finances, their duty to conduct its business, and were it not for their wise counsels and for the firm hand with which they mastered the situation, we might today be in a state of financial embarrassment. They have looked carefully and wisely to the distribution of the moneys that have come into their hands. I wish also to give due credit for the success of this convention to your Secretary, Miss Williams, and to the labors of our Treasurer, Mr. Hagemann. I know from the duties that have come to me that your officers have spared no pains to see that all of the things provided for the success of this convention were attended to.

Finally, let me say to you, that if we are to count up the causes which have contributed to the great success of this meeting, you will find them in no one place. This was a great meeting because of the
loyal progressive spirit of the great educational forces of the State of Wisconsin, and finally, to each of you, to everybody who contributed in the least to its success, for your sacrifices in coming here, for your kind ond cordial co-operation in carrying out with us the duties which rested upon us, I wish to return to you my appreciation and my most cordial and sincere thanks.
Mr. Schuler: Mr. President, I have listened with a great deal of pleasure to what you have said to the people to whom you felt that thanks were due. I want to say that I think I will express the sentiment of those here present this morning, and of the many more that have gone to catch their trains, that we feel that this meeting will stand out in our memories as one of the most successful meetings that we have had on account of the earnestness of the presiding officers.
Mr. Keeley: This meeting now stands adjourned.
Katherine R. Williams,
Secretary.

# SECTIONAL MEETINGS 

## SCHOOL BOARD SECTION.

Friday, 2 p. m., November 10, 1911.
Meeting was called te order by Chairman A. S. Lindemann. Wm. George Bruce acted as Secretary.

Chairman Lindemann opened the meeting by dwelling upon the new school laws of the state and pointed out the value of the new board of industrial and agricultural education.

The first paper read was on the subject of "School Accounting in Wisconsin" by Mr. H. W. Kircher of Dodgeville. He was followed in discussion by Prof. J. B. Borden, Assistant State Superintendent of Public Instruction.

Mr. Borden:-I have seen something of school accounting as it comes to the State Superintendent's office. The reports' which come to us mean little or nothing as far as the information they contain is concerned. Very few school clerks know just how to make out reports or how to fill out blanks.

I cannot insist too strongly upon some system of financial accounting. The many inconsistencies which creep into the reports which come to us and the incompleteness of these reports leads us to believe that method and system in school records are absolutely necessary.

It is also necessary to define improvements, equipment and supplies. There is a great deal of confusion on the various items of expense. We ought also to have an accurate record of the assessed valuation of the several school districts in order to determine whether the schools are receiving all they are entitled to. Many districts maintain the schools out of the state funds and do not tax themselves for the maintenance of the local school.

A better school accounting would give information which would lead to improvement all along the line. One school district would know what the other district is doing. It would tend to make school moneys go farther and increase the efficiency of the schools.
G. D. Jones of Wausau:--One of the weaknesses of the high schools of the past has been due to the transient character of the teaching
forces. The male teachers at least did not remain longer than an average of two years.

The movement to strengthen the secondary schools is practically of recent date. The public has awakened to the fact that efficiency is a necessity and that inducements must be made to secure teaching efficiency. It has also been learned to avail itself of the schools by contributing a larger attendance and by allowing the pupils to remain longer.

Statistics go to show that instruction is paid for more equitably and that the attendance of both the graded and secondary schools is proportionately larger than ever before in the history of the state. At one time the average term of the graded schools was twelve weeks while now it is thirty-two weeks. The attendance at the high schools of the state has increased threefold in less than two years. The average second and third class city in Wisconsin pays more annually for high school instruction than is paid by the average small college in the state.

President Richardson:-The illiteracy in Wisconsin is 4.7 per cent of the total population. The number of persons in the state who cannot read is 18,699 , the number of those who cannot read or write is 55,080 , total 73,779 . These figures were based upon the census reports for 1900.

Mr. Wm. L. Pieplow of the Milwaukee School Board then read a paper on the "Broader Use of School Buildings." .

The reading of the paper was followed in a discussion by Prof. J. J. Pettijohn of Madison.

Adjournment followed.

Wm. Geo. Bruce,<br>- Secretary.

## ACCOUNTING IN PUBLIC SCHOOLS.

By H. W. Kircher, Dodgeville, Wis.
Address Before School Board Section, W. T. A., Nov. 9, 1911.
I wish, first, to limit the subject from public schools in general to schools in districts whose population ranges from 1,000 to 6,000 . I do this for two reasons: First, because conditions in different schools vary so that they would demand an independent system of accounting, and second, because I have studied conditions only in the schools mentioned above.

In the schools that I am considering there is spent yearly a sum, ranging from $\$ 15,000$ to $\$ 60,000$, giving daily an expense ranging from $\$ 100$ to $\$ 300$. There are comparatively few businesses in any town
here considered that do more business than the public school. Suppose we look over the account of some corporation, or individual, that does $\$ 30,000$ worth of business a year; we would find some one person who always knows just where the business stands, and to whom you could go for information on any financial transaction of the business, as well as comparative conditions in the business. Have we such a person in the school district? We have not. We do have from four to six persons, who together could by enough figuring, ascertain a fair idea of the condition of the business, but since these people never get together no one knows where things stand. I have learned to look with a feeling somewhat akin to hate upon any blank that wishes information regarding school conditions, for I see the strong need of such blanks being filled, and also the work that will be required to fill them with a fair degree of accuracy. Suppose some one will want to know the cost of instruction per pupil in each department, the cost of fuel per year, and the purpose for which money was voted at the last annual meeting. I possess enough data to answer the first. For the second it wouid be necessary to go to the treasurer and probably hunt over the stubs or items on his books, and for the third I would be compelled to look up the secretary's minutes for the last meeting-if he could find them. Now, unless the need were very great I should not feel like spending the time to find how the school stood in these very few general things.

In looking up the matter of janitor service, I wrote to about one hundred superintendents of public schools, asking them the following questions:

Number of rooms to be kept?
Total floor space?
Building heated by furnace or steam and ventilated by fan or gravity?

Is the heating self-regulating?
Total yearly expense for all janitor work?
Salary of principal janitor?
Number of rooms cleaned by him?
If any help, who paid it?
How many hours a week does the head janitor sweep?
How much scrubbing does this man do?
About forty questions were asked. About forty persons responded, and several of these only partially, due to lack of data. I have seen several of the men that did not respond and their principal reason was a lack of sufficient data to make it worth while. I tabulated the conditions from about thirty-five schools whose reports were quite complete and compared conditions. This comparison further illus-
trates the lack of any general system of accounting and the effects of the same.

One school pays $\$ 85$ for the heating that another pays $\$ 22$.
One pays $\$ 10$ :, for the cleaning that another pays $\$ 13$.
One pays $\$ 1$ per pupil for its janitor service, while another pays $\$ 2.80$.

One school uses sixty pounds of sweeping compound per room, and another ten pounds.

One school scrubs once a year, while another scrubs eighteen times.
One school never dusts, and another dusts every day.
One school sweeps twice a week; others five times, etc., down the list.

I am certain that not two per cent of the schools know just what proportion of his time the janitor is devoting to different phases of his work. If few districts know just what they are doing, how could we expect that any district should know what others are doing? I could sight conditions without number to prove that the schools are not keeping track of their business in any systematic way.
If, then, it is clear that the schools are at fault, on the side of accounting, and therefore must have a great waste, who is to blame for it? At first thought we would say the board of education, but I see no reason why they should be blamed, only that they afford a convenient dumping ground for all school faults. The trouble is to be found in the system of management, not in the board or any member. Who would expect a business man, when he is elected upon a school board, to stop his business and take care of the school business? Even if we were so foolish as to expect it this expecting would never bring it. In fact, there are but few districts that have a man who can afford to spend his time looking after the school business, and is at the same time, capable of doing it. A school board can never be asked to do anything but have general supervision over the schools.

The party who should be held for detailed supervision over all school matters is the superintendent or principal. A committee should be appointed to devise some adequate system of school accounting for the schools. This committee should be composed of about three experienced schoolmen who are interested in school accounting and one expert accountant.

The board should then turn the business of the school over to the superintendent, who is getting the pay for doing it, and hold him responsible for all the business of the school except the engagement of the superintendent. I have considerable faith in superintendents, but they are human. If I should ever be so unfortunate as to be appointed on a board of education I should advise the board to act thus:

At the beginning of each year hand over the money to the superintendent (who should be under bonds) and say "Here is the money this town will pay for educational purposes. We want you to report as prescribed, we want the best service possible for this money. We will assist you in every way we deem proper, but the responsibility rests on your shoulders."

## By Wm. L. Pieplow.

No feaure o: recent educational deyelopment if of more genuine interest than the movement for a Broader Üse of Public School Buildings. The main objects to he achieved thereby, as I view it, are to continue education in adult life, to encourage culture, to develop social life, and to foster general improvement in the interest of all the people. Evening Schools, Free Lectures, Social and Recreational Centers and opening of school buildings to the use of citizens for purely civic purposes are manifest demands on the part of the people for these vital essentials of human life.

This spirit of self-improvement is no doubt fostered by the fact that the schoolhouse is the big central fact in our American life. Nowhere in the world are such sums spent on public school buildings and equtpment as in the Uuited States, and here, if anywhere, the schoolhouse should have the largest sphere of usefulness.

There seems to be a growing sentiment that it is a mistake to close the schoolhouse door upon the boy as soon as he leaves the school. In a monograph publisbed by the Bureau of Education, Edward L. Thorndyke, Professor of Educational Psychology at Columbia University, makes the startling statement based upon official data gathered with reference to New England cities of 25,000 or more inhabitants, that out of 100 average pupils who entered public schools, 90 finished the fourth year, s1 the fifth year, 68 the sixth year, 54 the seventh year, 40 the eighth year, 27 the first year of high school, 17 the second year of high school, 12 the third year and only 8 the fourth year of high scheol.

Thus only forty per cent of those who entered school finished the eighth grade and only 8 per cent went through high school. These figures, being true of New England cities, must be approximately true of other sections of the United States.

## Evening Schools.

The evening school, has, therefore, become to be recognized as a legitimate, permanent and necessary part of our public school system. The evening school makes provision for those, who, having quit systematic study during the day, wish to make the best use of the
leisure time left after their day's work. The evening school also makes provision for those, who, being of foreign birth, seek to study our language and learn abont our government. The course of study for the evening schools must consequently meet the needs of those attending. There is a very wide field for the possible usefulness of the evening schools, covering not only elementary and secondary instruction, but also giving direction in domestic science and industrial work.
Various types of evening schools such as trade schools, industrial schools, technical high schools; high schools and elementary schools, have come into existence because of these desires and demands.
The Springfield, Massachusetts, Evening School of Trades, aims to meet the needs of the semi-skilled employes in the shops. The instruction is divided into the following departments; mechanical drawing, machine shop practice and tool making, plumbing, woodturning and pattern-making, shop mathematics and electricity.

The Cleveland Technical High School in its evening course offers, besides the usual subjects, instruction in foundry practice, sheet metal work, bookbinding, pottery, leather work, water color rendering and art metal work. Women also attend this school and there are classes for them in plain hand and machine sewing, millinery, art needlework, plain and fancy cookery, table service and laundry practice.

The distinction made in the aims of the Buffalo Technical Evening High School is that it is not a place for learning the "manual parts" of a trade, although some hand work is done. In this school by far the larger part of its instruction is devoted to drawing and the "mathematical, physical, chemical and mechanical principles which are incidental to the different trades." New subjects given at this school are architectural drawing and designing, sheet metal draughting, machine designing, plane surveying, and gas engineering as applied to automobiles and motor boats. Nineteen courses in all are offered.

Coming to the type of the evening high school we find in Newark, instruction is offered not only in mathematics, English, Latin, the modern janguages, science, bookkeeping, stenography and tyrewriting, but also in such manual subjects as drawing, shop work, cooking, sewing, millinery, nursing and art needlework. The Cincinnati High School likewise gives its night pupils carpentry, cabinet making and mechanical drawing and has one avowed trade class in pattern making which is attended by apprentices in that craft. Stenciling, leather tooling, and china painting are given in the Lowell, Massachusetts High School. As a rule, however, the industrial courses found in these schools are of the sort afforded by manual training shops and
are better suited to the needs of amateurs than mechanics already engaged in the trades.

The kinds of instruction given in the evening elementary schools are well illustrated by the curriculum of Buffalo. The course in this school contains the following subjects: Reading, writing, spelling, English language, geography, arithmetic, American history and civics, bookkeeping, typewriting, stenography, domestic science, dressmaking, millinery, mechanical drawing, carpentry and English for foreigners.

In addition to the instruction in English, the program for the advanced pupils in the New York evening schocls also provides for lectures once a week, from the principals or other competent persons, upon such subjects as citizenship and its duties, naturalization, the municipal government, the prevention of disease, the lives of great men, and the significance of the national holidays.

There are other types of schools besides the well-defined types which have been described, giving opportunities of various sorts during the evenings in public school buildings. Thus in several of the Boston evening schools there have been popular classes in salesmanship. The gymnasiums of a high school and two intermediate schools of Cincinnati are used on alternate evenings by classes of men and women who are instructed by competent physical training teachers. In this city a chorus is conducted also by the supervisor of music in an auditorium of one of the schools.

## Free Lectures.

The duty of the state to educate its people is manifest, and municipalities cannot escape their responsibilities. It is true that, in the years gone by, it has seemed sufficient to provide free schools only for the children, but it is beginning to dawn upon all of us that the adults have also a claim to be considered. If education means the safety of the state, then it follows that. the proper training of the adult will bring about better conditions. Various American cities besides maintaining the evening schools, through free lectures given under the auspices of their boards of education, are attempting to instruct the adult. These free lectures cover history and travel, political economy, physics, literature, music, health, poetry, municipal and commercial progress, art, astronomy, etc., all of which are handled by lecturers who are competent, and who illustrated many of their talks with lantern slides and experiments. These lectures are made very instructive and most give entertainment besides. The foreigner who comes to us, may, through lectures, especially arranged for him,
become quickly acquainted with our institutions, and rapidly learn to understand the spirit and practice of our government.

By a thorough organization and systematization of the lectures they can be made to mean much in the moral uplift, intellectual advancement and the education of the adult population of a city or of a small community.

## Social and Recpfational Centers.

During recent years a number of American cities-New York, Boston, Chicago, Cincinnati, Columbus, Milwaukee, Rochester, Philadelphia, Pittsburg, and Pueblo, have been devoting serious attention to the advisability of making comprehensive plans for their civic betterment and development. The so-called Social and Recreational Centers have been evolved.

Of a very different nature from the evening school or free lectures, are the social and recreational centers. While the purpose of these centers is primarily also educational, it is along entirely different lines of conduct. The schoolhouse is utilized for the pleasure and profit of the people of the neighborhood with a view of broadening and elevating the social lite. Debates, literary programs, dramatic exercises, concerts, lectures, library books, educational games, playgames, physical training, basketry, sewing and dressmaking, classes in music, both instrumental and vocal, offer all possible incentive for individual advancement.

The social and recreational centers have been called into existence by existing social conditions that prevail in most of the neighborhoods of a city. They are not a passing fad, but have come to stay.

Opening the Schoors to the Use of Citizens for Civic Purposes.
Our welfare demands that those who enjoy the exercise of the franchise be well informed upon the economic, industrial and political questions of today.

In the process of citizen-building the public schools play the most important part. They contain the very essence of true Americanism; they inculcate ideas of republican citizenship and they fit the youth for the duties which will devolve upon them as they take their places in the pursuits of active life.

Why then deny the use of the public schoolhouse as a meeting place where civic questions can be explained and discussed? Why prohibit the holding of meetings whose object shall be the gaining of information upon public questions, by listening to public speakers and by public readings and discussions? The existence and perpetuation of

American institutions depend upon the intelligence as well as the integrity of citizenship. The schoolhouse is ideally the place for meetings of citizens to discuss public questions, barring, of course, purely partisan and religious meetings.

Vacation School and Playgrounds.
The object of the vacation school is to protect the exposed children from the destructive infection of evil associations and enforced idleness. It affords an outlet for untrained energies along the lines of useful occupations, wise instruction and innocent recreation. It teaches law and order without the burdensome discipline and hurried pressure of the ordinary school. It involves that form of recreation which works itself out in improved disposition and increased power of observation and application. It cares for the moral uplifting of the child whose lot is cast in untoward conditions, and it relieves overburdened, tired mothers of their strain.

The instruction given in the vacation school should be such as will occupy the body lightly but usefully, and the mind still more lightly but with profit. Every hour a child spends in developing constructive skill is a positive contribution to its health, usefulness and happiness. The vacation school can be made a means to do much in this direction.

In our cities and towns we must make definite plans for playgrounds. The ideal location for playgrounds is adjacent to the public schools. The playground when established, should be equipped wih suitable gymnastics and other apparatus, and competent instructors employed, who should properly be under the general supervision of the Public School Director of Physical Culture. If left to themselves the children are more ant to he quarrelsome and to cultivate coarse manners. When supervised they can be taught sports and interesting games that will put life, vigor and brains into their play, and will so influence them that all discord will be eliminated.

It is inevitable. All cities and towns must face the question of a Broader Use of Public School Buildings. Recognizing this, I wish to advance what I deem some sound propositions.

In the first place we should remember that the prime purpose of a public school building is education for the youth, and we must allow nothing to interfere with this purpose.

The moneys raised for the maintenance of the public schools must be kept intact ănd used for no other purpose.

A separate fund should be established for the new departures.
When erecting new school buildings, the question of a broader use
of the plant should be considered and proper provision made to meet the desired innovations.

The board of education must be recognized as having sole charge of public school buildings and grounds and no other body must be given any authority over them. There must be no division as to authority.

## BROADER USE OF SCHOOL BUILDINGS.

Py J. J. Pettijohn of Madison, Wis.

Discussion.
I agree almost to the letter with what Mr. Pieplow has said upon this subject. Possibly I would have stated a few things he has said from a different point of view, but our conclusions would have been the same. For instance, he said, "If education means safety for the state, then it follows that the proper training of the adult will bring about a better condition." We must recognize a democracy such as ours to be efficient and just requires intelligent citizens,-citizens especially intelligent in all matters pertaining to our political or civic activities, and possibly no democracy can afford to trust the training of such citizens to any agency or institution other than to the state itself. The big motive however back of our public school system is not to fit men for the state but to give every individual an opportunity for mental and moral development so that in his daily life activities he will not be handicapped for the lack of educational training. Because economic, religious, social, and other conditions combined with the effects of heredity and physical environment prevent the public schools from giving every individual an opportunity for educational training or an equal mental start in life, does not impeach the motive. Furthermore those who lament or those who boast that the publec schooi is a socialistic institution either do not understand the public school or do not know of what socialism consists. And this confusion has caused a lot of foolish criticism of and antagonism toward the public schools. Furthermore those who are now interested as friends of this so-called "Wider use of the schoolhouse," must clear their minds too if they are to institutionalize new forms of our educational activities upon a sound and lasting basis. Things educational must be guided by educational motives and principles.

# COLLEGE AND HIGH SCHOOL SECTION 

General Session
Thursday, Nov. 9, 2:00 P. M.
Plankinton Hall, Auditorium.
Chairman-Principal George A. Chamberlain, East Division High School, Milwaukee.

Secretary-Donald E. Frank, East Division High School, Milwaukee. 1. Address-"The Call of the Nation." David Starr Jordan, of California.
2. Address-"Can Literature Be Taught." F. A. Barbour, of Ypsilanti, Michigan.
3. Address-"The Relation of the City High School to Country Life." L. H. Bailev, of Cornell.

## THE CALL OF THE NATION.

It is often taken as an axiom that a free country must be governed by a party; that a party of action in control of affairs must be accompanied by a party of opposition whose function is to thwart it at every corner. The machinery of British government is framed on this theory, and from its operation the British people cannot even for a moment cscape. I helieve that the theory is inherently wrong,that party government as we know it, in England or in America, is but a temporary phase in the history of democracy.

Sooner or later the practice of party government must spell disaster, for the party in power can maintain itself only by concession after concession. These concessions are not made in the public interest, else they would not be concessions. They are of the nature of bribery,-some given to the floating vote in order to secure its support for purposes of mere partisanship. The old age pension movement in Great Britain may be most worthy, if the leaders of the party have decided on this as a legitimate and helpful use of the public funds. It is a most degrading movement if the motive is to attract the vote of those who become its beneficiaries. The same remarks apply equally to the pension of soldiers in America. Whether such use of public money is statesmanship or bribery depends on the motive, whether of patriotism or partisanskip.

The party of action has had the upper hand in most of our recent history. It saved the Union. It abolished slavery. At least, the nation did these things under its auspices and by the agency of its greatest leader of men. It has populated and exploited the West. It has developed our national resources. It has played into the hands
of the most gigantic of financial combinations, and these combinations have worked for its retention in power. Little by little they have come to direct the party movement, to claim ownership of the results of its activities. The party of conservation or of reaction might have been even more easily controlled if it had been indeed worth while. It is not worth while, for among our people action will always take precedence over theory. A recent journalist has cleverly said that the recessive party of today, like the dominant one, "has bowed down before the golden calf, without, however, receiving reciprocal attentions from that animal."

Because the original purpose of the party has been lost in partisanship, these names of Republican and Democrat have now no significance. The recent revolt within the party in power indicates no movement towards the other except as a temporary expedient.

Some thirty years ago, the relation of the two parties at the capital was expressed in these words: "I see a band of fat hogs, each with a foot in the trough. I see a band of lean hogs, each struggling and squealing in a vain effort to replace he first."

Today, these party names mean nothing of any importance. It is of no earthly consequence to you or to me if a republican as a republican be governor of Massachusetts or a domocrat as such be mayor of Chicago. One may be interested in the results of an election as in the results of a baseball game or a boat race. One may like to see Cornell win at Poughkeepsie, or Harvard at New London, or the White Sox victorious over the Giants and the Pirates, but after the game is over we turn to other things.

The movement against party dominance and in favor of higher political ideals has its impetus largely with the men of the West. This is because the West is the home of the young men, of college men, of men who think and act. The people are the leaders, and the members of Congress who voice their spirit are for the most part the followers of their own constituents. The movement is Western only in this sense, that the west is still young and full of exurberent optimism. It, is said of Buston that it is "a state of mind," rather than a geographical designation. So with the West, it is a state of mind. It is as possible, though not so easy, to be a man of the west at Pittsburg or Lowell as at Seattle or St. Paul. The spirit of the West is felt wherever young men think and act; and the new democracy, the democracy of action and effectiveness, is a part of its political creed.

In the revival of democracy we must not expect all acts of the people to turn out well. Democracy is no guarantee of good government. An ignorant democracy may be anarchy or tyranny. An intemperate democracy may be the rule of fiends. But in the long run manhood
asserts itself. Men learn by their own mistakes. They provide against like mistakes in the future. Democracy has a higher function than mere good government. We could get law and order, if that is all we want, on cheaper terms. Democracy is the great training school in citizenship in which the rules of good government are worked out by experiment. Its success is the best guarantee of good government in the future. When people know what hurts them, that particular wrong must cease. No nation was ever long held together by force, and all that is worth while in a nation's life endures because it has its seat in the hearts of the people. And in the long run, any people must get as good a government as it deserves. No one ever had permanently a kind of rule which was better than its merits.

It was said by Aristotle that it is the duty of the nation to do those things which the people need, which the nation can do better than the individual. This, I think, is a sound doctrine even down to our day. There is some middle ground between absolute collectivism and absolute individualism, some stopping place midway between socialism and anarchy. There are some things which are best left to the interest or the patriotism of the individual. Each man must eat his own food, must breathe his own air, must rear his own family, must save or waste the results of his own activities. If we allow him to save, we must allow him to waste. If we leave him free to rise, we must leave him free to fall, if he has not the strength to maintain himself in competitive society.

On the other hand, there are vital needs which can be met only by those concerned working together. To be crowded in society demands protection of the individual from society and protection of society from the individual. Neither of these forms of defense is possible without collective action. The individual cannot build his own roads, dig his own sewers, maintain his own jails, fill his own graveyards, educate his own children, without the aid or the regulation of others.

The great needs of our people, so far as government can meet these ends, are summed up in these words: justice, education, sanitation, temperance, peace. Education and temperance are best cared for wihin the state, and we may leave them out of the discussion.

As a nation we have the right to be proud of many things, but there is nothing more to our honor than this. We have a border line, as artificial as a boundary may be, running for nearly seven thousand miles, adjoining the greatest rival nation on the globe,-a boundary traversing lakes, rivers, meadows, forests, cities, mountains and archipelagoes of islands; a boundary questioned all the way, fiercely
disputed in four or five regions "with all the brutal frankness of near relatives". And for this tremendous distance, there is not a warship on either side, not a fortress, not a gun. It has been so for almost a century. All this seems so natural, so reasonable, so much in the nature of things, that most of us never give it a thought. It is true that we as a nation spend today on past wars and in preparation for wars that can never come, two dollars for every dollar we spend on justice, sanitation, conservation and co-operation. But this is the effect of bad habit. It is the residuum of past misunderstandings and past suspicions. We mean nothing by it. We are so busy and prosperous that the drain upon our substances as yet gives us no alarm.

## CAN LITERATURE BE TAUGHT.

From the premises: "That literature is the thought of thinking souls," Prof. Barbour argued:

That literature can be taught.
That to follow the logical processes of a great thinker is a logical training of high order.

That Unity, Coherence and Emphasis belong to literature.
That artistic effects are open to imaginative intellect.
That vowel and consonant rhythm can be cultivated on the sound side, thus De Quincy found beauty of sound in Chaucer.

That not to sympathize is not to understand the sympathetic heart.
That literature is the great character building force in the public schools.

That even youth is susceptible to the beauty and artistic power of literature.

WHAT 'THE CITY HIGH SCHOOL CAN DO FOR COUNTRY LIFE.
Abstract.
By L. H. Bailey.
There is the greatest necessity that all our people understand what the country-life movement is, and help to bring about a proper equilibrium of social and economic affairs. Every agency that teaches the people, therefore, has opportunity to help in this general forward movement. Considered from this point of view, the city high school, as well as the rural schooi, has a function in country-life work. The city high school, then, may react to the rural situation in two ways: first, in aiding to develop a general point of view on the situation; second, to aid in fitting certain persons to establish themselves in
the country. I think that the first is the more important field lying before the city high school.
Our teaching ought, so far as possible, to express the whole truth in any subject that it handles. It is more important that the whole truth be presented than that the pupil be taken very far into particular specialties merely for the purpose of providing what we call "mental drill." If we are dealing with economics or civics in the high school, it is important that the rural phases of the subject be given their proportionate attention; and, so far as possible, these phases of the subject should be presented really from the rural point of view rather than to be included merely by incidental references and illustrations here and there.
The high school should teach the physiology and physics and mathematics of human processes. The difficulty with much of our teaching is that the pupil does not carry it with him into life; and he does not carry it with him because it is likely to be taught in an abstract way and without any particular articulation or vibration with the situations that he has to meet or with the knowledge that he is likely to gain by experience. I do not care much, as I have said from another platform today, about the mere "practical" teaching, meaning by that the direct outcome of teaching in dollars and cents; but I care very much to have our teaching really mean something to the pupil, and to this end all teaching should be applicable.
If there is a department of domestic science or home economics in the high school, then here is opportunity for a very close articulation with rural affairs. I think we shall some day consider it to be important that our people know the actual products of the earth, not only that they may utilize these products effectively but that they also may have the resource that comes from good nature knowledge. Not much of our cookery preserves for us the native form, flavors and odors of the fruits and vegetables and many other products. I looked through a cook book and found that nearly all the recipes for cooking potatoes were designed to disguise the fact that they were potatoes. A department of home economics can bring its students into a real relation with the products of the earth quite as effectively as could a department of agriculture itself. Moreover, if domestic subjects are to be taught, the rural phase or application should not be overlooked any more than the city phase.

The high school library should contain a proper proportion of good rural books. I do not mean so much the merely entertaining kind of superficial literature that is likely to develop within the next few years, but good books of solid information and that give real rural points of view on the situation rather than urban points of view
on rural conditions. If the city high school has a reading room for periodicals, a proper proportion of these periodicals should represent country affairs. My point is that all city pupils should have a real understanding, so far as they are able to get it, of rural conditions, as well as that country people should have a good knowledge of city conditions. The whole fabric of society should be presented to our pupils, so far as it is presented at all, in its proper proportions.

The second line of activities for city high schools is aiding in the preparation of young people for country life. If the high school teaching articulates with the pupils life, then the most in addition that it can do for the boy or girl who would be a farmer is to discover those persons who have these tastes and to send them out to farms where they may get the actual experience. One cannot learn to be a farmer merely by going through a course of instruction any more than one can learn to be a lawyer, a physician, an architect, or a mechanic, by that process. In school one gets a point of view and something of the fundamental theory, and he ought also to have acquired habits of mastery; beyond this, he must learn his practice and application by reading law if he is to be a lawyer, by doing clinic and hospital work if he is to be a physician, by going into an architect's office or into a shop if he is to be an architect or mechanic, or by going on a farm if he is to be a farmer. It is not only a question of learning the manual operations of the farm but also of getting in touch with the real problems and of understanding the psychology of rural life.

It is probable that relatively few town boys can really become effective farmers, at least not until their point of view is radically redirected. In town life there is likely to be very little real work for the boy to do and he grows up in habits of indifference or indolence, if not of laziness. These habits must be completely overcome if one is to be a farmer, not that farming is to be manual toil alone but that the person may be master of his farm and his problem. We have insisted so much on what we call "character" that we have tended to develop the nonactive and negative sides of our youth, and the one who is merely negative has not the qualifications for grasping and managing a business on his own responsibility. Our town youth are likely to be thoroughly drilled in tremendous feats of idleness. Even the establishing of summer schools does not very much change this situation.

Therefore, I think it important that the high school discover the aptitudes of the pupils and then direct them into the particular channels that they seem to be fitted to follow. Those who desire to be countrymen should be directed to farms; and by this I mean to real
farms and not gardens or make-believe suburban enterprises. After the young person has determined whether he desires to be a farmer and probably has the capabilities for it, he will then choose his ways of getting further information and experience; and the responsible teacher in the high school should be sufficiently in touch with the institutions and with the ways and means to be able to guide him effectively in such choice.

## A POINT OF VIEW ON THE COUNTRY-LIFE SITUATION.

There is always danger that we may become so much engrossed in details as to lose our points of view. Every great movement should have the benefit of the long look. We need at times to stand at some distance and to discover the drift, and to ascertain the general reasons why.

What is now known as "The country-life movement" is well under way in all the forward countries of the world. There are epochs in which the attention of mankind is directed strongly in some one direction, coming largely as a reaction from too exclusive attention to some other line of social evolution. These epochs crystallize new ideas, and apply the best conception of the time to the general situation under discussion. It is very likely to happen that many phases or parts in these epochs are over-emphasized and sometimes the advice is incapable of application; but the net result of all such movements is that progress is made. The evolution of society may be conceived to be a zigzag process, developing rapidly first in one direction and then in another, like a man going up hill; but the total effect is progress in the right direction.

Every epoch reaches a dangerpoint. It has been said that the country-life movement is now reaching a danger-point. Whether this is true or not, it must nevertheless be apparent to those knowing the situation that we have now arrived at a time when mere propaganda and mere criticism of current conditions are likely to be overdone. We should now be cautious, careful, and constructive. There is danger that our rural life conventions will be too full of miscellaneous, unrelated, and sentimental suggestions.

## The Rural Movement.

We now all recognize that rural civilization has been in a state of arrested development. We are all interested in correcting this condition, not alone that the occupation of agriculture itself may be satisfactory to those who follow it, but also that the progress of society may be properly proportioned,

If we are to make any real progress in the redirection of rural society, we must distinguish very sharply between those movements that are chiefly concerned in the outward extension of city ideas and welfare, and those that are concerned with the rural ideas and welfare. The back-to-the-land movement is largely a city or suburban impulse. It may have the greatest importance to urban and suburban conditions. The real country-life movement, however, is concerned in the producing of a thoroughly satisfying type of occupation and life for those who are really a part of rural communities. We must also be careful not to confound the desire to sell real estate and to boom certain regions, as exploiting land shows and other means, with the forwarding of the existing rural welfare.
The redirection of country life is to take place very gradually. The situation cannot be very much relieved by mere agitation, fiat, or by any spectacular or sudden means.
All the normal processes of country life are deliberate. For myself, I am content to make suggestions and then to let them work out in piece or in part here and there as they will. The result of our suggestions may not seem to be very great in any one year, but the slow accumulative effect, when exercising itself in a broadcast and fundamental industry, is beyond all calculation when measured in terms of years.
There is now much agitation for the production of "clean milk." Now, a man cannot produce clean milk unless he has a clean mind. He must know what constitutes cleanliness. This necessity brings him into relation with at least a popular knowledge of germs and the way in which they are spread and propagated. The producing of clean milk reorganizes the conceptions of lighting, ventilating, and the construction of stables. The producer must have a new outlook on the kinds of receptacles that he is to use and on the whole process of manipulation. The person who produces really clean milk will have a new reaction to disease of his domestic animals and consequently to disease in general. The whole question of sanitation is a result of the practice of cleanliness.

I might make another illustration of the great change in the keeping of fowls and the production of eggs. The old red dunghill fowl is rapidly being relegated, and breeds are taking its place. Colony houses, brooders, definite feeding mangers, new ideas of rations, and in many cases incubators and other special devices, have redirected the whole point of view on the keeping of fowls. The old haphazard practice of hunting eggs, a practice that typifies unorganized effort in many agricultural lines, is in the process of passing out in the best farm establishments.

Inasmuch as the farming people have been able to readapt themselves so fundamentally to many new practices within the past generation, we have every reason to expect that with equal ease they will adapt themselves to new social, educational and religious betterment. Wholly aside, therefore, from any theoretical necessities of the situation, we expect that the redirecting of country life is to proceed. If one of us could fix in his mind a complete composite picture of present rural conditions, and were to project a similar picture at the conclusion of a twenty-five year period, he would have a comparison that would amaze him.

In many of the farming communities that are most prosperous commercially, there is great lack in social, religious and educational advantages; there may be very little vision in the way of libraries, good societies, civic and political betterment, or the historical background. It is now the fashion to think of "social centers" as providing the solution for the barrenness that exists in many rural districts. It is not to be denied that such centers are greatly to be desired, and yet we must remember that there is not the same necessity for such centers in the open country as in the city, because the conditions of property ownership and of family life and of personal psychology, are different from those in urban communities. It is necessary that we shall develop our schemes for country betterment directly out of the country itself, so far as possible; or, at all events, we must work them out in an indigenous way.

## The Background of Country Life.

The background of the country life movement is clearly the natural environment. As the race conquers, it comes into more intimate relation with the nature environment and expresses itself more confidently. The early Greeks and other early peoples had little knowledge of the items in the phases of nature. The large voices of nature and the large conditions appeal to primitive people strongly,the thunder, the volcano, the lightning, the noise of hail, the rush of the winds and the sea. They could not be expected to have had intimate knowledge of the smaller phases, because the natural sciences had not been developed. Our attitude toward the natural environment is, of course, conditioned directly on our knowledge of it. We have passed through many epochs in our relations to the natural conditions of life. We have only recently passed the great age of mysticism, to come out into the time when we try to explain all kinds of life and all phenomena as governed by law.

It is a common saying that our teaching should be "practical". I would rather say that it is essential that all teaching shall be true.

The best application is a modification of the philosophy of life rather than the application to details here and there. All investigations and teachings express themselves sooner or later in our attitude toward the conditions of existence.

The farmer, of all men, should be a part of his background. Whatever one's theory of the creation, he knows that the creation is not human: he knows that it is divine. If the planet is divine, it is also holy. If the planet is holy, then all the things that are on the planet are equally holy; and all the things that grow out of it also are holy. It is also true that all good honest efforts put into the production and the betterment of these things is a holy effort. A good farmer, therefore, must recognize his intimate relation with creation.

Now, no farmer owns his land. Society allows him to hold the title, but the land really is not his. He is the agent of society to hold and to manipulate a small part of the earth's surface. The reason why society allows a man to "own" a farm, is that he may make a living from it for himself and his family and also that he may contribute something to the sustenance and welfare of the remainder of mankind. The surface of the earth and the air and the sunshine belong, in the last analysis, to all beings that populate the earth. Whenever any one is given the privilege of holding any part of the earth's surface for his lifetime, he is thereby under obligation to society for the use that he makes of that land. No man has a moral right to skin his land, unless perchance the organization of society should happen in any epoch to be such as to make it impossible for the farmer to live by any other process. It is the concern of every person in the world how the farmer uses his land. Farming is a quasi public business, and will be so recognized in time to come.

If the farmer bears a direct and close relation to the creator, and if he also bears a responsibility to all his fellowmen in the way in which he handles his land, then in the best sense no man is a good farmer unless hé is a religious man.

And inasmuch as the farmer is the bottom man in society and thereby constitutes the foundation of that society, it follows that the kind of relation which the farmer bears to his environment will de= termine to a very large extent the attitude which society as a whole will bear to that environment. It is, therefore, of the very greatest consequence to all of us in what spirit the farmer utilizes his land. In fact, this is the bottom question in civilization.
The background of the country-life movement therefore, as also the background of society, is the farmer's relation to his natural enyironment, Whatever plans or programs we may have for modifying


1. Mrs. Mary D. Bradford, Executive Committee
2. Miss Elizabeth M. Herfurth, 2nd Vice President tive Committee
3. J. A. Hagemann, Treasurer
this or that rural condition, the integrity of the final result is going to depend directly on the way in which the farmer reacts to the sum total of his environment; and this sum total is made up of his vibration with the forces of nature as expressed in wind and weather, land and water, trees, birds and beasts and insects, the progress of the seasons, and his conceptions of the earth on which he lives. When these relations are properly developed, the farmer will find himself to be as much a part of his natural background as is the bird on its bough or the fish in its pool; and he will not be tempted to disengage himself from this environment and to live in town.

Solls, fields, meadows, cows, horses, chickens, forests, rains, streams: all these are the materials with which the farmer deals. The character of his handling of them determines whether he will be a masterful farmer or whether he shall be merely a temporary and more or less unwilling inhabitant of a piece of land. Education in terms of a broad and affectionate rural natural history is at the bottom of the country-life situation.

## The Need of New Literature.

The literature of any epoch expresses the state of evolution of that epoch. We are now rapidly developing a first-class technical agricultural literature. We have scarcely yet, however, begun to develop an artistic literary literature of the background of rural life. We must write as intelligently on the natural history of domestic animals as we have written on the natural history of wild animals. We must have as artistic presentation of farm and garden crops as we have of hepaticas, dandelions, trilliums and goldenrods. This is not because these farm subjects are what are called "practical," but because these are the most essential things in the countryman's background. One is never tied closely to any object until it appeals to him artistically.

Too much of our old nature poetry, which we are still so fond of quoting, approaches rural occupations from the contemplative point of view. It has imputed artistic expressions to affairs that are more or less remote from the work-a-day world. We shall never develop the best effectiveness in the country people until we escape the contemplative type of poetry, and express to these people the essential drama of the work that they perform day by day. Of course, it is necessary greatly to extend the technical literature of farming; but it is equally important that we develop also the literary background of the occupation.

# SCIENCE CONFERENCE. 

## PHYSICS AND CHEMISTRY SECTION.

Chairman-Prof. C. W. Trent, Lawrence University.
Friday, Nov. 10, 1911
The meeting was held at the Normal School. It was called to order at $2: 15$ by the ehairman.

Dr. Henry G. Gale, University of Chicago, read the following paper on Mears of Increasing Efficiency of Physics in High School:

Briefly and broadly the aim of the physics course in the high school may be said to be, to train the student to habits of accurate observation about familiar things, to develop in him the ability to think and reason logically about new things, to impress him with the idea of order and law in nature, and to give him a certain amount of practical and useful knowledge.

What should be the nature of the high school course which will best attain these ends, and under what conditions may the teacher do the most efficient work?

It is sometimes charged that our students are completing their year's work with hazy, ill-defined and erroneous notions. If so, they, and therefore we, are wasting time and energy by our present methods. How may we increase the efficiency of our work as teachers, and of their work as students?

In attempting to answer these questions the point which I wish to bring first to your attention is that the high school course should be planned for the good of the average high school student. The colleges should adapt their courses to the high school, the high school should not be primarily a college preparatory school.

A few years ago a number of articles were printed and a number of addresses delivered to societies of teachers which were decidedly hysterical, even panicky, upon the malign influence of the American college on the American high school. We were asked to believe that the college demanded a melange of useless knowledge, and that the high school curriculum had been distorted and abused in compliance with this demand, that the high school requirements were driving the majority of boys from school before the end of the second year, and that those who remained received an all but useless training. Although these views were in many cases extreme, they were backed by large elements of truth. I wish to state most emphatically that in my opinion and, I sincerely believe, in the opinion of most college
teachers of today, the higi school should offer the student what will make the best man of him, not only in physics or chemistry, or in science in general, but in all things. I do not believe at all that there should be one course in physies, for example, for the boys who are to go to college, and another presumably and possibly a better one, for those whose formal education is to cease with their attendance at the high school. If the colleges are not so conducted as to prefer students who have received the training best adapted to their age, and best-calculated to develop their intellects, so much the worse for the colleges. I do not see any escape from the conclusion that there can be only one best high school course, and that the college should adapt itself to this. Whether or not we may advantageously have separate physics courses for boys and girls in the high school, is quite another matter, and one which I regard as entirely an open question. We may look in the near future for valuable information on this point from Mr. Willis E. Tower, of the Englewood high school, Chicago.
Some of the articles and addresses to which I have referred seem to advocate very warmly the teaching of nothing which the student does not already know,-the discussion of phenomena of every-day life, the simpler the better,-the amusoment of the student,-the elimination of everything difficult,-the selection of subject-matter from the student's "environment", -the reference for all concrete ideas to "human experience," etc. There is much of great value in these suggestions but a very grave danger lies also in this direction. We all realize that none of the problems of education would be solved by putting a kindergarten course in the high school. Indeed, I will say, as a second point in my creed, that I do not consider any teacher of physics worthy of the name if he does not train his students to deal with intellectua! problems. The practical applications of physics are desirable subject-matter. Illustrations should be drawn, as far as possible, from familiar sources, and surely there can be no greater error than to give the student subject-matter of too advanced or of too complicated a nature. But physics is not properly fulfilling its field if it degenerates into what some one has called mere "phenomenology". It is undoubtedly much easier for the teacher to give only the simplest possibie course, to cover only a little ground, and to discuss only things which are already more or less vaguely familiar to the student. But to my mind, one of the best features of the high school course in physics is that it affords such admirable opportunity to offer to the student new ideas. Can education have any higher aim than to enable one to grasp and master and assimilate new intellectual material? Is not this the essential feature of mental growth?

The ideas of molecules and molecular motions are new to most students, but I have never noticed any difficulty of comprehension, or any lack of interest when the laws of gases, evaporation, boiling, latent heat, etc., are explained on the basis of the kinetic theory. The mutual perpendicularity of motion, magnetic field, and induced current is absolutely new to practically every high school student. The idea that something east and west, and something else north and south can produce a third thing up and down certainly lights new fires in the imagination.
I could never bring myself into complete sympathy with the late lamented, so-called, "New Movement among Physics Teachers", because it seemed to me a false ideal to appeal so markedly and almost exclusively to the natural desires and inclinations of the student. If a danger confronts the American high school it seems to me to lie here. Courses in music, drawing, manual training, sewing, typewriting, stenography, and cooking are increasingly accepted for graduation. I am glad to see these courses in the curricula of our high schools, but they do not represent a "progressive sequence of increasing difficulty." Latin does, but it is dropping out. The worst enemies of Latin cannot deny that it is one of the best taught subjects in the high school, and one which ranks high in disciplinary value. Advanced arithmetic, bookkeeping, commercial geography, and history of art are being introduced. They are good, but they must replace something. There is a decline in the importance of the place given to mathematics in the curricula of the high schools. Solid geometry is being dropped as a requirement, and algebra through quadratics is foliowing. Physics is one of the very few subjects, in addition to mathematics, in which we may introduce abstract ideas,general notions. It is of the greatest importance to have something of an abstract and general nature presented to the student at this stage of his mental development. Professor Münsterberg has written: "I do not want to be misunderstood as seeing no fault in the American system of instruction. There are not a few wrong tones that hurt the ear of the newcomer, discords to which he will never become insensible. But these fundamental errors belong to the school rather than to the college. It is enough to point out the most devastating one,-the lack of mental discipline at the very beginning of intellectual growth. The school methods appeal to the natural desires, and do not train in overcoming desires, they plead instead of commanding, they teach one to follow the path of least resistance instead of teaching to obey. The result is a flabby inefficiency, a loose vagueness and inaccuracy, an acquaintance with in hundred things and a mastery of none,"

Is it not true that the majority of high school students are intellectually lazy, do they not prefer to be amused, to see entertaining experiments, to run toy engines, and assemble electric motors? It is the line of least resistance, the line of the natural desires. And, of course, such things are good, thoroughly admirable as a part of the physics course. Interest is absolutely an essential thing. But will a course in mere "phenomenology" produce the desired intellectual growth? Does it not tend rather to "a flabby inefficiency, a loose vagueness and inaccuracy?" With the present day tendency in the high school to make more and more of the training useful and practical, with the decline of interest in the classics and mathematics, I hope to see the intellectual aspects of physics strenghened. By this I do not mean that I hope to see more mathematics introduced into the high school physics course. I mean that the material presented both in the class room and in the laboratory must demand the intellectual respect of the student. "Rub a match on a rough board, observe and record the results," as a laboratory exercise is perhaps an extreme illustration of the thing to be avoided, although the lighting of a match would be a satisfactory answer as one of a dozen illustrations of the generation of heat by friction. One of the hardest problems for the teacher is to decide as to the "plane" of the course. We shall all agree that the course should not be made ridiculous by too great simplicity, and also that the ambitious young bachelor or doctor should not attempt to assign all he knows, or ought to know, to his classes. An infallible rule should be to start with your classes on the intellectual plane at which you find them, no matter how simple the first lessons must be in consequence.

The difference of opinion beween those who believe that our present physics courses are good, and those who would like to see a very radical change in the spirit and content of high school physics seems at present to be concentrated to a certain extent on the dyne. While I do not particularly admire the dyne, and do not feel sure but that some other unit might well be chosen instead of mass as the third in an absolute system of units, I am inclined to meet the arguments of the opponents of the dyne. Even Professor Hall, if I understand his position correctly, is about ready to abandon it, chiefly because the student when confronted with the Force $=$ Mass $X$ Acceleration formula has to meet the dyne, poundal, gram and pound all as units of force. My answer to this is never to use any unit of force except the dyne in the $F=M$ or $F==\frac{M V}{T}$ formulae. I cannot help but feel that the cause of physics teaching would be benefited if we should all take an oath never to let the werd "poundal" again pass our lips.

If the word slips out inadvertently we should urge our students to forget it as quickly as possible. I try to impress them very strongly with the idca that as the result of our defin tion of the dyne, $\mathrm{F}=$ MA when $F$ is the force in dynes, $M$ the mass in grams, and $A$ the acceleration expressed in centimeters and seconds.

Professor Mann's chicf objection to the dyne is, I think that the student cannot experience it,-it is too small to actually feel and work with. My belief is that we should introduce some things which require deep thought,--alstract thcught, if you please if we are to get the best out of our subject. I agree that the greater part of the course should be conerete, directly referable to the students' experience in daily life and that every general idea should be given an introductory background, simple and concrete. The idea of the dyne is difficult for nost beginning studenis, but isn't it, on the whole, worth while?

1 ícel strongly that we should give our students, more or less casually, some glimpscs of the latest and most striking advances in physics, before they become matters of general knowledge and before they are incorporated in textlocoks. Wireless telegraphy and Roentgen rays were' illustrations in the past, and the electron theory, gaseous ionization, etc., are nore recent illustrations. This is, of course, an addit onal lurden on the teacher, but in the present age of magazines there are always many articles on the live scientific topics of the day, articles condensed and popularized for the busy man. Science occupics the foreground in the intellectual advancement of the present age, and we are not giving our students full measure if we do not give them some glimpses of the heights heyond their reach, and of the regions still imperfectly explored.

This leads us inevitably to a point which has undoubtedly occurred to many of you, and which I wish to emphazise, as the third point in this discussion. Do not try to present too much. And here, of course, the teacher's judgment must decide. It would be easy to spend a full year on the simplest and most common practical applications, or a full year on mechanics or electricity. With only a limited number of periods per week, and all too few weeks in the year, the responsibility rests with the teacher to decide what shall be omitted, and what included in the high school course. Many teachers seem to have a false sense of pride about omitting any part of the material contained in a bock. This seems to me to be altogether wrong. Omit whatever you choose, if you feel that it is for the pupils' advantage. Omit whatever you choose if you feel that you have something better to offer instead. Feel that it is your course and that you may mold it as you wish. How uell we teach is very much more important than how much.

Since the nature of a course depends so largely on the individuality of the teacher, I have never been in favor of syllabi and lists of requirements and definite outlinєs except as aids to the teacher. If a teacher cannot give a proper course, except under the restraint of a syllabus, that very restraint may make the course much more deadly and valueless to the student than it might otherwise have been. I visited recently a school in a large eastern city, and found the students reciting word for word certain assigned passages from the text book. And I learned that this was the usual lesson. Every day certain passages were to be memorized. I think that we all appreciate the full horror of the situation, the direct outgrowth of a system of definite, prescribed topics, on which the students were to be examined later. How very much more valuable the course would have been if these teachers, capable people, had been free to conduct their courses on their own responsibility. They were thinking of the examinations which their students were to take, and I suspect they were interested, probably unconsciously, in the passing of these examinations more for the sake of their own reputations as teachers than on behalf of their students. To give their students the drill they felt was necessary in the syllabus topics took all the time they had. There was no time for the finer, higher and more human aspects: This situation is sure to arise, whenever the examination is not given by the one who conducts the course. The teacher demands a syllabus as a check on the examiner, and as soon as he has a syllabus he will begin to train his students primarily for the examination on the syllabus topics. It is hard to imagine a system more potent for discouraging and destroying good teaching than that of the board of regents of the state of New York. Any system which involves the conducting of courses to meet examination on the topics of a syllabus, is an enemy of good teaching. It leads to the definition-learning type of physics against which progressive teachers are in revolt. We of the west shculd congratulate ourselves that we are comparatively free from the domination of the college entrance examinations. They work, inevitably, in the same direction.

A certain amount of uniformity in the content of the physics courses in different high schools is probably desirable, but in the attempt to get it, there has been very great danger in the past of making the demands so definite and so excessive, that the teacher was seriously handicapped. If the high school teachers wish to have a syllabus, they are the ones to draw it up. College men should be glad to help, if. asked, but the initiative and the responsibility should rest with the men who are actively engaged in teaching physics in the high schools. The advice of normal school men should be sought, of men
who are making a study of teaching, and especially of those who are studying the teaching of science. I cannot believe that the situation demands any extreme measures. While I am too much of an optimist not to believe that there will be changes for the better in the high school physics courses within a decade or two, I believe that these changes, whatever they may prove to be, will come slowly. Whenever any considerable fraction of the high school men of the country feel that the absolute units and Newton's Laws of Motion should be omitted, you may be sure that the colleges can and will meet this change in a satisfactory manner. One of the changes sure to come in high school physics is a reduction in the amount of material presented. And no doubt we shall have some degree of unanimity as to what may be omitted to the best advantage. If it should be decided to omit the absolute units, those of us who wish to emphasize the practical applications of physics can define the output of a dynamo in terms of horse-power instead of in kilowatts. I have always felt, however, that the highly desirable, and I hope, inevitable adoption of the metric system of weights and measures would be greatly hastened by the exclusive use of the metric system in the high schools. I am inclined to think at present that if we retain the metric system, we may well retain the absolute units.

While the need of shortening the high school course has been advocated frequently of late, lery few definite suggestions have been offered. What we need is experiment and abundant testimony. To my mind, the best step at present is for each teacher to decide for himself what to onit. This practical test will give us much valuable data. Many of us are now attempting to cover too much ground and the problems of what to omit is not at all a simple one. We shall soon be in a position to back our opinions by experience. We must not impoverish the course by eliminating the illustrative material, we must keep it as close to the student's life as possible, but we must not lower the intellectual plane of our subject. If there are certain portions of what we are attempting to teach which any considerable per cent of our students are unable to master, we are certainly wrong to include them. If we must spend too much time on a certain point to make it absolutely clear, we are not teaching wisely if we include it. It may be the fault of the individual instructor, but should it prove to be a matter of common experience that very few high school students have a thorough understanding of, let us say, the laws of falling bodics, after the first day's discussion and that more than a very few are hazy after the second or third brief discussion of it in review, then we should admit that the laws of falling bodies take more time than they are worth. In the same way what we need is the
testimony of a large number of witnesses on the relative importance and time required to master various other subdivisions. Is terrestrial magnetism worth while? How about Newton's Laws of Motion? The Wheatstone Bridge? Static machines? The formalae for lenses? Capillarity? If something must be omitted, we should omit the things which yield the least for the time and effort spent. We should retain those in which our efforts are well repaid, if we wish to make our courses efficient.

The following plan for increasing the efficiency of our high school physics courses is, to my mind, a practical one. Let each of us make a conscientious effort to decide by trial the amount of time required to make certain topics clear to our classes. Let us weigh carefully the importance of these topics, relative to the whole course. Let us get at the efficiency of these different points for doing for our students what we feel that physics ought to do. As soon as we have reached conclusions let us compare notes, first with our colleagues in the same schocl, if there is more than one instructor in physics, and then with the teachers in neighboring schools. To draw any conclusions of permanent value about the desirability of certain subjectmatter, we should have an extended investigation on these conclusions, probably by questionaire. If we are to decide whether or not to omit the dyne, for example, it is not sufficient to know that some one teacher approves or disapproves it. He may have decided by conscientious trial with many classes, that the notion of the dyne is too abstract and dificult for high school boys and girls. Another teacher may feel that with very little trouble he is succeeding in giving his students a clear and correct knowledge of the dyne. Obviously, then, a satisfactory conclusion as to whether or not the preponderance of evidence is for or against any portion of the subject-matter can be obtained best by conimon examinations given to a great many schools. But this should be undertaken as a piece of educational investigation, in which teachers are asked to aid voluntarily. The value of such an investigation would depend, entirely on the wisdom with which the questions were selected and on the number of teachers coöperating. Until we can obtain smeh a body of evidence, the individual teacher must be the judge of $w$ hat it is best to omit in his particular classes, always leaving out those subjects which in his judgment repay least for the time and effort spent in mastering them.

While I am advocating the greatest freedom for teachers in their classes, please do not understand me to approve of looseness in ideas or looseness in method of presenting the subject-matter. Indeed, I advocate, as of fundamental importance to successful teaching, proceeding by points. By this I mean that an effort should be made so
to organize the material that it may be presented under definite headings, and that under these headings the teacher should endeavor to make each day's lesson as nearly as possible a unit, so that when the student says to himself, "What have 1 learned today?" he may be able to find a decisive and clear cut answer. When you have a definite point to discuss, and, of course, a point worth while, and can arrange the day's work about it, you may be sure of satisfactory progress. In the larger aspects we do this, of course, proceeding through light, sound, electricity etc., but I feel strongly that each day's work should be made more or less complete in itself. Here also the responsibility rests largely on the teacher.

And this brings me to the fourth point which I wish to emphasize. The most important element in a course in high school physics is the teacher. The inspiration must come very largely from him. I like to see discussions in class run far afield, chemistry, astronomy, physiology, meteorology, all should contribute their share under the guidance of the alert and resourceful teacher. Many things should be mentioned in passing which the class is not required to remember, and even occasionally things which you cannot hope to have them understand at the time.

I am coming to believe that the good that students get from their courses is almost exactly proportional to how hard the teacher works. I am not thinking now so much of the work done outside of the classroom in the preparation of lecture table experiments, although I regard these as of vital importance, or in the reading of papers, etc., as of the amount of energy expended by the teacher during the class hour. It is not an easy thing to bring to every face that indescribable look of intelligence, to every eye that sudden brightening which comes only when a hard point is definitely mastered, when a hazy point becomes definitely clear. As Professor Alexander Smith has said:
"Extraordinary variability in the speed with which different individuals apprehend the same thing, is one of the most conspicuous qualities of a group of human minds."
And the conscientious teacher will not spare himself in making the difficult point clear to all, although aggravated cases may wisely be postponed until after the regular class hour. Absolute understanding is necessary at every step in the progress. As soon as the student's perception ceases to be clear, twilight will be followed by darkness with the suddenness of tropical night. Starlight may trickle through the consciousness, and perhaps even moonlight in some later division of the course, but once night has fallen and disheartened and dis-
couraged the student, only a miracle can bring back the full clear light of day.

In presenting a new idea we cannot expect a satisfactory reaction on the part of all, or even many of our students at the first attempt. Permit me to quote again from Professor Smith's article on "The Rehabilitation of the American College, and the place of Chemistry in it," an address read before the Section of Education of the American Chemical Society at Detroit in July, 1909, and dealing largely with the teaching of Chemistry to college students.
"The first hearing of an idea produces but a faint track in the brain. It is the putting together of this idea, in its original setting, and also along with new ideas, that converts the first faint track into a travelled road. Is it not one of the strong points of language study that the student must put together in endless variety of forms, the limited number of ideas he is trying to master, and must do this by his own efforts?

Again, repetition explicit and persistent is absolutely essential to fair acquisition. The lack of this in science teaching has recently been pointed out by President Remsen. Yet much repetition in a lecture is out of the question. It becomes tedious and boresome. It is like having the same person introduced to us formally five or six times over. We are conscious of boredom the second time, irritation the third time, rage the fourth time, and thereafter of settled hatred of introducer and introduced alike whenever we hear that person's name. Yet if we had been furnished with an opportunity spontaneously to recognize the person the second time, we should have been pleased to meet him on that occasion, we should have grected him as an acquaintance on the third occasion, and have felt the impulse to close friendship before long. We cannot alter human nature. In the study of language we have an opportunity to meet and recognize the friends whose acquaintance we first make through the dictionary, and the subsequent encounters follow the line of our natural instincts. If we fail to recognize one of our word acquaintances, the request for a fresh introduction comes from our own side. Does not the informal discussion of chemistry in the class room furnish just the sort of opportunity we require for repetition without boredom? Is the almost limitless repetition in language one whit more than is necessary? Can we then afford to do with any less amount of it in sturying a science?"
I think we all recognize the need of this continued reiteration especially in connection with the more difficult portions of physics. What Professor Smith has seid in regard to the impossibility of repeating
in a lecture applies even more forcibly to the textbook. This great responsibility, therefore, falls unavoidably on the teacher. He it is who must lead the class room discussions, and with tact and rare skill bring back the new ideas in various poses and robed in different garments, until the student will recognize the acquaintance in unexpected places, and in new and strange disguises. Such discussions should also bring up new ideas, and show whether or not your students are learning to reason. Facility in forming and testing hypotheses is perhaps as valuable an addition to the mental equipment as any they may acquire.

Informal class room discussions seem to me to be of such great importance that it is necessary to reduce the more formal recitation to a minimum. But how can we be sure that the students are studying their assignments unless we can have recitations at considerable length? For many years I have used a plan which I learned when I took my first course in nsychology under Professor Angell.

At the beginning of the hour ask the class to write for say five minutes on some definite point in the advance assignment. While this need not be done every day, it should be done so often that the class will be aware that it may be done any day. The practice beside giving the instructor a check on whether or not the student has studied his lesson, possesses great pedagogical value, as it requires the definite organization of the material in the student's mind. With this plan the instructor may often omit the formal recitation entirely, and devote the period to review, to the discussion of the accompanying laboratory work, to illustrative experiments and to informal discussion.

Time may often be saved, and very effective teaching done, by proceeding at once with the problems in a certain subdivision, and omitting entirely class room recitations on the theory. In such cases the teacher should outine inieily the textbook matter, before it and the problems are assigned. If your students can solve the problems, you need have no worry about whether or not the theory is clearly understood.

There is no better test for the efficiency of your teaching than short and frequent examinations on topics in review,-written recitations, if you prefer the name, of say ten minutes. They enable you to test how clearly the class is comprehending. No examinations should be dreaded by the students. If you are teaching rightly and they are learning rightly they will like them. When a class shows signs of terror at the approach of an examination, you may be sure that something is wrong with the teaching. While examinations should never be mere memory tests, but teaching evercises, we have a right to de-
mand that the memory shall hold, with the utmost tenacity, the facts which are needed as a basis for thinking. The burden of correcting papers may be greatly lessened by formulating questions to which the answers are short, often even yes or no.

In an address before the American Federation of Teachers of the Mathematical and Natural Sciences at Minneapolis last December, Professor Thorndike made some admirable suggestions as to several forms which these tests may well take. In one form of test the student is asked to fill in missing words in a succession of sentences on the subject-matter in question, in another to write some fact suggested by each word in a list. Tests like these form an excellent supplement to numerical problems as an index of the efficiency of your teaching. Not the least advantage of such papers lies in the fact that they may be written quickly and corrected quickly. It is a very encouraging fact that the officers of the American Federation of Teachers of the Matinematical and Natural Sciences have brought Professor Thorndike's ideas to the attention of several thousand science teachers who belong to the Associations allied in the Federation. These teachers are asked to cooperate in testing the value of Professor Thorndiike's ideas. Work of even more fundamental importance is being done by Professor Otis W. Caldwell of the University of Chicago. Professor Caldwell has obtained valuable results on the reaction of elementary school children to scientific ideas and the work is being extended to the high school.

Let us keep our courses rich in thought content, let us omit what we must in order to teach the remainder well. Let us do all we can to free teachers from the incubus of outside examiners. Let us remember how important it is to throw ourselves whole-heartedly into our work. As aids to good teaching let us endeavor to proceed by daily units, let us demand brief but frequent papers on the advance assignments and in review. Let us not forget the necessity for continued repetition, the importance of informal discussion, and finally let us be alert to adopt whatever proves to be of value in new theories of science teaching.

Superintendent G. O. Banting, Stoughton, Wis., read a paper on Practical Work in Physics.

[^11](1) Segregate the boys and girls, giving each the kind of work that appeals to them.
(2) Have a part of the work of the girls' division in charge of the teacher of domestic science.
(3 Substitute field work for part of the laboratory work.
(4) Allow more freedom of choice in both laboratory and field work. Let boys and girls do what they as individuals want to do.
(5) Have the pupils do more library work in science. Let them get acquainted with scientific literature. Give them free use of the laboratory for trying experiments suggested in their reading. Let local conditions determine the character of much of the work.

In the discussions Mr. Upham of the Whitewater Normal stated that, although inventions were sometimes conceived by men of little scientific education, their practical working out was made possible by the help of the trained scientist.

Dr. Gale said that the pupil should learn that the intellectual aspect of puysics is worth while.

Mir. T. H. Moyle of the Menomonie high school read a paper on Chemistry and Daily Life.

Abstract.
The views of theoretical chemists hiave made our texts in general chemistry too much physical chemistry, i. e., we have too much theory.
in an effort to add completions to a subject, detail is inserted hav* ing no vital interest, e. g., the inert gases of the atmosphere; a discussion of the preparation and properties of fluorine and hydrofluoric acid.

A simplifying of the course by some of the above admissions will give a chance tor the armission of some of the following topics which I consider more important.

Boys:
Some soil chemistry.
Chemistry of fuels and illuminating gas. Testing for impurities. Alloys.
A fuller treatment of metallurgy.
Cement and lime.
Glass and clay products.
Girls:
Bread-making and baking powder.
Classification of foods.

Soap-making.
Cleansing.
Water softening.
Disinfectants.
There is really no question as to such a course. The making of real things of everyday life, adding interest; where it is as well organized there will be just as much discipline in it as in the stereotyped course.

Why should we regard as final the views of the college as to what should constitute a course when they, on their part, give our students no recognition of having had any chemistry?

In the discussions Mr. Treat said that the college does not dictate the course for the high school, and that it is the place of the high school to provide proper instruction.

State Inspector Terry said that laboratory work offers an opportunity to give instruction according to the ability of the pupil to do individual work.

Superintendent Kircher of Dodgeville read a paper on Matter and Method in High School Physics.

Abstract.
No subject should be taught in high school physics unless the pupils have or can obtain enough experience to warrant a concrete treatment of the matter. Laws and principles should be deduced from experience and not from rules.

The apparatus used in the laboratory, laboratory work, and problems should be taken from the environment of the pupil.

All fundamental laws and principles should be constantly reviewed by means oï problems involving them.

The section adopted a motion that section meetings in the 1912 conference be set for two afternoons.

Meeting adjourned at $4: 45$.

> Isabel Henkel, Secretary.

## BIOLOGY AND PHYSIOGRAPHY CONFERENCE.

Normal School, Friday, Nov. 10, 1911.
Meeting was cailed to order by Chairman John C. Pierson, at 2:00 P. M., who stated briefly that the object of the meeting was to discuss some of the phases of the teaching of physical geography and biology in Wisconsin high schools.

The Chairman then called upon Prof. F. F. Mitchell of Oshkosh, who opened the discussion on physical geography. He said that every
teacher of geography should have thoroughly in mind a clear definition of geography. He then proceeded to define it as the science of distribution, stating however, that other teachers of geography might have other definitions. Then he stated that the source of all geography could be classified under four heads. (1) The earth as a sphere (2) The land and water of the earth, (3) The air, (4) The life. He then stated that he would teach simple facts about these subjects, but relating each to some problem of distribution. He showed how, if this scheme were carried out, the whole subject of geography would develop as a single unit with a single purpose, instead of a conglomerate mass of unrelated facts as is usually the case. He then said that a geography text should be a high class exposition.

Miss Bertha Henderson followed in the discussion. She agreed in general with what Prof. Mitchell had said making a plea for more. practical work in geography. She said that the success of the work depended largely upon the teacher and that she must have, 1-a knowledge of the subject matter, 2-a knowledge of psychology, 3-a pleasing personality. A general discussion followed.

The Chairman then called upon Prof. C. B. Atwell of Northwestern University, Evanston, Ill., who spoke as follows:

## ON THE TEACHING OF BIOLOGY.

The coming of Louis Agassiz to Harvard College in 1848 to lecture upon comparative anatomy marked a great forward step in the teaching of biology in the United States. His personality, his scholarship, and his method of instruction combined to produce a number of remarkable teachers, who were largely influential in establishing modern methods of teaching biology in our leading institutions. "Probably no one," says G. K. Gilbert, "except Hugh Miller, did more to popularize science in our time than Agassiz, and no other teacher trained so many young rising naturalists." But these men were zoologists for the most part, and, naturally enough, their courses of instruction had a strong zoological trend; their material, illustrations and discussions pertaining largely to animal life. For years "Biology" meant hardly more than the study of zoology by the laboratory method.

The publication of Darwin's Origin of Species (1859), and the consequent discussions pertaining to the theory of evolution brought to the front as defender of Darwin's views, and as promoter of things biological, Professor Thomas H. Huxley. Like Agassiz, he was a teacher of comparative anatomy. Among his many essays and lectures we find two of special interest to us today, one on the Physical Basis of Life, and the other On the Study of Biology. In the latter,
delivered in 1876, three years after the death of Agassiz, he undertook to answer the question, Why should we study biology?

First, he says, "because thereby alone are men able to form something like a rational conception of what constitutes valuable criticism of the teaching of biologists," meaning that no one could hope to dis. cuss intelligently the great biological problems of the day without first hand knowledge of the fundamentals.

His second reason is even more practical, namely, that the "general as well as the professional public should have sufficient knowledge of biological truth to be able to take a rational interest" in the theory underlying the study of infectious diseases known as the germ theory.

His third reason is the promotion of agriculture, which he says has been entirely revolutionized in the last forty years as a result of biological research.

Having given these three practical reasons for the study of biology he asks the question, What is the best way to study it? And answers "By the laboratory method as in the physical sciences." And to the question, When may biology be best pursued? he answers that he does not see any valid reason why it should not be made to a certain extent a part of ordinary school training . . . and of secondary school instruction carried out somewhat on the same principles as in his own laboratory, in London.

In giving advice to those who propose to study biology for practical purposes, especially as a preparation for the practice of medicine, he says "There is no training so fitted . . . as the discipline in practical biological work." By "practical" work he evidently meant laboratory practice. This was in 1876. Those of us who recall Hukley \& Martin's Practical Biology will remember its great influence upon the development of teaching the subject in the ' 80 's and 90 's, and how the first half dealt with animal life, beginning with the frog, working down to the amoeba, through outlines covering 376 pages, and then taking up plant life with yeast as the first subject, and working upward to the bean, through 105 pages. He always advocated the use of plants in his course of study, and on this point he says "In respect to teaching something about the biology of plants there is no practical difficulty, because almost any common plants will do, and plants do not make a mess-at least they do not make an unpleasant mess; so that, in my judgment, the best form of biology for the teaching for very young people is elementary human physiology on the one hand, and the elements of botany on the other; beyond that I do not think it will be feasible to advance for some time to come. But then I see no reason, why, in secondary schools . . . we should not hope to see instruction in the elements of biology, not perhaps to the
same extent; but somewhat on the same principles as here." (Meañing in his own laboratory in London). "There is no difficulty when you have to deal with students of the ages of 15 or 16 , in practicing a little dissection, and in getting a notion of, at any rate, the four or five great modifications of animal form; and the like is true in regard to the higher anatomy of plants."

Agassiz's teaching developed investigating naturalists and promoted research. Huxley popularized the subject in public lectures and essays and standarized a course of instruction in practical laboratory work, adapted for colleges and the stronger secondary schools, and which is substantially the basis of the courses of study now in use.

But biology as taught in the schools and colleges until close up to the 90 's was largely zoolcgy, mainly, it seems to me, because of the influence of Agassiz's naturalists and the handicap placed upon botany by the popularity of a method of study known as Analysis of flowers, which that science inherited from Linnaeus. Biology is not a onesided science. It deals with all forms of living beings. Animal life cannot be explained without a study of plant life. Once the scientific spirit was aroused, the study of plant life broadened and botany soon came forward for its full share in biological instruction.

In many colleges for more than twenty years instruction in biology has been divided between the two phases, botany and zoology, introductory courses being offered in both. This plan is also in use in many of our larger and stronger high schools, where I believe it is regarded as successtul.

Although the fundamentals are the same in both phases of the subject, the structure and morphology are very different. The student avoids confusion of ideas and gains a better training and a deeper insight when he devotes a year to one phase, rather than dividing the time between the two or undertaking to mingle them in a comlined course.

Since Huxley's day many reasons have been set forth for the study of biology, and many textbooks and laboratory guides have been published following one plan or another. The plan of following the evolutionary thread through a series of selected types has been popular, especially in the colleges, but a marked tendency toward the practical and informational side of the subject has led to many modifications. Some recent textbooks have appeared which make the economic and humanistic the emphatic factor of the entire course in secondary schools. It is interesting to note the various reasons offered by several of our popular textbook writers for the maintenance of biological study in secendary schools. Their views may be briefly stated as follows:

Ganong, 1899, in The Teaching Botanist. The study of biology (Botany).
(1) Develops the scientific instinct.
(a) by exact observation. "The study of microscopical anatomy is one of the best disciplines for training in observation."
(b) by critical comparison and generalization. This develops the morphological instinct.
(c) by developing faith in causality. Every effect is preceded by a cause.
(d) by estimating evidence in the formation of conclusions to be held as probable or possible.
(2) Develops intellectual honesty.
(3) Develops intellectual independence.

Coulter, 1904, in The School Review. "Botany as a factor in Education."
(1) Cultivation of the scient:fic spirit; the accumulation of observed facts as the basis of theory.
(2) Gives a training peculiar to itseif. Reciting about science is not training in science. Laboratory method is only a means to an end. Habit of observation is a result only.
(3) Power of analysis is to be developed.
(4) Analysis is barren without synthesis, which must follow.
(5) Humanities lead to appreciation and self injection. Science leads to formula and self elimination.
Lloyd \& Bigelow, 1904, in The Teaching of Biology.
(1) The Pleasure Value.
(2) Discipline of Mind Involved in Method.
(3) Humanistic value as the relations to health and d:sease and to progress of agriculture.
(4) Essential facts of the physiology of reproduction.
(5) Develops disinterestedi judgment.
(6) Teaches adjustment to environment.
(7) Raises ideals of life.

Galloway, 1910, in Elementary Zoology.
(1) Primarily concerned in our life interests.
(2) Evolutionary conception as shown by ecology, morphology, and physiology of animals is is much a human interest as is agriculture or stock breeding.
(3) At every legitimate point introduce material looking toward economic and humanistic interests of pupil.
(4) Use subjects intrinsically interesting and calling for original work in fleld or library.
((5) Seek mental activity rather than information.
Sharpe, 19i1, in Laboratory Manual in Zoology.
(1) Emphasize physiological relations of plants and animals.
(2) Induced thinking is of more import than attempts at memorizing, hence the problem method.
(3) Practical aspect is most desirable as opposed to the strictly educational and cultural function (Spencer) of this study.
(4) Should include training in logical thinking and exactness, with references to food, clothing, health, etc., having practical relation to the subject.
A superficial view of this long list would lead one to think that the reasons for studying biology, and the value to be gained thereby, were many and various, and that hardly two writers were agreed in the matter. But upon a more careful survey, making due allowance for varying phraseology having essentially the same meaning, one may discover that the writers whom I have quoted agree practically in three essentials, namely:

First, there is an intellectual value arising from the discipline in the method used in this study.

Second, there is a scientific value arising from the morphology and physiology without which the subject would cease to be biology.

Third, there is humanistic value arising from knowledge acquired relating the pupil's life to his environment.

All these values are to be emphasized and brought out. The development of these values in fair proportion in a class of first-year high school boys is the difficult problem, and its solution depends not so much on the textbook, the topics, and the types selected for study, as upon the teacher himself. I do not know a more difficult subject to teach in a high school than biology. Greek, Latin, German, history, chemistry, physics, are easy compared to it because their materials are so well organized and the methods established. But the study of living things is an ever changing and ever growing science, and the successful teacher must be lively to keep up with the procession of new facts, methods, and the great variety of problems pertaining to life.

It would seem as if the course of instruction in biology in secondary schools is now swinging back somewhat toward the earlier type mentioned by Huxley, and away from the evolutionary type which has developed in the colleges and which has exerted a strong influence upon teaching in secondary schools for twenty years or more. This I regard as a trend in the right direction. Much valuable information pertaining to man's relation to plant and animal life, much that is sociological and economic, can and should be taught in connection with the high
school courses in biology. It is to be hoped, however, that the demand for this humanistic side of the science will not take away the pupil's opportunity for a scientific, comprehensive, and orderly study of either botany or zoology. There is evidence that the mixing of the phases by a sort of alternate treatment produces confusion of ideas and many misconceptions. Either phase, botany or zoology, taken alone makes a center of vital interest around which all needful problems may be grouped for emphasizing the practical and economic side of the subject. I venture to list here a few topics for personal experimentation and investigation on the part of pupils under the guidance of a competent teacher. Such experimentation can be done in plant life most easily.

Properties of living matter.
Origin of the world's food supply.
Relations of plants and animals to air and soil.
Adaptations for particular ends.
Physiological processes in each organ.
Origin and significance of sex in plants.
Adaptation of flowers for insect visitation.
Renewal of soils.
The cycle of life maintained.
Cell theory of organization.
Parasitism, cooperation, symbiosis.
Significance of putrefaction and decay.
Usefulness and harmfulness of bacteria.
Significance of sterilization by heat.
Mechanical contrivances.
Adaptations to environment.
Fruits and their adaptations for dissemination.
No one teacher should attempt to accomplish in a year's course all the practical work which may be laid out along the line of an elementary course in either botany or zoology. The material is abundant, books of reference and direction are numerous, apparatus is simple and cheap, pupils arc multitudinous, what seems most needful is the teacher who has the gift to teach; is trained for this particular work; is able to choose and plan practical problems suitable to the progress of the class and illustrative of the facts observed and understood, and is able patiently to direct the work until each problem is solved and the results properly recorded.

After all, it is the teacher which counts most. This is the crux of the whole matter. It is surprising what a dearth of science teachers there is today. I mean persons with a gift of teaching, with satisfactory personality, broad preparation and definite training for thẹ
particular work they are selected to undertake. Our colleges and teachers' agencies have hundreds of calls for teachers of the sciences which they find it impossible properly to satisfy. College graduates who have specialized in English and German find themselves called upon to take charge of biological work in high schools for the reason that they had the fortune or misfortune to have pursued a single introductory course in either zoology or botany while in college. Other cases similar in character might be mentioned. On this matter let me quote Huxley once more, "No man can be competent to deal with the greater problems of biology as they are now presented to us, unless he has made a survey, at once comprehensive and thorough, of the whole fieid of biological investigation. The animal and the vegetable world are only two aspects of the same fundamental series of phenomena, and each is capable of throwing a flood of light on the other." Under the conditions prevailing in the north central states, is it asking too much to require the future teacher of the biological science in our high schools to have made while at college a special study of one phase of the subject and to have taken at least a year's work in an introductory course in the other?

The teacher and the pupils are primary factors. The training and preparation of the pupils turn almost entirely upon the personal character of the teacher rather than the content of his course of instruction.

The demand on the part of the business world for bright boys and girls to occupy subordinate places is extraordinary and a source of great temptation to the youth of our high schools; the inducements to drop school work and chase the alluring dollar are so great that too many of our promising young fellows leave off their schooling just at the time when they should be obtaining the highest benefit from it. Many who are able to undertake the high school course find little interest in it to attract them and hence turn from the grades to a business career. It would seem that biological courses offered in the first and second years of the high school curriculum are well adapted to hold this class of pupils since they may be related so directly to the pupil's personal life and environment and at the same time carry a true scientific value.

The country still needs naturalists, morphologists, investigators, and teachers of biology. I do not know where they are to come from except from the boys of our high sehonls. It would indeed be fortunate for the state if in our anxiety to make our courses practical, having in mind the many boys whose educational opportunities will never reach beyond the high school, we should on the other hand so foad down our courses with informational problems as to smother the
genius of a rising Huxley or Agassiz, who needs the discipline and training peculiar to the study of morphology and physiology by the laboratory method.

A general discussion followed led by Prof. Lewis Atherton of Sparta.

The following resolution was then passed:
"Resolved, That the executive committee of the State Teachers' Association be requested to give the Physiography and Biology Section a place on the 1912 program."

There being no further business the meeting closed.

E. W. Waite, Secretary.

## WISCONSIN ASSOCIATION OF MATHEMATICS TEACHERS.

Report of the mecting of 1911.
Chairman of the meeting-_Professor L. W. Dowling, Madison.
Program.

1. Eariy Instruction in Geometry in The High School.

Discussion opened by Miss Mary C. Nye, Superior. Wisconsin.
2. Report of Special Conmittee appointed in 1910.

Professor W. W. Hart, Madison, Chairman.
3. Simplincat: on of First Year Algebra.

Discussicn Opened by Mr. J. N. Warner, Platteville Normal School.
The program as given above was carried through, with free and satisfactory discussion following the two papers. No notes were taken covering the extemporaneous comments on the papers that were read. The discussion of Mies Nye's paper sbowed that there is both need and interest in the subject as she presented it, and that in isolated places some effort is being made to give a more gradual introduction to geometry than cccurs in the average textbook. Lack of time prevented much discussion of the paper by Mr. Warner.

## AN EXPERIMENT IN ELEMENTARY GEOMETRY.

Doubtless all teachers of geometry have found that at the beginning of the course the work has been seriously retarded for several reasons, chief among which are the following:

1. The pupils fail to comprehend the meaning of the terms used.
2. They are unable to step at once from the inductive method of algebra to the deductive method of geometry,
3. There is a transition from the concrete to the abstract so sudden and often so complete that the average child finds himself in a strange, new country with no experience to assist him in forming new ideas-there is nothing to build upon-all is new.

With the hope of bridging over this gap, the experiment was tried in our high school a few years ago, of introducing into the curriculum a course in elementary geometry, given to all freshmen three times a week throughout the first semester. Wentworth and Hill's "First Steps in Geometry" was used as the basis of the course, and each pupil had, besides a copy of the text, his own notebook and tools, the latter consisting of compass, ruler, protractor, and scissors. The subject was developed almost entirely in the classroom, the only outside preparation being that required to keep up the notebook in a creditable manner.

The first lessons were simple drawing exercises designed to train the hand in the use of ruler and compass and at the same time to make the pupil acquainted with the more common geometric figures. Straight and curved lines, angles, triangles, quadrilaterals, and the circle were developed and their properties discussed. Combinations of these in original ornamental designs, often artistically colored, taxed the ingenuity of the pupil and aroused in the class a wholesome interest in the work.

Then followed the development of the surfaces of some of the simpler solids, such as the cube and other rectilinear solids and the tetrahedron. Diagrams for these were drawn in the notebooks and the models themselves prepared outside and brought to class before the next recitation.

Numerous exercises in paper-folding and cutting were next introduced for the purpose of determining experimentally some of the more obvious truths of geometry. Figures of this kind were cut out from colored paper and pasted into the notebooks under suitable headings. The first of these exercises were necessarily such as to explain the meaning of symmetry as applied to a geometric figure-a subject until recently scarcely referred to in the regular geometry textbooks. It will not be possible for me to take the time here to describe the serjes of interesting exercises leading up to this knowledge. Suffice it to say that the work was finally summed up in the two definitions following:

1. Any two points so situated that the straight line joining them is perpendicular to a line $A B$ and bisected by $A B$, are symmetric with respect to AB as an axis.
2. Two plane figures are said to be symmetric with respect to an axis, if every point in the boundary of one has a corresponding symmetric point in the boundary of the other,

When the later work in geometry is taken up, the student readily adapts his knowledge of symmetric figures to those which are congruent, but in this course no mention need be made of congruence at any time. A great variety of symmetric figures can be constructed by means of a folded paper and a pair of scissors, the cutting being always through two or more thicknesses of the material, and the Iine of the fold the axis of symmetry. The construction of these figures-first with but one axis of symmetry and gradually with several axes, as in those having central symmetry-provides the pupil with a series of fascinating and instructive exercises. Considerable time was spent in developing this idea of symmetry, but I believe it was very profitably spent as many of the facts of geometry may be determined experimentally, that is inductively, if the subject is approached from the standpoint of symmetry. A few illustrations will make this clear.

The pupil has already learned how to construct an equilateral triangle and what the properties of such a figure are. Have him now construct an equilateral triangle of any convenient size, say 10 cm . on a side, cat it out and then fold along any axis of symmetry. By a study of this figure with ruler and protractor the following facts are readily determined:

The two triangles formed are symmetric.
The axis of symmetry is perpendicular to the base.
The axis of symmetry bisects the base:
The angles at the vertex are equal.
By folding the same triangle along the other two axes of symmetry, additional facts are determined, viz:

The three axes meet in a common point. This point is two-thirds of the distance from the vertex to the base.

If in the above statements, the words "axis of symmetry" be changed to "altitude," and "symmetric" to congruent," the facts observed are clothed in the phraseology of the text to be used later on. But this conventional wording is immaterial; it is far more important at this stage to have the pupil store into his mind either for practical purposes or for the technical use of his formal geometry, a number of new concepts, hitherto wholly without his limited experyence.

The square may be studied next, the pupil noting that either diagonal is an axis of symmetry. Then by using the ruler and protractor, and folding along the diagonals, at least three facts are readily observed:

The diagonals are perpendicular to each other.
Either diagonal divides the square into two symmetric right triangles.

The two diagonals divide the square into four symmetric right triangles.

In considering the rectangle, the first thing to observe is that the diagonal is not an axis of symmetry. However, by folding the figure along the diagonal it is seen that two right triangles are formed. Then by cutting along the diagonal, and rearranging the triangles it will be seen that the two may be so placed as to be symmetric with respect to any one of the three sides as an axis. In other words, the two triangles may be made to coincide throughout. The parallelogram would follow naturally, the class observing first what points of similarity and then what points of difference occur between the new figure and the rectangle just considered. By folding and cutting and using freely all the tools with which he is equipped, the pupil discovers for himself that:

The opposite angles are equal.
The sum of all the angles is equal to four right angles.
The two triangles formed by the diagonal are equal.
The area is the same as that of a rectangle having the same base and altitude.

The circle affords a wealth of mater:al for work in paper folding and cutting. In fact, the amount of time available is perhaps the only real limit to the possibilities of work of this nature.

It is evident that in all this work, absolutely no attempt was made to introduce the pupil to the formal demonstration. So far as he was concerned, such a thing did not exist. On the other hand, throughout the whole course, attention was constantly directed to a consideration of the infinite varity of geometric forms by which art, science, and nature have surrounded us. For instance, the image of the leat when conventionalized becomes a bi-symmetric figure with a plainly marked axis of symmetry, while the central symmetry of the snowflake is unmistakable. Moreover all the lines in the room, the designs in the windows, the patterns in tiled floors, oilcloth, and every available piece of parquetry are combinations of the simple figures that have been studicd. Indeed no illustration need be regarded as too homely or too elementary to be here considered.

The contention may be made by some that the proper place for work of this nature is not in the higii school at all but in the grades. It might well be given there if the necessary time for it were available. I see but one serious objection to this-namely, that unless a teacher is specially qualificd by training and experience to handle a class in geometry, he is not able to give the right kind of preliminary instruction. The foundation of a building is certainly not less important than the surface structure, and irregularities in the work-
manship of the former must always seriously impair the beauty, efficiency, and lasting qualities of the latter. The same thing is true in regard to the study of the subject under discussion. But waiving the question just raised, the fact remains that all pupils need at some time constructive work of this kind, and it is hardly advisable to delay it any longer than necessary. If it is given during the first year of high school, the second year provides ample time for the study of both plane and solid geometry. If it is not given as a separate study, the time for it must be taken whenever the geometry proper is taken up, be it second or third year. This usually results in throwing the solid geometry intu the work of a third semester as an elective. By this arrangement only a small per cent of the - whole number of high school pupils have an opportunity to learn of the geometry of three dimensions. In this connection, it is interesting to note the trend of the subject matter found in some of the more recent textbooks in plane geometry designed for a one-year course. Page after page of preparatory and illustrative exercises so alter the appearance of the book that many a parent wonders what has become of the geometry he pondered over, a generation ago. One author writes, in the introduction to his text: "The pupil using this book will no longer look upon geometry merely as a collection of abstract truths to be mastered for a promised but shadowy mental discipline". Also this: "Demonstrative geometry is approached gradually through concrete exercises, measurements, and constructions. A concrete basis is thus furnished for the more formal work that follows."

And is it not true that all intelligent study of the science rests upon exactly this kind of foundation? The word geometry itself-literally "earth measurement"-indicates that the subject existed originally for practical purposes and not as an aid to correct logical thinking. It took many years of study on the parl of the philosophers and mathematicians of the old world before their efforts finally blossomed forth in the demonstration of Euclid; and this historical growth must be duplicated to a certain extent in the individual if we would have our pupils make satisfactory and intelligent progress in our classrooms. If we provide them with the right kind of early instruction, we will not have as much to discourage both ourselves and them, when we attempt to teach the niceties of the abstract and demonstrative geometry.

The course 1 have described was intended to furnish pupils with exactly this kind of preliminary instruction, and it produced results that were highly satisfactory. The class as a whole was enabled to commence the work of formal geometry, the second year with an ease and understanding that were most gratifying, the result of training received in four distinct ways:

1. The pupils had learned how to use their rulers and compasses and how to draw suitable figures to illustrate their proofs.
2. They had made many valuable additions to their working vocabularies and knew what forms and relations were suggested by these words. This result was especially important to us in our school, where the large foreign element among the pupils is a factor that cannot be ignored.
3. Whatever they learned was by actual contact with the things themselves-existing facts observed and consistent conclusions drawn; i. e. by the study of the material body, the trail was blazed for the logical consideration, later on, of abstract truths concerning the figure or sclid purely geometric.

4 They had been trained to use their powers of observation and shown that they had but to open their eyes to behold about them a wonderful array of geometric forms, most of them useful but all of them beautiful.

In short, what we attempted to accomplish was to bring home to the pupil a fact apparently lost sight of in many classrooms-that geometry has to do with the practical every-day world in which we live. Upon this concrete foundation in some form, but never without it, is it possible to build a splendid superstructure of formal geometry, as abstract as the subject demands and as logical in every detail, as the combined philosophy of all the ages can possibly make it.

## REPORT OF SPECIAL COMMITTEE.

At the meeting of the Mathematics Conference of the Wisconsin Teachers' Association in Milwaukee in November, 1910, a committee was appointed to consider the advisability of effecting a more permanent organization of the teachers of mathematics of the state than exists in the Mathematics Conference which meets from year to year as a section of the W. T. A. This committee consisted of the following members:-

Chairman-Professor W. W. Hart, Madison.
Profesisor J. C. Collins, Stevens Point.
Miss Ada M. Parsons, Milwaukee.
Miss M. A. French, Milwaukee.
Mr. John N. Davis, Stevens Point.
The committee recommends that an organization be perfected and proposes the following constitution which was first submitted to the officers of the general association.

The letter to the officers of the general association follows:
To the Officers of The Wisconsin Teachers Association, Mr. C. C. Parlin, President.

Gentlemen:-We, the undersigned, were appointed at the meeting of the Mathematics Conference of the W. T. A. in Milwaukee in 1910 to take up with the officers of the general association the proposition of organizing the teachers of mathematics into an association analogous to that of the teachers of English, in accordance with some plan which meets the approval of the officers of the W. T. A. We beg leave to submit the inclosed constitution. If it meets with your approval, we shall submit it to the teachers present at the meeting of the Mathematics Conference in 1911, for their consideration.

We beg leave to sign ourselves the committee:
(Signed). Walter W. Hart, Chairman.
Ada M. Parson,
Jos. V. Collins,
John N. Davis,
Margaret A. French.
The constitution inclosed follows:
The Wisconsin Association of Mathematics Teachers.
Constitution.
Article I. Name. The name of this organization shall be "The Wisconsin Association of Mathematics Teachers."

Article II. Object. The object of the association shall be the promotion of the teaching of mathematics in the schools and colleges of Wisconsin.

Article III. Membership. All teachers of mathematics in the schools and colleges and all principals of secondary or higher schools in Wisconsin shall be eligible to membership.

Article IV. Meetings. The meetings of the association shall be held in connection with the meeting of the Wisconsin Teachers Association annually.

Article V. Officers. 1. The officers of the association shall be a president, a vice president, a secretary-treasurer and a chairman of an executive committee.
2. These officers shall be elected by ballot at the annual meeting of the association.
3. The nominees for these offices shall be proposed by a nominating committee appointed by the presiding officer in charge of the meeting.

Article VI. Executive Committee. The executive committee shall consist of the chairman and the other three officers of the association, who shall hold office ex officio.
2. It shall be the duty of the executive committee to prepare a program and to secure speakers for the annual meeting.
3. The executive committee shall have the right to draft by-laws, subject to ratification by the association.

Article VII. Amendments. This constitution may be amended at any meeting by a two-thirds vote of those present.
The letter of reply from the Secretary of the W. T. A. follows:
15. Dist. School No. 2, Milwaukee, Wisconsin. April 23, 1911. Professor W. W. Hart, Madison, Wisconsin.
My dear sir:-At the recent meeting of the Executive Committee, Wisconsin Teachers Association, it was unanimously voted to accept the constitution presented by the conference and to recognize that conference as a separate conference of the W. T. A.

Yours very truly, (Signed) Katherine R. Williams, Secretary W. T. A.
A report consisting substantially of the preceding items was presented by the committee. The report was accepted and the committee was discharged from further duty.

A motion was formally made and seconded that an organization be formed and that the constitution proposed by the committee be adopted as the constitution. This motion was put to vote and carried.

The chairman of the meeting, Professor I. W. Dowling, appointed a nominating committee to recommend officers for the year 1912.

The following officers were recommended by the nominating committee, and were elected in accordance with the constitution:

President, Mr. Henry Erickson, Milwaukee.
Vice President, Miss Mary C. Nye, Superior.
Secretary-Treasurer, Professor W. W. Hart, Madison.
Chairman Executive Committee, Professor J. V. Collins, Stevens Point.

## SIMPLIFICATION OF FIRST YEAR ALGEBRA.

I. N. Warner, Instructor in Elementary Mathematics, State Normal School, Platteville, Wisconsin.

The title of our subject, as you know is "Simplification of First Year Algebra." What does this mean? To me, it does not mean making the beginning course in algebra easier; indeed, on the contrary, it may mean making it more difficult. Neither does it mean making a course shorter. It may with profit, perhaps, in many instances be made longer. It surely does mean a careful, thorough, constant study on the parts of teachers everywhere into the question: What algebra is of most value to all the pupils I am to teach? What difficulties and obstacles are these pupils of mine encountering every
day in the way of new names for old relationships; new ideas brought about through the broadening of the number field so as to include negative as well as positive numbers? And how can I keep constantly anchored to the s:mpler Arithmetic relations and still project my course into the new field of thought? What problem material shall I choose? What shall I avoid? What shall I emphasize in the way of "drill" or mere mechanical operations? What shall I cut out and omit entirely in this first year? And what shall I place chief emphas's upon? These are some of the questions, as it seems to me, which come before us constantly and are obligatory upon us to answer. In general, a mummy is sadly out of place behind a teacher's desk, and indeed most seriously so behind an algebra teacher's desk.

We hear much of late years akout choosing problem material that is interesting, that is we hear this in the arithmetic and elementary algebra. Who has heard of it in the higher fields of mathematical study? We elementary teachers might seem to be engaged in a sort of smuggling process, through which we strive to win over a maximum number of our students into a field which otherwise they might avoid. To say that this attempt to get the supposed "thought" material into the algebra problems has been run, in many instances, to ridiculcus extremes, is putting the proposition but mildly. Yet this is just what "Simplification" means to a lot of folks. We must ransack physics; optics; commercial life; geometry; trigonometry; astronomy; agriculture; domestic science; automobiling; technical trades of every sort; and aviation, even, to get something, forsooth, which shall be interesting. Yes, interesting. INTEREST! Ah that abused maligned cog in the wheel of the pedagogue's everlastingly threadbare makeshift for real genuine worth. I may be a little bit conceited myself, but I am honest with you when I say that I have never been seriously hampered with any class of students myself, because of lack of interest in a problem in arithmetic or in algebra, and that is the genuine satisfaction that comes to every normal or natural mind when a consciousness of having conquered, dawns upon the mind. Really, where is the interest in pursuing a piece of work, anyhow? I do not mean to say that our algebra work should not be made more concrete; that is, it should be tied in as many ways as possible to the environment surrounding the pupils' immediate life and to that condition or set of conditions, which will help him in his future life. But so far as "interest" in mere problem "material" s concerned, I maintain that the real helpful interest does not center in the "material things" talked about in the problem: here is a verbatim copy of a part of a very recent advertisement about a certain algebra: "The inductive approach of the new
Algebra stimulates thinking, and because the pupil solves things he
wants to solve, because the problems fit, and are not forced, he finds an answer to his query of why he should be put to the study of algebra. What other algebra has aviation problems, and what other algebra takes up everything in a way so correlated with experience and other subjects as to make the subject a part of the pupils life?"

If that "ad" had only been printed in red letters, and set up in the characteristic yellow journal scare head style, it would have been worth, perhaps some dollars more. Seriously, how would you folks here like to admit that in order to "interest" your algebra class, you would need to resort to aviation problems? Why not a good old time one about the Hare and Hound? Some of us are still so near the woods! Also, about what per cent of your boys and girls ever ask you or themselves either the question of why they were put at algebra? Even if they do ask it, can't you answer? Is it really necessary to answer all questions of American 14 year olds?
in this matter of motives and interests I am aware that I am unorthodox; at least I am very unpopular. To me a problem is a problem. I do not say that a physics problem, or a geometry problem, or one in aviation is not interesting; but what I do say is that the interest is no greater in these cases than it need be in the solution of any problem. To sum it all up, I firmly believe that real interest in algebra is not greater now than it was when you and I first began to study it years and years ago, and you know we didn't lack interest then because of poor material in the problems. Now in order not to be misunderstood in these statements, let me explain further that I doubt seriously if we find the solace that we think we shall find in change of problem material. Perhaps this will aid us in our teaching problem, but it certainly will not save us. There are just about so many fundamentals that must be mastered, and it is these fundamentals that give the light, when they are once mastered. It should be noted and remembered always that there is no royal road to any piece of learning that is of real value, and least of all is there any royal road to algebra. Mathematics is no place for weaklings. No idle dreamers need think they can lazily drift along and absorb it. It must ie studied. It will yield up its beauties to him and her who court it most ardently.

Mr. Monroe, in his paper, read last May, before the Association of Mathematics Teachers of Missouri, advocates this interest doctrine largely, and he claims to have had much success with his own selections of problems, chesen as they were, from percentage, physics, geometry, etc. But Mr. Monroe has tanght sclence, I judge, and hence he was able, through this very valuable knowledge, to make otherwise difficult task all the more simple for his boys and girls,-a first year class, He is a thorough bellever, one would judge, in this idea
of "Motive" for study. Ard he well says that this motive must exist somewhere. M.y contention is that although we may make it easier for the student sometimes, the genuine motive is a something inherent in the student himself, and not seated in the material about which the problem deals. How to reach this inherent quality in the student is our problem.

The gist of the report of the English Mathematics Association alluded to, is that many teachers of algebra in England desire to spend more time on ideas drawn from physics, mechanics, mensuration, solid geometry, calculus, and numerical trigonometry. It also states that "custom" represented in pubiic examinations, prevents the teacher from doing this. So we in America might say that college entrance examinations dictate one thing while the needs of our pupils demand another. And yet, it is an open question whether these two needs are at variance. The chief question for us all seems to be; shall we put our time the first year, mostly on the mechanics of the algebraic processes, or shall we enrich the course by much use of that universal tool of the algebra,--the equation, and apply it to the solution of many problems-interesting problems, of course. The English report holds that only so much knowledge of manipulating processes as is necessary to go on to the next topic should be required. That we need not expect thoroughly accurate workers in all of our processes among first year students, but only so much of the ability to do as will serve our immediate purposes. This leads to the question as to what to omit? Or how far to go? This report advocates giving only very simple fractions. Long multiplications and divisions should be omitted. Highest common factor and lowest common multiple except where these can be discovered almost upon sight, $\cdot$ should ie omitted. Literal and negative exponents, if indeed not positive fractional exponents, should be left to later study. These foliowing types of fractions, and these only are advocated: (a) Fractions with monomial denominators (mere arithmetic); (b) Fractions with linear denominators; ail others omit. Factoring is confined to the quadratic type, as:
$\mathrm{A}^{2}-\mathrm{b}^{2} ; \mathrm{A}^{2} \pm 2 \mathrm{ab}+\mathrm{b}^{2} ; \mathrm{ax}^{2}+\mathrm{bx}+\mathrm{c}$.
Such forms as: $a^{3} \pm b^{3}$ are said to belong to formal algebra, and should be left to that work. No separate "chapter" or "section" should be given to H. C. F. and L. C. M. Treat these only briefly when the need for them arises in fractions. Did you ever stop to ask why these subjects used to get such prominent and formidable position in our arithmetics and algebras of a few years ago? This English report further advocated the omission of square root of polynomials; and of work on progressions. It is to be noted, however, that it says that the idea of functionality is so important socially as
well as scientifically that it should be fundamental even in an elementary course in mathematics. Work with graphs is now an accepted part of every successful course in mathematics. It is also recommended that the study of variation be made correlative with the work in graphs, or functionality. The study of logarithms is also urged by this report, whether it be done as arithmetic or algebra. Numerical trigonometry as well as much work in geometry is advocated as a part of the algebra course.

I am sure that American authors and teachers are quite agreed upon the proposition that graphical work should be induced early in our algebra work, and that it should be employed frequently, as a means toward simplificating what may otherwise be difficult. It is the borrowing of geometry upon which to base the more abstract algebra. At first the graphs should be simple and informal or untechnical. They may be easily applied early to subjects such as temperature readings; precipitation as given in weather reports; different prices in some commodity through a series of days, weeks, or years; census reports on population; production of various commodities, etc.; interest problems, and lastly, their chief early aim, to linear equations and then later to the quadratic equation. The graph offers a quick means of "checking" results, and no well taught algebra student nowadays, trusts his result without first "checking" it in some conclusive manner. Of course the student should learn early that even the best of graphs is only an approximation to exact results, but as such it is effective, for it is quick of interpretation; it is vivid; and it appeals at once to all.

- We have not mentioned the treatment of radicals, the work on ex--ponents, the "Index" laws; imaginaries, etc., etc., so often given as part of a first year course. We think that it is almost self-evident that considerable of the work ever attempted with these rather intricate subjects with a first year class, is almost, if not quite, useless, and time spent in "drill" upon them might well be spent in other lines of algebra work, leaving these, if they are to be studied at all, for some more advanced course.

Our course the first year, however, needs to treat some of the simpler radicals, involving chiefly the square roots of arithmetical numbers. Here, it seems to me, we may well employ the algebra to extend some of the mensuration work of the arithmetic. Indeed, many eighth year classes in 1llinois schools, at least, do employ square root for just such purposes as the more modern algebra texts now often employ it.

Of course we shall have quadratic equations treated in our first year course. These we shall solve both algebraically (completing the square, using the formula, and employing factoring; and also geo-
metrically-that is, by means of the graph. Whether we shall use simultaneous quadratics, it seems to me, depends largely upon the ability we find in a class. We must "check" our results, too, and show especially the possibilities involved by considering the simpler positive and negative answers. When have we a real solution? When have we no solution? When have we two solutions? So much of this as we can show by the graph as well as by our algebra, we should advocate as beneficial, and problems giving rise to such equations, are, in general, not out of place in our course.

To sum up then, what might we omit?

1. Many of the longer intricate multiplications and difficult long divisions.
2. Many of the complicated and "special" cases in factoring.
3. Much of the work-in fact most of it-in H. C. F. and L. C. M.
4. Long tedious complex fractions.
5. Simultaneous linear equations involving more than three un-knowns,-and indeed most of those involving more than two unknowns.
6. Work on radical equations, exponents, and imaginaries.

- 7. The work in square root and cube root of polynomials.

8. Much of the work on more difficult simultaneous quadratics, quintics and higher ones.
9. The work on the theory of equations. (Properties of roots, etc.)
10. The work on ratio and proportion.
11. The work on progressions.

But if we omit all this you say, and "simplify" all our traditional "form" work out of our courses this way, what shall we use instead? This is the question. We must use more problems. State and solve more equations. 'Teach the theory of positive and negative number. Teach the solution of equations by means of axioms; not by formal "rules" such as by the timeworn "transposition" method; teach "checking" or verification. Show that our arithmetic, our algebra, and indeed our geometry and our numerical trigonometry are really all one piece of mathematics, and that our algebra is but a tool by which we the better handle these other subjects. Teach the use of the graph as a valuable tool or means to an end. To do all this, of course we need to draw upon as many practical fields of information as we can for problem material. We need, however, to avoid straining the situation in order to get our problems. A problem that is largely "informational" instead of largely mathematical is unfit, or is ill adapted to our needs. If we deal with problems from physics, we do not deal with them because of their physics, but to show how our algebra can be made to serve us in our physics. And so on for other subjects from which we borrow or draw our problem material.

The interest, as I have already tried to make clear, must be in the solution of the mathematics question involved in the problem.

Now I do not wish to be thought unmindful of the difficulties in the way of the practical working out of my own advocated scheme. I believe we are growing into a better day in our algebra teaching. Our newer textbooks are better; our teachers are awake, for they are concerned. Many of them are bothering about present conditions and this is a wholesome atmosphere in which to be. Shall we then strive to do something? If we cannot do all, we can at least do something. We can depart from the traditional beaten paths. If the college entrance requirements are in our way, then we'll change these requirements. We must reach all of the pupils that we can. But we must never forget that it is mathematics that we are to teach, whether our students are to acquire this knowledge for use in the workshop or in some trade or calling, or whether they are to use it in going on for further mathematical study. We must never fail to keep in mind-and indeed-to point out occasionally to our pupils -just what good "common sense" even our mathematics can show to its own credit in the world of study and work all about us. To this end I have found that even in advanced arithmetic and elementary algebra classes, a little information on the history of mathematics is a great help. It makes the pupils appreciate all the more the significance of their own struggles in this field. Some fine day our best texts in algebra and in arithmetic as a few already do, will include some of this simpler history of our mathematics.

Shall we say then that our teaching problem is what to best emphasize in our first year algebra course; and what best omit entirely or touch at least but lightly? How enrich our work by more problems that deal with everyday affairs of most of our pupils and not only this, but how teach even these, and all other parts of our work so that we give our students a deep and genuine respect, admiration, and true longing for the real underlying truths and beauties of mathematical work?

## ENGLISH CONFERENCE.

Under the direction of the Wisconsin Association of English teachers in the gymnasium of the Normal School, November 10th, 2 p. m.

In pursuance of the plan adopted in 1908, which provided for the discussion of the vital problems in high school English teaching in each year of the course, the program dealt with two vital problems of the fourth year work, namely:

1. "How Make the Fourth Year the Capstone of the Other Three? Where Place the Emphasis in Composition and Literature?' J. C. Castleman, South Division High School, Milwaukee.
2. "Is the Fourth Year the Logical Place for a Course in Argumentation; if so, What Should be the Nature of Such a Course?" Miss Grace Edwards, Janesville.

Through a resolution heartily endorsed by its members, the Association favored the establishment of an English Journal which is to be published by a national body of English teachers.

On the adoption of the nominating committee's report, the following officers were selected for the ensuing year:

President, Mr. C. R. Rounds, West Division High School, Milwaukee.
Vice President, Miss Grace Edwards, High School, Janesville.
Secretary and Treasurer, Mr. H. K. Bassett, University of Wisconsin, Madison.

Executive Committee, Mr. L. W. Brooks, Principal, High School, Racine; Miss Margaret Ashmun, University of Wisconsin, Madison; Mr. D. O. Coate, State Normal School, La Crosse.

During the year the Association issued various bulletins presenting papers and topics of vital interest to English teachers.

H. K. Bassett,<br>Secretary.

## LATIN CONFERENCE.

Wisconsin Latin Teachers' Association.
Friday, November 10, 1911. Room B-3, Normal School.
The regular annual meeting of the Wisconsin Latin Teachers' Association was called to order by President Benezet.

The committee on elections, appointed by President L. P. Benezet, and consisting of Professor Fiske, Madison, Miss Bell, Milwaukee, and Miss Congdon, La Crosse, reported the nomination (later ratified by the association) of the following officers for the year 1911-1912.

President-Miss Lucia E. Danforth, Platteville Normal School.
Vice President-Professor Long, La Crosse Normal School.
Secretary-Treasurer-Wallace Reiss, Milwaukee, South Division.
Executive Committee, Officers, ex officio-Mr. Tremper, Kenosha, Miss Lucas, Manitowoc.

Chairman of the Committee on Lantern Slides, Miss Leta Wilson, Madison.

The regular program as presented, was as follows:-

1. "What is Essential to First Year Work in Subject Matter and Method of Teaching?"

## ESSENTIALS IN SUBJECT MATTER AND METHOD OF PRESENTATION IN FIRST YEAR LATIN.

Miss Leta M. Wilson, Madison.

First year Latin is hard to teach because we try to teach it just as it was taught twenty years ago. "Well, suppose we do"-says the old-fashioned teacher,-"Latin hasn't changed, has it? No, but the boy has, and the Latin verb "to teach" takes two objects, both of which have to be considered. Having briefly disposed of the first object, subject matter, let us hasten to the second and more important one, the personal, animate, wriggl:ng American child.

The tendency of modern pedagogy is against tradition in presentation equally as in subject matter. We must correlate the study of Latin with something in the life of our people, else the study is useless and as idle as the inquiries of Tiberius at Capri, when he wished to discover what song it was that the Sirens sang.
"No profit grows where is no pleasure ta'en." Some one else has added-"When we have love distributed over all things worthy of being loved,-then we have education."

Therefore, it is essential that our method of presentation secure "interest."

Interest is dynamic in character, it becomes the consciousness of the value of an end. And I believe we gain much in taking one, two, three days at the beginning of the year, and one day every three weeks thereafter in answering for the child the ever recurring query, "Why study Latin?" For after all, with the young, interest in the main follows the teacher, not the object, and if liking is glowing in the teacher's soul, there is no child who will not feel its warmth.

The result of interest is effort. The desire to know is as spontaneous in the child as the desire to eat. It is pathetic to see how very small an amount of aroused and satisfied curiosity will suffice to make a school attractive.

Imagine yourself confronted every day by 30 odd wriggling youngsters' hands flying in the air. Did you ever calculate what a success we could score, if we could in some way manage to keep alive this interest of the first day? How do we set about to do it? Why some of us deliberately set the class to work studying the grammatical introduction still inserted in some textbooks; others, but little wiser, set a task in pronunciation, dividing and accenting mere meaningless words. Very soon we have gained our object-our class sits passive and mute. Any teacher can readily spoil the best and most thoroughly active mind.

Seek tension, alertness, force, earnestness, enthusiasm; surprise your pupil at overy turn, don't call him once but five times; don't sit down when you teach, but get into the game and play and work with him; don't do things forever in the same way. Art abhors a routine! Let the very assignment of the new lesson be various and vital. There is your biggest opportunity for teaching, vastly different it is from telling,-even as monologue is different from dialogue. The new lesson must be associated with related lessons. Don't be afraid of the art of narration in making your assignment and don't, don't, don't be impeded by a textbook. After you have led the child step by step to an intelligent attack of the new problem and have shown him the means of solution, then allow the pupils to open their texts and assign the problem by pages.

However, it is the purpose of this paper to be constructive and not destructive, to suggest "does" not "don'ts." The suggestions which follow are made humbly-by a teacher who is equally faulty with anyone here-they will depend for their success upon the individuality of the teacher and her abiiity to be superior to her method and unconscious of it.

The suggestions are offered under four heads-
I Drill Work.
II Sentence Work.
III Syntax Work.
IV Work seeking the immediate stimulation of interest, enthusiasm, emulation and class and department pride.
I. Once having made it clear that you will tolerate no hesitating nor dawdling in memory work, avoid the mere empty rattling off of paradigms. Rather pronounce the English equivalent and require the Latin; use a word in a sentence and expect the correct form; vary the order of cases and ask for the proper termination; give the case termination and ask for the case, or the signified use in the sentence; give an English prepositional sign word and demand the Latin case sign; say an English personal pronoun and require the Latin personal ending; or an English auxiliary tense sign and demand the equivalent in Latin. In rapid work of this sort, allow only a second for every member of the class to think the answer, and then insist upon an instantaneous reply from the child called upon. Sometimes it is profitable to call upon the class and see whether the agility with which they respond is indicative of attention.
Much use of the colored crayons and the mathematical "+" sign is profitable in board work. The child loves the color idea, and besides he is taught to see that Latin is a conservative, economical sign language, and that each part of the work demands a separate word in English.

In drill work I often use what I may call the consecutive declension of nouns--the forms being indicated by those in their seats to the pupils at the board. Three words for example,
(1) trader
(2) spirit
(3) war
may be placed on the board in three columns. The nominative of the first, the genitive of the second, the dative of the third; then the accusative of the first is required-unti the complete declension has been given. To add zest to the task, use each noun with an adjective. The same suggestion may be carried out in the consecutive conjugation of verbs. The youngster who is tripped in a form should, without being told, go to an inconspicuous corner of the board and put on the tull declension. There must be a spirit of quick, rapid fire in all drill work, and the humdrum "straight-to-the-teacher" tone of voice should be absolutely forbidden. In the hands of a capable teacher this energetic drill work is full of zest, alertness and force.
II. In the translating of English-Latin sentences, I strongly advocate sight work. It does away with the habit of writing bad Latin; it shows the child the process by which correct Latin is written; it secures class attention and stimulates the child with the joy of accomplishment.

All books should be closed; then read the sentence, slowly and distinctly, have it repeated, keep it working through the mind of each competent child, who knows not when he may be called upon to furnish the necessary data on a given word, or complete the sentence. Call upon various pupils to defend constructions by rules. When every word hạs been worked out,-its use, case, declension, termination and form discussed, ask one child to give the complete sentence; send another to the board. While he is writing the sentence, have someone pluralize it or vice versa-change its voice-give the complete tense of the verb, or any of the thousand and one possible things. Meanwhile the child at the board remains there until he has read his sentence and, if he has made any errors, he must correct them in colored crayon, being led to make his correction by questions asked by the other children. The following day, when the sentences are handed in, one may demand a high standard of excellence-almost perfection.

Equally efficacious is sight work in Latin-English sentences. Again books should be closed, the sentence pronounced by the teacher and repeated by the child. Two results should be secured here; drill in pronunciation and drill in interpreting a Latin sentence as a whole. After the pronouncing of the sentence, there should follow a drill in analyzing, picking out the subject, object, verb, etc., ending with a complete translation of the sentence. In sentences of too great length or difficulty, the books should be opened, else the very purpose
of this viva voce method; namely, the stimulation of attention and eagerness, will be lost.

This method of handling sentence work should succeed in keeping every member of the class busy all the time; secondly, it does away with dishonest methods of work; thirdly, it reveals the weakness in the thinking process of the children; lastly, it secures the power of sustained and protracted concentration.

This method takes time, it is true, but I believe it is better to do half of the sentences in this way, than all by the old memorizing process.
III. In syntax work I find it is profitable to encourage the child to make a grammar of his own. For example, have him keep an "Ablative" book, illustrated with newspaper cuttings. The page should be headed with the name of the ablative, underneath should be pasted the newspaper clipping; below the rule should be written an illustrative Latin sentence. The same scheme may be followed with any other case, or subordinate clauses. The latter book usually proves especially profitable in systematizing what might otherwise be a mass of unrelated facts. Besides the child is delighted at the thought of connecting Latin syntax with newspaper write-ups of football, baseball and life.

From time to time it is well to stop and arrange in some systematic order all constructions of (1) place; for example or (2) time. We cannot be too careful in anticipating confusion and consequent despair.
IV. The last heading of this paper deals with methods, which aim directly at the stimulating of interest and enthusiasm. These methods are efficacious always, only in so far as they appeal to the natural aptitudes and instincts of the child. It is possible to stir up a healthy spirit of rivalry and emulation by pairing off the children according to their ability, and allowing them to contend for high grades in their five and ten minute quizzes.

The same result may be attained and an even greater degree of enthusiasm by dividing the class into two teams, each headed by a captain and each contending for supremacy in a rapid board work contest or a W. D. Wright four part game, for which a time limit is set. The scores for each contest should be kept on a conspicuous part of the board, even as they are kept for big league games, and at the end of a certain series let the losers entertain the winners with fudge and a program devoted to Roman Life and Manners; or, if the season be fitting, with a "Saturnalian" revel. For most assuredly you keep every possible holiday.

One game my children care for especially. Each team has its members placarded, one with the present stem of the verb, another
with the perfect, a third with the supine; others represent the various tense signs and personal endings. Each side has its goal line, equally distant from the players, and, when I call out an English verb form,-for example,-"I had called," the perfect stem, tense sign "era," and personal ending "M" rush forth like shots from a cannon, the side getting there first, properly grouped and spelling the form correctly, scores ten; the game is one hundred.

When your class shows a certain degree of proficiency, let them challenge another first class to such a contest, and thus stir up class spirit. And here you will find an opportunity for organizing the classes of your department into Roman centuries, each with its own standard, and each striving to secure the election of one of its own members to the consuiship, at a truly Roman consular election held in the early part of the New Year.

One fault we teachers have in common, an exceedingly selfish desire to ask all the questions and correct all of the errors. It is a onesided method which develops solely and alone the ability to answer questions. An error made by one child may be profitable to the other members of the class provided they are led to ask the questions leading to the correction of the error, and are made to feel the error is their own unless they do so.

Why compel children when they are so easily led? Remember "the chief motive of human action lies in feeling and emotion."
"Art alhors a routine" and even more Art abhors monotony. Thus it is our periodic reviews are such dismal failures. They are absolutely devoid of incentive. To avoid such a catastrophe I often use a. device of my own, which I may call an "Alphabetic Freeze" or a "Spell Yourself Out." All around the top of my board in A. B. C. order, throughout the alphabet, some task is set, a declension, a synopsis, a tense. Each child selects the tasks designated by the letters in his name. For example, "John Jones" starts in with "J" then on to " $o$ " and " $h$," and so on until he has spelled himself out. You haven't any idea what fun it is to see how many letters you can work off in the five minutes of the recitation allotted for such written work, especially when the grade is either 100 or 0 , and zero means "do it again tomorrow."

Sometimes we review by a question box in which each child has deposited one question, which may be directed to some particular member of the class. Woe to the boy or girl who has not been doing things well! That day he does his penance!

Spelldowns are often very successful in vocabulary reviews, either from English to Latin or from Latin to English, or from English derivatives to Latin roots. Perchance a game of "charades" or
"Twenty Questions," may solve the question of "How make by review a new view of some famuliar thing?"

Of supreme value in gaining correlation with the every day life of the child is the keeping of a Latin calendar. It serves to eradicate the erroneous impression that Latin is "dead" because it cannot be spoken and it proves the power of the language even in such sacred matters as football, baseball and airships. Collaboration with the Manual Training and Art Departments will result in a very artistic calendar.

Many other methods will suggest themselves to you, as they do to me. However, these few may serve the purpose of this paper; namely, that our thinking together may have stimulated each one of us to greater originality and resourcefulness. We are the transmitters, through us our classes live or die, even in proportion as we reveal the soul of our subject.

Discussion opened by Wallace Reiss, Milwaukee, South Division.
2. "Devices in the Teaching of Latin."

Miss Lucia E. Danforth, Platteville Normal School.
Miss Danforth pointed out especially the advantage of reading Latin prose and poetry, many parts of which, like some of Horace's Odes, the opening lines of the Aeneid, the Boar's Head Song, and of course, church hymns, have been set to very pleasing music.

Discussion opened by Donald Frank, Milwaukee, East Division.
At the conclusion of the program, the report of the Lantern Slide Committee was read by Wallace Reiss, who acted as chairman during the year, in the absence of Professor Fiske. The report follows:
(Report appended)
Report of the Committee on Lantern Slides.
The report of your committee on the Traveling Collections of Lantern Slides shall be as brief, comparatively speaking, as most of the answers sent to the committee's request for further subscriptions. Last year, there was a balance of $\$ 28.88$; to this amount various sums sent in by different teachers were added during this last year, bringing the total amount of the fund to $\$ 47.14$. $\$ 14.00$ were expended in securing a set of 40 Vergil slides from the records of the Past Exploration Society, and $\$ 3.50$ for stamps, stationery, etc., making a total expenditure of $\$ 17.50$, and leaving the balance on hand $\$ 29.64$.

More than 100 letters, enclosing subscription blanks and requesting some action or part of the pupils, teachers, principal, or school board, were addressed to as many schools since the last meeting of the association. In spite of a specific request in these letters that, even if nothing at all could be done, we should at least appreciate the courtesy
of a reply, 75 letters were absolutely ignored, only 25 replies were received, of which 9 enclosed money orders for the fund. Do not delude yourselves into the belief that we are discouraged, that we are beginning to think that the support which this undertaking, intended for the improvement of Latin teachers and conditions throughout the state, deserves, is not being given by a great percentage of the very Latin teachers whom it is intended to benefit, and that we shall give up the task in disappointed disgust.

Even though the generous subscriptions of $\$ 150$ which we fondly hoped for last year have dwindled down to a paltry $\$ 20$, we are more optimistic than ever before. We believe and we know you are with us in the opinion, that the lantern slide fund is bound to grow little by little each year, and that we shall eventually succeed. But we must continue to agitate, to attract attention, to formulate favorable opinion and to continue to serve. Really, the best indication for greater advance in the future is the constant, and satisfactory demand for, and use of, the lantern slides now in the collection, by the different schools all over the state. During the last year, 15 schools have used the slides, most of which, but not all, were subscribers to the fund; 28 schools are on the waiting list for next year. You must remember, the slides have been sent out, and will continue to be sent out, to all schools that ask for them; they are for the use and advantage of every teacher in Wisconsin, whether in the field of Latin or Ancient History, whether a subscriber to the fund or not.

During the next year, we shall again appeal to you to increase the amount in our treasury; we ask you again to secure the slides for your school; we seek your coöperation. We in turn shall try to be of greater service to you. A lecture to accompany the slides and to serve as a suggestion to teachers, has been completed by Professor Fiske; and will be sent to you during the course of the year.

As much material will be added before the next convention, as money and conditions will warrant. Books will be added to the library; slides, especially for Caesar and Cicero and duplicates of the present slides, to the collection, and concise material to the lectures. All that we need is your assistance. We shall try to help you; will
you help us?

Respectfully submitted
Wallace Reiss,
Acting Chairman.

The year 1912 marks for the Latin Teachers' Association, the biggest advance in satisiactory results obtained both from the set numbers on the program and the very free and general discussion in which most of those present participated and which brought about an invaluable exchange of experiences.

## MINUTES OF THE MEETING OF THE WISCONSIN MODERN LANGUAGE TEACHERS' ASSOCIATION.

 1911President--Proí. Charles M. Purin, University of Wisconsin, Madison. Vice President- -Miss Edna Zinn, River Falls Normal School, River Falls.

Secretary-G. A. Fritsche, South Division High School, Milwaukee.
The annual meeting of the Wisconsin Modern Language Teachers' Association was held Thursday, Nov. 9, 1911 at 2 P. M. in Walker Hall, Auditorium. In the ahsence of the president, Prof. M. B. Evans, Prof. Charles M. Purin presided, having been appointed by the executive committee to act in that capracity. L. F. Thoma of New York presented the prospectus and itinerary of the Convention of American Teachers of German to be held in Berlin, Germany, in 1912. A cordial invitation from the German Emperor as well as from many German cities was extended to American teachers.

Program:-General Topic:

## Oral Practice in Elementary German.

I. Karl R. Guth, 14th District School, No. 1, Milwaukee, conducted an object lesson in German on "The Hare" with a class of twenty pupils approximately twelve years of age. Not a word of English was spoken. This lesson was to serve as a preparation for a reading lesson. He was guided by the following fundamental principles:

1. All knowledge is based upon observation. True education, positive knowledge rests upon the work of the senses. Object teaching and the development of a vocabulary are intimately connected and should not occupy isolated positions in any school. Objects placed before the eye of the pupil for the purpose of observation must develop the language powers and enrich the child's vocabulary. The entire secret of successful teaching rests on observation. All instruction not based upon observation is worthless and leads to sham success.
2. The object is minutely examined, described; if an animal, its body studied, its life looked into, its relation to nature and to man set forth, similar objects are mentioned, comparisons made, and finally repetitions and general reviews are in order.
3. If object teaching is to lead to true education, certain conditions and requirementsoon the part of the teacher are presupposed:

He must be well prepared, select suitable material, confine himself to the subject matter, avoiding unnecessary deviations, use correct pronunciation, talk with ease and fluency, acquire the art of ques-
tioning, avoid ambiguity, accept only correct answers given in complete sentences and correct language, have recourse to concert work, repeat and sum up frequently, and last but not least, he must love his pupils and his profession.
II. Prof. Barry Cerf, University of Wisconsin, in the absence of Prof. M. M. Dondo, conducted an object lesson in French with a class of high school students, who had had but six weeks of work in this language. "The Hare" was again used as the basis for this lesson.
III. Miss Jeanette Marsh of the Eau Claire high school presented the following paper on the Gouin Method of Teaching. Gouin maintains that the inability of a pupil to read.a foreign language or to speak and understand it when spoken, after years of drill in school, is fundamentally due to the fact that we have neglected to study the method of the great school teacher-Nature. The child does not learn to talk by seeing alone, only as he hears words and phrases in connection with what he sees, is he able to express his thought in intelligent language. The reading and writing of the mother tongue is not attempted until the ear has caught the thought and the lips have learned to express it.

Secondly, Gouin holds that ability to acquire a language quickly, depends upon one's ability to form a picture on hearing the sounds of the language. We must see the picture not necessarily with the outward eye, but in his mind's eye,-he must form a mental picture, as clear as if real action or real pictures were placed before him. He will, Gouin maintains, by means of this mental visualization, be able to think in the language he is learning, without using the mother tongue as a crutch. No one before Gouin, recognized and used this principle as he did.

In preparing exercises for the learner, Gouin endeavors to present events in natural order of sequence, so that the pupil in endeavoring to hear them and voice them, will tell things in the order in which they naturally occur. He makes the mental pictures easily and schools himself to think logically, which in itself is valuable mental training.

Gouin has attempted to present a series of exercises, each systematic in itself, and each bearing a relation to the next, which shall make the acquiring of new concepts easy and natural. All the emphasis in the beginning work is put on oral work. It is always "First the sound and then the letter." Reading and writing are not attempted until the pupil has made the sound and its thought content his own.

Gouin's plan of language instruction includes three courses, each of which can be finished in one year, with four hours instruction a week. The first year's instruction is for children 10 to 14 years old and makes the vocabulary of daily life its basis. In the second year, what has
been learned is deepened and strengthened, until one has gained the vocabulary of a person of ordinary education. The foreign language is used alone in this year as the medium of instruction. In the third year the pupil is introduced to the world of literary and scientific thought. The three courses of instruction work like concentric widening circles. The realm of thought which the three courses correspond to, are those of the individual at 10,14 or 21 years respectively.

The idea that Gouin is opnosed to teaching grammar is entirely false. He only objects to the old way of teaching. His fundamental principle here is,-that all abstractions are to be avoided. All mechanical repetitions of words, declensions, conjugations and syntax rules are abstract. He holds the pupil must be led to a mastery of grammatical forms by using words and phrases connected to express what the eye, the mind's eye, clearly sees.

Gouin holds that at first a pupil should pursue the study of but one foreign language at a time. The work should be intensive, and if possible one hour in the forenoon and one in the afternoon daily. Gouin himself was able in 300 hours instruction, to give his pupils a mastery of 1200 of his series, each consisting of 18 to 24 sentences. In six months he was able to give a 12 year old, ability to express himself easily in the foreign language within the range of his own realm of thought, and to understand perfectly and interchange thought with a 12 year old to whom this language was native. To command the language of a mature and educated person, he found from 800 to 900 hours instruction necessary, with the use of 3,000 to 4,000 of his series. At least 2,000 of these would be purely scientific. After one year of such study he found his pupils ready to begin another foreign language successfully.

My own experience in teaching in a three years' German Course, which will soon be a four year course, leads me to feel that as long as we adjust ourselves to short recitation periods, and short language courses we must compromise as to method. The Gouin method or a natural method may be used for a few months, and then followed by work in grammar with a text, and reading work, which after the first year, steadily increases in difficulty. This has been my practice for several years. I have used with beginners, the series printed by Dr. Handschin of Miami University, which are based on Gouin's series and method. I know of nothing better for this plan of work.

John Stuckert of the La Crosse high school in discussing the above paper pointed out the difference between the Gouin method and the "Auschauungsmethode." He emphasized the vital importance of oral work in language instruction and dwelt especially upon its value as a preparation for composition work.

In discussing the relation of the work of the high schools of the state to that of the university it was indicated by several speakers that a better adjustment was gradually being accomplished.
IV. Miss Edna Zinn, River Falls Normal School, read a paper on the Orai Practice Based on Reading. She said in part: Oral work based on reading should not be considered merely as supplementary work, but as the most fundamental part of modern language instruction. It should take the place of translation as far as possible. To make it most satisfactory the texts used must be properly adjusted and graduated. Such reproduction of the text in the foreign tongue results in a far more accurate knowledge of grammatical forms than when grammar is studied for its own sake. Each day is a grammatical test and review. The aim of the work so constructed is not, however, conversational, but to help the student to read, enjoy and appreciate foreign literature on its own ground.

Because of the late hour it was decided that Miss Clara Schuster, Platteville Normal School, who was to lead the discussion on the foregoing paper, hold her paper over for next year's session, and that this same topic "Oral Work," because of its wide extent, again come up for discussion at the next annual meeting. The attendance at the conference was the largest in the history of the organization, nearly four hundred being present. There was a keen interest and a lively participation in all the discussions.

Upon the adoption of the report of the nominating committee, consisting of Supt. Leo. Stern, Miss Clara Schuster, C. B. Straube, the following officers were elected for the ensuing year:

President-Prof. Charles M. Purin, Madison.
Vice President-Miss Clara Schuster, Platteville.
Secretary-G. A. Fritsche, Milwaukee.

## Executive Committee.

Prof. A. R. Hohlfeld, Madison.
Prof. Hugh Smith, Madison.
Director Max Griebsch, Milwaukee.
Supt. Leo Stern, Milwaukee.
Miss Edna Zinn, River Falls.
G. A. Fritsche, Secretary.

## WISCONSIN COMMERCIAL HIGH SCHOOL TEACHERS' FEDERATION.

Officers.
President-F. Stanley Cowles, West Division High School, Milwaukee.
Vice President-Grace L. Kins,, Wausau high school, Wausau.
Secretary-W. J. Martindill, Madison high school, Madison.
"High School Stenography" was the title of a most interesting paper by Miss Susan Drew, of the East Division high school, Milwaukee. Miss Drew believes in emphasizing the practical side of shorthand.

Discussion: Miss Abbie Brown thinks that students ought to be allowed to erase to the same extent that they will do in business work, and that they ought to be taught to erase when using carbon sheets. She is enthusiastic about touch typewriting. Further interesting discussion followed, several members of the Conference participating.

Mr. Claude D. Stout, of the Stoughton high school gave a very interesting and helpful presentation of his method of teaching commercial law.

Mr. A. J. LeGrand of the South Division high school, Milwaukee, gave a practical talk on "How to Secure Results in Bookkeeping." In discussing this paper, Mr. Jangmas, of the Kenosha high school, urged the emphasis of form and ruling.

The program concluded with Mr. Ferris' splendid address. Anyone who has ever heard the "Michigan Cyclone" knows how entirely im- . possible it is to report adequately on what he said.

In the business session the treasurer's report was read and adopted. The report of the committee to investigate the desirability of adopting a uniform set of capital letters, was read and adopted. The committee (consisting of J. A. Book, C. I. Stout, D. D. Manross, Emma Janisch, Pauline J. Hayes and Caroline M. Helner) reported that it did not believe it advisable to confine teaching of capital letters to any particular style or set. Teachers were recommended to encourage individuality in writing, especially in high schools.

The secretary read a communication from the Underwood Typewriter Company, offering a prize for a speed contest to be held in this state in connection with the association. The following committee was appointed to investigate the matter, with power to act: J. W. Martindill, F. D. Cross, Pauline Hayes, Mae L. Curran.

The following committee was appointed to investigate the double period of bookkeeping in the high school: G. M. Pelton, E. L. Cramer, Paul A. Carlson, D. J. Salisbury.

In the election of officers F. Stanley Powles, West Division high school, Milwaukee, was re-elected president for the third time by a unanimous vote. Grace L. King of Wausau was chosen vice president and J. W. Martindill of Madison, secretary and treasurer.

STATE NORMAL AND CITY GRADES SECTION.

Thursday, 2:00 P. M.<br>Main Hall, Auditorium.

Chairman-Supt. S. B. Tobey, Wausau.
Secretary-Miss Jessie Todd, Platteville.

1. Address--"A Conservation Through Truth." Edith Smith Davis, World's Superintendent of W. C. T. U. Educational Work.
2. Address-"Wisconsin Normal School Administration." Karl Mathie, of Wausau.
3. Address-"'The School Room Beautiful." Henry Turner Bailey, of Massachusetts. (Illustrated with a stereopticon.)
4. Stereopticon Views, presented by the Wisconsin Anti-Tuberculosis Association, to iliustrate the work of this Association in Wisconsin.

## A CONSERVATION THROUGH TRUTH.

"Great truths are portions of the soul of man, Great souls are portions of eternity. Each drop of blood that e'er through true heart ran With lofty message, ran for thee and me; For God's law since the starry song began Hath been, and still forever more must be That every deed which shall outlast Time's span Must goad the soul to be erect and free.,'

This great earth of ours deepens wondrously in meaning as we think of it as the meeting place between truth and the human mind. The truth is in the world but it is of no value until man takes hold of it. The man is in the world but he is of trifling value until he takes hold of truth. But when he does take hold of truth and putting it into clear, tangible form, gives it to the world, he finds that the world has always needed it and is the richer for its possession.

The dress in which the truth comes is not of greatest importance for we need truth in all forms of dress. It may be that the intelligence of man takes hold of the hard gross material and transforms it
into a Taj Mahal of India, or a St. Peter's of Rome, or a St. Paul's of London, or a great Congressional Library at Washington. We need truth in all of those forms of dress. Or it may be a Michael Angelo, who, taking the colors, puts them upon the ceiling of the Sistine Chapel in the Vatican and the Creation stands before us, or he hangs the Last Judgment upon the walls. We need truth in that form of dress. Or it may be that it is a Luther Burbank who transforms the potato or the tomato or taking the onion he renders it odorless. We need truth in that form of dress. But even more do we need truth as Luther Burbank puts it in his "Training of the Human Plant."

Henry Ward Beecher used to say, "Here is a chasm ten feet wide and a man attempting to jump across that chasm jumps exactly eight feet. Some kind, sympathizing friend says, 'What about the eight feet that he did jump?' Well, what about the eight feet? He went down and some things must be done, and done in their entirety, in order to make them of value and I take it that the making of character is one of those things. We must jump the whole ten feet and we may jump the whole ten feet but never unless our lives are conserved by a knowledge of the truth."

In the beautiful gardens of the city of Edinboro, the great Scotch preacher, Dr. Guthrie, stands in marble as he stood in life with his cloak wrapped around the shivering form of a barefooted, half-clad boy. One day the great doctor was going down the streets of Edinboro when his eye was attracted by a little girl carrying a great fat heavy baby almost as big as herself. The kindly hand was instantly placed on her shoulder and Ir. Guthrie said, "My dear, that is a very heavy load for you to carry." The little girl turned her big, wondering eyes up into the doctor's face and said simply, "Why, sir, it's my little brother." That is woman's work in this great temperance reform. She is trying to carry the brother over the dark places, the muddy places, the wicked places, she is trying to make the truth clear and radiant whereby he may be savec.. It seems to me something more than a coincidence that two names should have been voted upon for the great Hall of Fame of this nation at the same time. I mean the names of Frances E. Willard and Edgar Allen Poe. Frances E. Willard, the greatest woman educator of the United States, who gave her life to make the world realize the truth for the lack of the knowledge of which Edgar Allen Poe lost his life. I never go up the streets of Baltimore which leads to her famous market place and pass the grave of Edgar Allen Poe without thinking of his own words:
"They are not wrong who deem that my days have been a dream.
Yet if hope hath flown away, in a night or in a day, .
In a vision or in none, is it therefore, the less gone?
All that we see or seem is but a dream within a dream.

I stand amid the roar of a surf tormented shore
And I hold within my hand grains of the golden sand
How few and how they creep inrough my fingers to the deep
While I weep-while I weep, O God! can I not grasp
Them with a tighter ciasp. O God! can I not save
One from the pitiless wave? Is all that we see or seem
But a dream within a dream?"

That was life to Edgar Allen Poe, a life that went out in drunken debauch. It was life in the end to Alexander the Great, and to Charles Stuart, and to Hartley Coleridge and to Charles Lamb, and to Byron and Burns and Keats and Shelley-great poets, yes, but not one of them a great man, because nations have failed to conserve the lives of their men of genius. The genius of a Poe ought to have meant more to the American people than her forests of pines or her richest mines, but we speak glibly of the conservation of our natural resources and very reluctantly of the conservation of our men of genius.

Some two years ago I stood in the little Protestant cemetery near the city of Rome. I wandered from the grave of Shelley to the unmarked grave of the poet, Keats, and read upon his friend's tomb that he rested next the grave which contained all that was mortal of a young English poet, who unon his deathbed in the bitterness of his heart, desired these words to be engraved upon his tombstone: "Here lies one whose name was written in water." Thousands of years ago the psalmist said, "My people perish for lack of knowledge," and these same words might serve for an editorial in tomorrow's newspaper. Great men everywhere are perishing for the lack of a nation's knowledge concerning the nature and effect of alcohol, a knowledge which ought to be employed in the conservation of life.

In my work in the public schools I very frequently go into the slums of the cities. During this past year I have studied the children in the slums of London. Glasgow, Edinboro, and of Dublin, for wherever alcohol is sold there you will find slums. But again and again have I gone into the slums of Chicago and of New York City. There I look into the white faces of men and of women, but into the still whiter and more pinched faces of little children. Children who have been robbed of their birthrights. Little ones who in place of the splendid heritage of strong minds in strong bodies come into the world crippled, physically, morally, and mentally. Children of whom the Scotch say, "they are not all there." Children of whom General Booth in his "Darkest England" writes, "They are not born into the world, they are damned into it."
> "Something short in the making, something lost on the way As the little soul was taking its path to the light of day. The father did not mean it, the mother did not know, No huinan eye has seen it, but the little soul needed it so."

These are the children that Mrs. Russell Sage is having thoroughly examined, and if Russell Sage never did a good thing in his life, he certainly atoned for much in his death when he left his money to his wife to do with as she chose. For these are the children like the descendants of Margaret, the mother of criminals. The children who are born to rob the nation of millions of money, but are themselves robbed before their birth of that which is so valuable that money has no terms in which it may be estimated. Talk about the conservation of our national resources, would that our statesmen would begin to discuss the conversation of the lives and characters of these children for the child is the greatest asset of any nation.

The child in the slums and the men of genius seem to be related in the suffering which comes from the lack of attention to the truth which conserves life. You remember what that great old Scotchman, Thomas Carlyle said, "A poor woman in Edinboro could get recognition of sisterhood from nobody so she took typhus fever and died and gave it to seventeen others in the alley where she lived and thus she got recognition of sisterhood."
"Freedom is growth and not creation
One man suffers, one man is free, One brain forges a constitution, But how shall the million souls be won? Freedom is more than a revolution, He is not irree who is free alone."

There is but one solution of this vexed problem, it must be the truth taught to the children of all nationalities concerning the nature and effects of alcohol, the knowledge of which will conserve the life of a nation.

I ask you to go back with me for some twenty years in the history of Milwaukee to see the need of this conservation. We will enter a courtroom where a young man stands on trial for manslaughter. He is scarcely more than a boy. What has he done? Let me give you his story. Some twenty years ago he came to Milwaukee with another young man, scarcely older than himself although the other was a husband and father. They came to spend Sunday in Milwaukee and have a good time. On Saturday afternoon they drifted into a Third Street saloon. They were still there early Sunday morning when an old colored woman entered the saloon with her scrubbing brush and pail
to get it ready for the Sunday trade. She fell on her knees and began to scrub and as she worked she sang one of those rude plantation melodies. These two drunken boys were leaning idly against the bar smoking their cigars and watching her. It seemed to the younger of the two that it would be very funny to creep up behind the black woman and put the end of his cigar to her flimsy cotton gown. He did so and she sang and scrubbed on, until she was entirely enveloped in flames, when, rushing out into the street she died upon the Third Street pavement. Now the boy is on trial in the courtroom and it is not strange that when asked, "Guilty or not guilty?" he answers, "Guilty, but-" and says no more. What did that little, hysterical "but" mean? It meant that he could not understand why he alone should be guilty. Why he should give his life to undo what he had done. He never intended to injure the woman at all. He really did not recall that he had ever touched her dress with the end of the cigar. Was not somebody else in some way responsible?

Here is another boy just across the border of Wisconsin, in Rockford, Ill. It is Herbert Spring and he is being sentenced to the Joliet penitentiary for the remaining years of his life. I want you to listen to the words of Judge Farnand. He says that during the past five years he has had seven men before him charged with murder. In each case the defendant was under the influence of intoxicating liquor when the crime was committed. That one of these men was also under twenty and that what he had said to him he wished to say to Herbert Spring: "Intoxication cannot be considered as a defense; for a young man who is a habitual drinker of intoxicating liquors is almost certain of moral death before he reaches mature manhood, and I would beg the young men of the nation to shun the saloon, it will blight and finally destroy your manhood, it will bring unutterable sorrow to those who love you and hasten you prematurely to the grave or behind prison doors." And then he pronounced this sentence: "It is the sentence of this court that you be imprisoned in the penitentiary at Joliet for and during the term of your natural life, the first day of that imprisonment to be in solitary confinement, and that you pay the costs of prosecution."

Please multiply these cases. Go with me to the penitentiary of state after state. Unlock the prison doors especially of the southern prisons and you will see the young manhood, the boys of some of the finest families of the different states imprisoned there for life because of crime committed when the brain was narcotized with alcohol. Ought this life to be conserved with the knowledge of the truth concerning the nature and effect of alcohol? The answer is yes, but how shall it be done?

The truth which should conserve life has been in the world from the time of Homer but we are just beginning to make use of it in our teaching. When Shakespeare said, " $O$, thou invisible spirit of wine if thou hast no other name I will call thee, Devil" and "O that men should put an enemy into their mouths to steal away their brains," he knew exactly what alcohol did to the brain. But in his play of "As You Like It" he brings out very plainly the effect of alcohol upon the blood vessels and the arteries when he has the old servant, Adam, say:
"Though I am old yet am I strong and lusty
For in my youth I never did apply hot and rebellious liquors in my blood,
Therefore my age is as a lusty winter, frosty but kindly."

A man is as old as his arteries, you know; and the drinking young man of thirty may be an old man, much older than the old servant, Adam.

In the teaching of athletics today one is apt to think that the forbidding of alcohol to men in training is something new until he opens the pages of Sampson Agonistes and reads:
"O madness! to think the use of wines and strongest drink Our chief support in health, when God with these forbidden Made choice to rear his mighty champion strong above compare Whose drink was only from the limpid brook."

We understand that Jefferies did not go down before Johnson but before aicohol but that is the history of prize-fighters. But Milton knew that truth centuries ago.

The time has come whẹ the nations of the earth must be conserved through the truth. The truth must be taught in the school rooms of the nations for in no other place can the people be reached. It was Phillips Brooks who said: "He who helps a child, helps humanity with a distinciness, with an immediateness, which no other help given to human creatures, in any other stage of their human life, can posslbly give again." Give the truth to the child.

# INTERMEDIATE AiND GRAMMAR GRADE TEACHERS CONFEREINCE. 

Juneau Hall, Auditorium, Friday, 2 P. M.<br>Chairman-Prof. Henry S. Yonker, Ochkosh Normal School.<br>Secretary-Ruth Murphy, Fond du Lac.<br>The meeting was called to order by Prof. Henry S. Yonker of Oshkosh.

Miss Sarah L. Arnold, Simmons College, Boston, Mass., gave a talk on "Essentials in Language Teaching." She was followed by Mirs. Duffield of Milwaukee, who conducted a class in Language. Principal Cooley of 21st Dist. No. 2, made a few explanatory remarks concerning the work Mrs. Duffield's class had accomplished. He said the pendlulum nowadays was swinging away from diagraming and analysis, but that he was very much in favor of this work. He believed that formal grammar siould be taught in the fifth grade. If children were made language conscious fewer mistakes would occur.
Mrs. Duffield had her entire filth grade class present. She wrote sentences on the board and called on pupils to state the office of each word found in the sentence, as well as to diagram them. The work accomplished oy this class included the parts of speech, attribute and object complement. The class showed a thorough understanding of the work, and won much applause.

Miss Christine Bandli of Madison then read a paper on "Blackboard Work in Language Teaching." Miss Bandli said in substance: The chief aims in language work are to give the pupil power to express his thoughts fluently and clearly in both oral and written speech and to aid him in acquiring the habitual use of correct English in daily conversation. The value of any method employed may be judged by the degree in which it meets these requirements. To show the use of the blackboard in connection with language teaching I shall give the plan followed in my class room. An essential element is to have a good story or other interesting subject upon which to build. A good story must contain something which is in common with the life and experience of the child. It must contain distinct word pictures or paragraphs. It must strengthen the child's imagination, teach lessons of bravery, kindness, truthfulness, and unselfishness or humor.

In preparing for the board work the story is read to the pupils twice. The first reading is just for the pleasure it gives the listeners. .The second time the pupil hears the story he is expected to listen with the re-telling of the story in view. He must notice the paragraphs and the sequence of the story. After the second reading the pupils are
called upon to reproduce the story orally. Afterwards they are asked to tell how the story is paragraphed. This often leads to lively argument as to what constitutes a paragraph. These discussions eliminate the possibility of using stilted expressions and give the teacher an opportunity to correct the oral English of the children.

Following the oral work the pupils pass to the board. Because of lack of board space each child cannot write the whole story. The pupils are numbered according to the number of paragraphs in the story-numbers one writing the first paragraph and so on. Each pupil proceeds to write his paragraph just as he wishes without further help or suggestion. Having finished his paragraphs, he rereads it. If he discovers any mistakes he may correct them by drawing a line through each part that is wrong and making the correction above. This done he takes his seat and waits until the other members of the class finish their work.

When all are seated, the one who wrote the first paragraph passes to the board. His work is then criticised by the class. The pupil who made the mistake and failod to discover it is now helped to correct his error by means of questioning by the pupils. For example if the word "running" has been misspelled he is asked, "How do you spell "running?" In no case is the pupil told just what is wrong or how to correct his mistake unless he is really unable to help himself. In this way the whole story is criticised by the pupils. The teacher only taking part when errors are made in the pupils' corrections.

The next step is to have each child write the story in ink to be handed in and to be corrected by the teacher. If the paper is not written well and there are many mistakes the pupil is asked to rewrite the story making the corrections as indicated. This same method may be employed with equally good results by letting pupils relate incidents in their own lives, as "How I Earned My First Money" or in describing a pet or a picture.

In all cases holding pupils to the use of clear simple sentences and requiring them to write their stories in paragraphs.

Following are some of the beneficial results reaped by using this method. In the oral work the child forgets to be self-conscious and learns to express himself easily and clearly. Unconsciously he is enriching his vocabulary by adopting some of the new words he has heard in the story.

The board work creates a friendly rivalry among pupils. It creates alertness in the mistakes made by others and must think clearly in order to ask such questions concerning the errors made so that the one questioned must think in order to correct his mistakes.

Another value of the board method is that a mistake corrected for one pupil is corrected for the whole class or a technical point de-
veloped for onc pupil is developed for all. The uses of the capital letter, punctuation, possessives and quotations can all be taught incidentally in this way.

In making his own correction the weak pupil becomes stronger and the whole class is benefited by the effort made to correct mistakes of others. The teacher is saved much time and strength by not being compelled to correct the first copy of the story out of school hours.

These are some of the advantages of using the blackboard in language teaching.

Miss Margaret I. Taggart, Principal Training Department, Whitewater Normal, read in part the following paper:

## Interest in Intermediate Reading.

"The reading lesson should teach children how to study, how to group ideas; how to find the thread of purpose in any lesson, the thread which gives unity of meaning to the diversity of detail which makes up the subject. It should inspire children with love for knowing and a desire to gratify that desire through independent doing. It should inspire children with worthy motives, honorable ambitions, high ideals and a dynamic desire to realize them. The reading period should be the period for toning and dignifying the whole work of the school. It should be the period in which the large, the permanent, the spiritual forces hold sway, and in which the character and stability of each pupil in the unfolding process are shaped and determined. It should be the period in which coming manhood casts its shadow before."

The above quotation taken from Welch's "Literature in the School" is the aim of all good schools, and we shall endeavor to show how to some extent this aim has been accomplished in some schools.

We find that we get excellent results from varying our work to suit the selection to be read. In one text we have a series of stories about the early Greeks, their beliefs and customs, followed by some of their interesting myths. The first of these selections we read is about the geographical location of Greece, the names applied to these localities in those early times, with a brief description of the home of the chief gods and goddesses. The new words should be carefully studied in class as to syllabication, diacritical markings and accent before the assignment is made. About twenty minutes daily is devoted to the silent study at seats, preceding the lesson. At the beginning of the recitation an opportunity is given for questions as to any part which was not understood while studying. Books are now opened and all are asked to silently look through the first paragraph, this with all books closed one child is asked to tell all she saw in this. Others are asked to supply any point that she may have overlooked.

The next selection may be conducted with expressive reading as the aim. Here by careful questioning as to the meaning the author intended to convey we secure excellent expression.

One selection of literature or history may be utilized for some time. In Scudder's "Life of Washington" we cannot read the whole orally so we select certain chapters to be read aloud, assign others to be read by different members of the class, who later, are called upon to reproduce their respective portions, thus making a connected whole.

Another assignment for certain classes of literature is to have the pupils look for the best description, the most pleasing or most beautiful passage, and read it so that we may enjoy it. If this is a poem we wish to teach we begin by telling the children something of the author and the real or imagined circumstance under which the poem was written. Then we read the poem as a whole to the children trying to give them the pictures as we see them merely for the pleasure of the story. Then they are asked to read how the author introduces her order and give this in their own words. Next is the description of the setting of the picture. We occasionally give sub-aims to aid the children in making more vivid pictures.
A. few words in regard to the teacher's attitude toward this work. If to her there is no pleasure to be derived from a selection or much of it is meaningless, or appear childish or foolishly fanciful then let her omit that selection and pass on to something that to her is pleasurable, uplifting and inspiring. Then only can she bring joy to the reading period, and render to the children their due.

It is at this period of the child's life that he is apt to become a bookworm, hence the greatest: of wisdom and tact is necessary in order to guide him into a wise selection of his book friends.

Different methods have been tried and carried out to get children to read worthy books at some other than the reading period. One plan often employed very successfully is for the teacher to read enough of a book to arouse an interest in it, and a desire to read it, then to tell where it can be borrowed. Another plan is to have a school library loaned by the pupils of the room, each book to be carefully looked over by the teacher who is the ultimate judge as to its fitness for the uses of the school for the time. With this ownership of the library by the children, one of their number may be elected librarian by the children for a definite time, for its care and preservation.

Too much cannot be said in insistence upon the teacher's setting a good model in reading of whatever kind she does in the school room.

The answer to the question, "What are bad books?" Dr. Robert Collyers writes, "If when I read a book about God, I find that it has put Him farther from me, or about this universe, that it has shaken
down upon it a new look of desolation turning a green field into a wild moor; or about life, that it has made it seem a little less worth living, on all accounts, than it was; or about moral principles that they are not quite so slear and strong as they were when this author began to talk:--ther I know that on any of these five cardinal things in the life of man,--his relations to God, to his fellows, to the world about him, and the great principles on which all things center, that, for me, is a bad book. It may chime in with some lurking appetite in my own nature, and so seem to be as sweet as honey to my taste; but it comes to bitter results. It may be food for another; I can say nothing to that."

## GRAMMAR GRADE CONFERENCE

Friday, 2:00 P. M.
Plankinton Hall, Auditorium.
Chairman-Supt. C. W. Schwede, Grand Rapids.
Secretary-Mary Crangle, Watertown.
The meeting was called to order by the chairman.
The first subject, The Importance of the Study of English Grammar, was presented by Prof. F. A. Barbour, Ypsilanti, Mich., a man of great experience in the teaching of the subject.

Prof. Barbour said that the question is often asked "Where should the study of English grammar begin?" He would answer that, in his opinion, whenever a boy or a girl can reason logically in analysis of problems in arithmetic, etc., he or she may begin the study of grammar.

In speaking of the educative value of English grainmar, three things are claimed for it by Prof. Barbour:
First; grammar as a disciplinary subject has no superior among studies, for one is making thought objective and concrete when studying this branch. It is the nearest to the study of elementary logic that there is.

Secondly; its educative value lies in its being a great ald in the interpretation of thought in all subjects. The child will read his history, his mathematical problems, and all else more intelligently because of his study of the sentence. Systematic drill in grammar will make Latin, German, prose, and poetry easier to interpret.

Thirdly; English grammar is a great and indirect aid in the expression of thought in composition. If the mind is trained through years of study to recognize the subject and its modifiers, and the verb and its modifiers, one will unconsciously use one's mental training in shaping one's own sentences. It becomes a part of one's
self. It has become so stamped upon one's mind that one must use correct forms.
"Phonics and Dictionary Work In The Grades and Results That Should be Evident in Grammar Grades" was presented by Prof. F. S. Hyer, Stevens Point.

Prof. Hyer stated that many people called phonics a new subject, whereas it is an old subject and one whose object is not to supplant dictionary work, but rather to unlock the words met with by pupils during the first three years of their schocl life, and leading up to the dictionary work.

Proi. Hyer said "We begin phonics in first grade as soon as pupils can read about one hundred words (with expression) in sentences. We take the fifteen consonant sounds (b, d, f, h, j, k, l, m, n, p, r, $\mathrm{s}, \mathrm{t}, \mathrm{v}, \mathrm{w}$ ) first. We do not teach c and g during the first year because the sound depends upon the letter following.

Teachers should be careful to give correct sounds of consonants.
Following the consonants, we teach the phonograms which consist of a vowel plus one or more consonants having the same sound."

Prof. Hyer showed charts containing one hundred six common phonograms, chiefly those that have few exceptions. He advised against teaching those that unlock only one or two words. When the phonograms have been properly taught, a child can unlock most words that he meets.

Prof. Hyer would begin the study of diacritical marks and the use of a dictionary in fourth grade, first drilling upon the key words at the bottom of the page. He advises the spending of much time on accent and syllabication, and the study of those vowel sounds that are most used.

As pupils advance, the teacher of orthoepy builds on what pupils have had. She sets them to testing words to find that c before a, o, and $u$ has the sound of $k$ while before $e, i$ and $y$, it has the sound of s. The pupil goes through the speller, testing words and generalizing for himself and-making his own rules, so that before the grammar grades are reached pupils have acquired such a fund of material as would enable them to do intelligently the work of those grades.

The results should be correct enunciation, articulation, and pronunciation.

Then followed a class exercise in upper grade reading, conducted by Miss Emmie H. Nichols, Milwaukee.

Miss Nichols said in part: "The chief business of a teacher of reading is to indoctrinate principles of interpretation. The test of every good reading lesson in the interpretation of the thought and feeling of the author, and the power to impress hearers as we ourselves are impressed.

And now permit me to make a plea for better delivery. And the first and most important element in good delivery is enunciation. It is simply a matter of muscular skill and flexibility, and in order to secure this we practice exercises such as ee-ah-oo, oo-ah-ee, ip, it, etc. The best exercise to secure clear enunciation (so far as I know) is syllabication. Pronunciation and emphasis must next receive attention. If one has the correct interpretation of the text plus feeling, he cannot go far astray in the matter of delivery."

Miss Nicholas illustrated her talk with class work.
Following the reading lesson, Miss Nichols showed how she would prepare pupils for a new reading lesson.

This number was briofly discussed by Prof. W. H. Cheever, Milwaukee.

## REPORT OF PRIMARY CONFERENCE.

## Friday, 2:00 P. M.

Main Auditorium, Auditorium.
Chairman-Mr. C. H. Bachhuber, Port Washington, Wis.
The meeting was called to order by Mr. Bachhuber who announced that the subject on which Mrs. Bradford would speak was "Suggestions Regarding Motivation in the Primary Grades" and not "moviation" as was stated in the programs.

The first sneaker introduced was Miss Margaret Canty of Milwaukee, who presented a paper on the topic "Language Work in the Primary Grades"--whe said in part: "The aim of language is to secure accurate and fluent expression of thought. The teaching of language is of special importance in the primary grades since early impressions are the most lasting. In spite of a knowledge of grammar many adults occasionally lapse into some childish error of speech. Successful language teaching must arouse thought and create desire to express it. The pupil should have something to say rather than be forced to say something. Since impression precedes expression, the pupil should be given an abundance of interesting material and, as far as possible, he should be furnished with good models. The acquiring of a language is due to imitation, conscious or unconscious, rather than to the application of rules of grammar. The imitative faculty is particularly strong in childhood and a child's speech is therefore, in a large degree, due to environment. If a child hears only correct English, he will form the habit of speaking correctly. In school, the pupil's impressions are derived mainly from the teacher's use of English. For this reason, the teacher should exercise the greatest care to furnish correct models and to avoid the use of childish expressions such as "real" for "very"."

Miss Canty then spoke on the value of finger plays, Mother Goose Rhymes, well constructed stories, fables, folk-tales, proverbs, picture study, cumulative stories, games, poems, dramatization and nature study as a basis for language work. She concluded by saying: "The mode of expression should be largely oral. In the evolution of the race, speech was highly developed before the art of writing was known. It is advisable to confine the written work to simple sentence letters of friendship, and short compositions on account of the mechanical difficulties encountered in writing.

Teachers in the primary grades can render incalculable service to the course of education by laying the foundation of good habits of speech since proficiency in the use of English is not only a valuable business asset, but it is also an evidence of culture."

This was followed by some work done by the children of the Milwaukee schools, illustrating certain phases of language work.

The next feature of the program was a series of games and folkdances given the pupils of the First District School Milwaukee under the direction of Miss Rhoda Gooch.

Mrs. Mary D. Bradford of Kenosha next presented a paper on the topic "Suggestion Regarding Motivation in the Primary Grades". She said: "There are three familiar terms used to express the efforts of the school to make its work more valuable to children. The school employs incentives, it strives to arouse the interest of the pupils in the subjects taught and it endeavors to awaken motives for doing the work which schools must do. The purpose of all of these is to make the work of the school more compelling, to stimulate effort and to improve results. The terms incentive, interest, and motive are not, however, synonymous. Both incentives and motives for doing things are attended by feelings of interest; but no mere incentive can operate as a genuine motive, although a motive always operates as an incentive."

Mrs. Bradford then fully explained the difference between incentive interest and motive using personal experiences as fllustrations, and added: "The significance to us as teachers of the distinction which I have been endeavoring to make clear is this "That our efforts must go beyond finding worthy incentives to hold before our pupils; must go beyond finding ways and means of making school work interesting, it must aim at motivation.
"That the minds of young as well as older children can be touched with motives; that good teachers in all grades have attained their chief success because they either consciously or unconsciously have employed true motivation; that more and more of our school work needs to have this breath of life breathed into it; that this will come when teachers gain clearer ideas of the great pedagogical truth,
are the propositions that having entered my thought furnished the motivation for this paper."

After fully discussing the two standpoints from which to attack this problem, namely: First, that of the child and second, that of the present course of study and citing motives to be used in teaching reading language, nature study, drawing and arithmetic, she spoke of the four dominant impulses that may be relied upon by teachers as available in the school, according to Mr. Dewey. First, the social instinct oi. children as shown in conversation and communication. Second, the instinct of making or the constructive impulse. Third, the instinct of investigation. Fourth, the expressive instinct.

In summarizing, Mrs. Bradford said her chief points were:
1st. Interest attaches most strongly to that which has a vital relation to one's well-being; therefore the child must somehow be brought to feel the relation of the school task to some personal need. This gives motive.

2nd. It is natural for us all to feel joy in our work, when we believe that this work conduces to some end, some larger goal we are seeking to attain, in other words when we have a motive for doing it; therefore to motivate the work of little children seems to put life and joy into it.

3rd. That there must be joy in work is necessary to reach the best results both inner and external, both spiritual and material.

4th. Every new discovery in motivation is a distinct step in advance, taking us nearer to the ideal set by Baldwin in his motto for his elementary school, learning to live by living each day in the school.

Next on the program was a very brief discussion on "Reading Work in the Primary Grades" by Sarah Louise Arnold of Boston. She spoke on the subject of arousing such an interest in the child for reading, that when the book was put into his hands he would be ready and anxious to do his best. She advised against confusing word and phonic drill with the regular reading. If these drills precede the lesson, when the child starts to read he will have nothing to think of but getting the thought and expressing it clearly.

She also spoke against confusing the child by continuous questions and suggestions regarding position, pronunciation, etc., while he is reading.


1. Henry T. Bailey
2. David Starr Jordan
3. Sarah Louise Arnold
4. F. G. Blair
5. Duncan MeGregor

## KINDERGARTEN CONFERENCE.

Chairman-Miss Marion A. Smith, Milwaukee, Director of Kindergarten, Tenth District School, No. 2.

Secretary-Miss Carolyn Hatch, Evansville, director of kindergarten, Eransville, Wis.

Kilbourn Hall, Auditorium,<br>Friday, November 10, 1911.

The meeting was called to order by the chairman, Miss Marion Smith, at 2:00 P. M. The following program was given:

1. "The Kindergarten Program." a. From the Conservative Viewpoint, Miss Clara Wheeler, Grand Rapids, Mich. • b. From the Liberal Viewpoint, Mrs. Mary B. Page, Chicago, Ill.
2. Report of the International Kindergarten Union in Cincinnati, Miss Florence Hughes, Milwaukee.
3. "Report of the Froebel Pilgrimage," Miss Clara Delano Hitchcock, La Crosse Normal School.
4. "The Kindergarten in its Relation to the Home and the Community," Miss Joanna Hannan, Milwaukee.
5. "The Relation of the Kindergarten to the Primary." a. What the Primary expects of the Kindergarten, Miss Bertha E. Whitehead, Milwaukee; b. What the Kindergarten is Giving the Primary, Miss Mary E. Buckmaster, Janesville.

## THE KINDERGARTEN PROGRAM.

a. From the Conservatife Vienfoint.

To reproduce the action of an object, helps the child to understand the object itself. And it is not only the activities of life that he would coinprehend, and therefore, that he imitates; but the various relationships of life, and the experiences that have most deeply touched him are often re-lived and re-enjoyed time and time again.
Often the love to exert the force within him combines with the desire to imitate the activities he sees about him, and he creates an ideal world of his own, and here the magical words "Let's play" bring forth a wealth of impersonations as he represents in play the experience of his investigations.

The question of the kindergarten today is not shall we play, but rather, how shall we play that the highest development may be attained.

Program making should be based on the experience of the child. Work from child experience, talk from the child's experience, have
material on hand with which the child can gain experience, can investigate and discover; then cultivate in him the power to express the results of his experience and you have your leading.
Does not the "Divine spark" within each soul given by the Divine Creator to mankind, partake necessarily of the nature of the giver. So man must create because of the God-given creative power within him which must act to live. Does not the responsibility of the nature of the material upon which this creative energy be fed, rest most forcefully upon us, as makers of the daily program of procedure, and our use of play materials?

Should not our first aim be to furnish the inspiration that shall produce in each heart aspiration toward the highest ideal to which that soul can attain?

Frocbel saw in play the power of a great ideal and he formulated his experiences with little children and his observations of devoted mothers in his series of "Mother Plays." I believe that is the reason that in these Mother Plays the typical experiences of life are so truly portrayed, and because the experiences are typical of all life experience, I believe we have no better play material by which to illustrate the ideal in life to our children than the "Mother Plays."

## THE KINDERGARTEN PROGRAM.

## b. From the Liberal Viewpoint.

I have been asked today to state only the point of view of liberal kindergartners in program making. Broadly speaking, the two most

- conspicuous propelling motives are the outcome of two distinctly different types of government in society,-one aristocratic, the other democratic. "Each of these preserves at all costs a certain end. In conservatism, order and social restraint; in democracy, liberty and selfdirection.

The kindergarten program of today represents broadly these two view-points-the conservative or aristocratic, and the liberal or democratic forms of thought. These markedly different tendencies and points of view among kindergarten teachers today in the use of a program are among the most helpful signs of growth. Growth is a dynamic process. It involves change. "It expresses a principle so flexible as to allow for variation.'

In the following outline I can sketch only the striking aspects of the liberal position. The point of view of the so-called liberal kindergartner in the making of her program is therefore a necessary expression of her philosophy of life; it is ber faith, or creed. She believes not only with Froebel, but with all that the most advanced philosophy and science of the day has presented, that only as one lives in active
relation to the world about him, does growth most effectively proceed.
In the kindergartner's view of spiritual ideals and purposes for which society is organized will be found the key to her program. According to her point of view will be her use of materials in the program. In a word "the relation of particular impulses to universal activities must ine understood--"" race activities.

The child's impulsive action is. the beginning of his life expression. The consciousness of the teacher understands the meaning of the child's impulses and her guiding principle will be to lead him slowly from the tyranny of impulse to a consciousness of need in self-direction, in acts, feeling and thoughts. The means she uses will be suited to the individual, the group, the occasion and the surrounding conditions.

Our desire is to help the little child to learn how to think, and to think out his own problems through play:
The liberal point of view emphasizes, therefore, the real life of the present, and idealizes it, starting on the plane of actual experience as it is, and using it as a stepping stone only for a larger appreciation and control, which shall enable them to proceed naturally to the next. The effort of the liberal kindergartner is to so arrange the activities and interests of her children that organic growth, stage by stage will be effected, and, as Froebel says, the allurement of the interests beyond will invite desire and inquiry to reach out for a fuller life.

## REPORT OF THE INTERNATIONAL KINDERGARTEN UNION in Cincinnati.

Growth of Union-Reports: United States and Canada, Foreign.
Opening Meeting-Welcome by Mayor of Cincinnati; Supt of Schools, President of Municipal University, President Taft's telegram.

Miss Wheelock's plea for contributions to the Froebel House at Blankenburg.

Miss Hill's plea to kindergartners to urge mothers to demand better comic supplements to Sunday papers.

Social Functions--Evening reception, luncheons, Story Hour and Play Festival.

Visits to places of interest-Rookwood Potteries, Art Museum, Zoological Gardens; Schools: University, Training School, Kindergartens.

Kindergartens-White: Jewish, Foreign speaking children; negro,
Exercises in cutting, drawing, games, lunch, exhibit.
Kindersartner's duties-Regular, advance work to first grade, visiting homes, mothers' meetings, (extract from Miss Littel's paper on mother's meetings).

## REPORT OF THE FROEBEL PILGRIMAGE.

In the summer of 1911, seventy kindergarten pilgrims, brought together by the force of a great idea,-love for little children, and a desire to build for the future,--traveled to Germany to pay tribute at ihe shrine of their beloved leader, Froebel. Everywhere they met with the most deiightful huspitality, and cordial welcome.

They visited Eisenbach, whose rugged and beautiful mountain scenery inspired Froebel to write the "Knights." At Lebenstein, they traveled through the woods where Froebel was walking when he received news from the Prussian government that his kindergarten was under ban.
A mile from Lebenstein was the little cemetery containing Froebel's grave. The monument is a granite sphere, cube and cylinder and is surrounded by an iron fence. A throng of people, many of them children, covered the hillside around the grave. After an address by the minister and music by the choir, representatives from France, Belguim, England, Scotland, Russia, Germany and America led by tiny children placed flowers and wreaths on Froebel's grave in loving remembrance. At Marienthal, a second monument was seen, marking the spot where Froebel played with the children.

At Blankenburg the travellers enjoyed a most royal reception, and were entertained by peasants dancing in costume in the market place, to the music of a Thuringian band, and songs by the boys from Keilhan. The next day, they visited the boys' school at Keilhan. Here they saw some of Froehel's own handwork.

T!e pilgrims returned home filled with a spirit of enthusiasm to carry out the principles of a man capable of such devotion to an ideal.

## "THE KINDERGARTEN IN ITS RELATION TO THE HOME AND THE COMMUNITY."

"To know, to love and to serve God is the purpose for which we have been created. Unfortunately, the unthinking public looks upon the kindergarten as a day nursery-as a safe and pleasant place in which the children may be taught pretty songs, games and dances, and may be cared for and amused with no other purpose in view than that of relieving the parents of responsibility a few hours each day. To the disciple of Froebel, however, the true conception of the kindergarten is the direction of the child's life toward a realization of the purpose of creation. The world is God's kindergarten.

To so direct the activities of the child that he may recognize the great law of compensation and later realize that the fullest life is one
of knowledge, love and service is the aim of every true follower of Froebel.

On the kindergartner rests the responsibility for the dissemination of these doctrines. 'This responsibility reaches in two directions-toward the school and toward the home, and through the home toward the comminity. How can we as kindergartners best perform this triple service? To the school we owe the fullest development of which the individual child is capable at this period of his life.

The intimate relation between the home and the kindergarten serves a threefold purpose. First, the aid that this relationship gives the kindergartner in promoting the fullest development of the child; next, its influence in instilling high ideals and correct standards in the home; and, lastly the general uplift to the community through the influence of the home.
Not only is it necessary that the mother should know the kindergartner, and the ideals of the kindergarten, but it is just as important that the kindergartner must know the mother and the influence of the home.

The important question with us is how can conditions be adjusted so that the average kindergartner can find time and energy for this most vital part of the work?

## "THE RELATION OF THE KINDERGARTEN TO THE PRIMARY."

## a. What the Primary Expects of the Kindergarten.

Miss Bertha E. Whitehead, Milwaukee.
"The introduction of the kindergarten into the public schools was regarded as one of the greatest steps in the educational history of the country and in Milwaukee where the system was inaugurated this expectation has bcen fuily rcalized.

The kindergarten is a preparation for the primary in that it cultivates the ear, heart, hand and brain of the child as nothing else does. It is the step between the home and the school preparing the child for the formal work of the first grade.

We expect the kindergarten to establish modes of thought and habits of work-habits of purposeful industry, not listless or aimless activity. The child shoulú be required to be as neat and accurate as the limitations of his age and skill will permit. Dramatic expression through the kindergarten game and story has most important bearing upon the primary work. In addition to this may be mentioned conversation and reproducing of stories. A true disciple of Froebel not only in language but in all forms of teaching follow the precept,-things before words.

Quite as impcrtant as the knowledge imparted is the matter of character building. Obedience, instant and unquestioning, should be insisted upon. Independence should be secured. It is easier to help the child than to help hin to help himself, but it should be made a matter of pride with him to say, " 1 did it myself." "Work that is play, and play that is work makes a solid foundation for future education."

## b. What the Kindergarten is Giving the Primary.

"The kindergarten is to prepare children for school, to fit them for learning more readily, to sow the first seeds that are to produce adults of a sound mind, in a sound body, good citizens and true christians." In many cities there is a feeling of interdependence between primary teachers and kindergartners that is good to meet. First you must know your own primary teacher, what she teaches, how she teaches it, and what help she expects from you. This co-operation must come before you can make your kindergarten accomplish its highest good. Lead your children to form the foundation habits of consideration for the rights of others, of social fellowship, of a respect for law and ready obedience to law, anci of punctuality and a thoughtful use of time. Train them for a Jesponsibility and leadership, develop independence, the power to do their own work and finish it on time.

Observation, contact with things, alertness, muscular control, and co-operation should be developed in kindergarten to aid in primary reading, writing, number work and calisthenics.

Use simple and suitable songs, never in minor, and not too low on the staff. Give many games for finding the head voice, for breath control and to strengthen the tongue, throat and lip muscles. Concerted rhythm also has an important place in kindergarten music and marching is very good. Drawing necessitates a correct mental image, close observation and muscular control. Give plenty of free hand cutting, but have a long talk and a short cutting period. For brush work, give clear colors ready for use.
The question is not whether the kindergarten trained child will get through the grades more quickly, but what he has gained in power and efficioncy that will make the work of more value to him. Therefore, our whole aim need not be just the thought of preparation for the primary, but the beginnings of many good habits that will make not only our children but ourselves, healthy, happy, industrious, and possessed of the ever increasing charm of being "good to live with."

# PROCEEDINGS OF THE JOLNT MEETING OF COUNTY SUPERINTENDENTS, TRAINING SCHOOLS, STATE GRADED SCHOOLS, AND RURAL SCHOOLS. 

(November 9, 1911.)
Chairman-C. O. Marsh, Antiso.
Secretary--Ruby M. Acker, Fond du Lac.
Dean L. H. Bailey of Cornell, delivered an address on "Country Life."

COUNTRY LIFE.
(Synopsis.)
What is now known as "The Country Life Movement" is well under way in all forward countries of the world. Every epoch reaches a danger-point. There is danger that cur rural life conventions will be too full of miscellaneous, unrelated and sentimental suggestions. We now all recognize that rural civilization has been in a state of arrested development. We are all interested in correcting this condition, not alone that the occupation of agriculture may itself be satisfactory to those who follow it but also that the progress of society may be properly proportioned. The field has been blocked out. We need now to begin to work out processes in many directions and in all parts of the country. If we are to make any real progress in the redirection of rural society, we must distinguish very sharply between those movements that are chiefly concerned in the outward extension of city ideas and welfare and those that are concerned with rural ideas and welfare. The real country-life movement is concerned in the producing of a thoroughly satisfying type of occupation and life for those who are really a part of rural communities. The redirection of country life is to take place very gradually. The situation cannot be very much relieved by mere agitation, fiat, or by any spectacular or sudden means. Inasmuch as the farming people have been able to readapt themselves so fundamentally to many new practices within the past twenty-five years, we have every reason to expect that they will adapt themselves with equal ease to the new suggestions for social, educational and religious betterment.

It is my purpose today to discuss not the details of the country-life movement or to make any suggestions as to particularities, but rather to hang before you what I think to be the screen on which the movement is to be cast. The background of the country-life movement is clearly the natural environment. As the race conquers, it comes into
more intimate relation with the nature environment and expresses itself more confidently. We have passed through many epochs in our relation to the natural conditions of life. We have only recently passed the great age of mysticism, to come out into the time when we try to explain all kinds of life and all phenomena as governed by law. It is a common saying that our teaching should be practical. I would rather say that it is essential that all teaching shall be true. The application takes care of itself in the long run. Our attitude toward the conditions of life is very well expressed in the prevailing literature of the day. The oid attitude of personifying all forces of nature, of mysticism, of supernatural domination in physical affairs of the planet, have given way to a simple and direct desire really to understand the facts and phenomena of the world in which we find ourselves. The race is becoming more self-reliant. It is more convinced of its ability to conguer. Men rely less and less on fetish and on secondary resources. All this makes for directness, effectiveness, and integrity, and has a very great effect on the moral outlook of the race. The farmer, of all men, should be a part of his background. Whatever one's theory of the creation, he knows that the creation is not human: he knows it is divine. Farming is a quasi public business, and will be so recognized in time to come. If the farmer bears a direct and close relation to the creator, and if he also bears a responsibility to all his fellowmen in the way in which he handles his land, then in the best sense no man is a good farmer unless he is a religious man. And inasmuch as the farmer is the bottom man in human society and thereby constitutes the foundation of that society, it follows that the kind of relation which the farmer bears to his environment will determine to a very large extent the attitude which society as a whole will bear to that environment. It is, therefore, of the greatest consequence to all of us in what spirit the farmer utilizes his land. In fact, this is the bottom question in civilization. The background of the country-life movement therefore, as also the background of society, is the farmer's relation to his natural environment. Education in terms of a broad and affectionate rural natural history is at the bottom of the country-life situation.

## EDUCATION OF THE NEGRO IN THE SOUTH.

Booker T. Washington, of Tuskegee.
(Synopsis.)
Owing to indisposition, Mr. Wasnington's address was brief. He impressed the importance of teaching the young race to keep its feet upon the earth. In the South we are trying to interest the young


1. Wm. Goodell Frost
2. Earl Barnes
3. Booker T. Washington
race which I represent with real things, real life, for the mind is developed and strengthened by studying things themselves without the medium of the book. The speaker gave an account of his own experience in the schoolroom when, on a hot, uncomfortable day he tried to teach a formal geography lesson but found that neither he nor the pupils could accomplish anything. He closed the books and took the children out for a twenty minute tramp through the marsh. The bright children began to notice the land formation about which they had been trying to study, and learned more in those twenty minutes than he could teach them in a week from the textbook.

The little schoolhouse standing by, which is different even in architecture from the other buildings in the community seems to have nothing io articulate it with the life of the people about it. The school should be articulated with the life of the community. The Rising Sun school was used as an example. Here the school used is a building that resembles the farm houses about it. The teacher lives there, the sitting room is the schoolroom, there is a farm with farm tools in connection, the pupils learn to cook, take care of the house, do farm work, and all these things are correlated with the literary studies. The average person does not believe you are getting educated unless you are looking into a book and holding the book at a proper angle. In a school like the one described the life of the school is articulated with the life of the community, and pupils and teachers are contented and happy. There is a beauty and glory and satisfaction about this of teaching that is not found in the old abstract meetings.

## WASTE IN EDUCATION.

## Superintendent Francis G. Blair, of Illinois.

: have in mind a view of a boy holding his finger in the hole in the great wall to prevent the influx of water that would destroy the wall and flood the country. I want to call your attention to a great wall and the leaks in it and the necessity of stopping these leaks. The first great cause of leakage and waste in our educational system is weakness at the important point,-we must properly finance the system. We need revenues for buildings, training the teachers, and conducting schools. We must show the people the relation between educational activity and property and value. We have hitherto called attention to the productive efficiency of education. Whence comes the value of land? Not from the land itself, but from intelligence, science and skill. When Columbus planted the cross of a great religion on a new continent, a new value shot into the land. When a great government planted itself there, every acre got a new value, when a man
with intelligence came and drove a stake into the ground, the land got a new value, the home, the church, the school brought new value to the land. He who goes about plowing the human mind and sowing seeds of intelligence is the great propagandist of country life. There was no value in the land when the savage owned it, for in the savage mind was no dream of civilization. When that idea came the land and its products got a new value and there came worth into muscle, nerve, molecule and brain. The cheapest thing in all God's world is a cheap man or woman. We need a better footing on the educational question, teachers need the courage to see our mights on this matter of values. If we could strike civilization back to the time when might made right, we should have to control the strength of the city and country roads with militia. The greatest safety I know of is the safety of the laws written in the hearts and minds of the boys and girls, the safety of property depends on this law. Our Declaration of Independence must be written in our own hearts and minds by the finger of our new endeavor. Regard for public property in the school lays the law deeper than anything said or done by the legislature.
The great waste in our educational system comes through the lack of properly trained supervisors. We need strong leaders. In Illinois $80 \%$ of the schools open each year with teachers new to their school. One of the great savings in Illinois is the county superintendent, for he knows the schools and can guide the teacher and stand between her and whatever interferes with her work. He is to the schools what the leader is to the orchestra. He must plan the campaign.

Another great waste in education is in the flood of new subject matter. There are two ways of improving a bill of fare. We can cook better what things we have, or we can add new items. In the flood of new subjects we are apt to neglect the fundamentals, we are apt to underestimate the importance of reading, and forget that the book is our great information.

The greatest source of waste is incompetent teachers, untrained boys and girls who have never considered the importance of the work, who come to the wedding feast without their wedding garments. We need money to train teachers, the so-called self trained teacher gets her training with great waste. We must have better salaries to coax better young men and women to train for the profession.

Mrs. Edith Smith Davis said in closing: In my work in the public schools I am often called to schools for mentally deficient children. These are often in the slums of the cities. One day I was asked to visit a school in the city of St. Louis. It was a beautiful building but when I entered the schoolroom I saw the saddest sight my eyes have ever rested upon. A teacher was teaching in this way. She took a
bunch of roses and pinned it to the curtain and said, "one." She then pinned another bunch of roses to the curtain and said, "one and one make how many?" And there was not a single child in the room that could tell her how many one and one made although she told me afterward that some of the children had been with her over eight years. I asked her what kind of homes these children came from. She answered, "This is a very expensive institution. We have a separate attendant and a separate teacher for each child. These children are from the richest, the most beautiful homes of St. Louis and they are what they are through the drink habits of their fathers and mothers."

The law of God is inexorable and today the child in the most beautiful home in the nation is a brother in suffering to the child in the slums. Only the truth concerning the nature and effects of alcohol can save either of them and the truth is given to the teachers of the world, for the Divine Teacher said, "And ye shall know the truth and the truth shall make you free."

## AGRICULTURAL SECTION. <br> Friday, Nov. 10, 1911.

The agricultural section met in the Arcade of the Plankinton House at 2:00 P. M. with Prof. K. L. Hatch of the University of Wisconsin, chairman, and Allen B. West of the Janesvile high school, secretary.

Prof. K. L. Hatch was elected chairman for the coming year and Allen B. West secretary.

Dean H. L. Russell presented a paper entitled "The Development of Agricultural Teaching in Wisconsin Schools." The following is an abstract:

## THE DEVELOF'MENT OF AGRICULTURAL TEACHING IN WISCONSIN SCHOOLS.

H. L. Russell, College of Agriculture, University of Wisconsin.

Wisconsin adopted the idea with reference to separate schools of agriculture some yoars ago, and is now developing further agricultural instruction by inecriorating the subject in her public school system. It is a pertinent problem to raise as to whether there is necessity for both systems. In my opinion, the work of these two classes of schools does not necessarily and should not be allowed seriously to overlap. The county school, the special type, should be made primarily vocational,-a trade school for the preparation of farmers and home makers. Agriculture in the high school should be
a subject to broaden the horizon of the student. I do not like the term "cultural" as upposed to "vocational," because vocational work can be so given as to be made just as cultural as the general subject. lt is culture for the city boy to learn the principles and applications of any subject that vitally touches the common life of his community. Questions relating to the problems of soil fertility and maintenance, and conversely, soil wastage, erosion and bad management; the selection of seeds and grains, the effect of cultivation and tilth, the control and eradication of plant and animal pests, are subjects that are just as valuable for training purposes as other biological facts and possess the added advantage of bringing the student in close contact with his environment.

If the special school develops the subject intensively along the lines of fitting the student for his future vocation, it is in essence a trade school, such as those which are developing in the city in connection with industrial education. If the subject of agriculture in the high school curriculum is presented in its general aspects, it manifestly follows that the line of cleavage between these two classes is more or less distinct. It will be obvious that the special school should not attempt to develop high schiool studies to any material extent in its curriculum, nor is it feasible for the high school to carry on the work of the special school, unless it be in those cases where a technical high school giving a four-year course in agriculture is developed in the country.

The introduction of ag:iculture into the school work should not be confined purely to classroom work. To bind the school to the community, the extension relation must be developed. It is the life-blood of the school, because by it the people see the practical nature of such work, and become much more willing to support adequately the system.

The introduction of agriculture into the public school system, whether it is of the special or high school type requires especially well qualified and iechnically trained teachers. The presentation of the subject by a person who has only had academic knowledge of the same, and who has had no first-hand contact with country living, is not likely to inspire and enlist the enthusiasm and attention of pupils in a way which will develop a high degree of success.

Principal Claude H. EJdred, Marskall; read a paper entitled "How the high school may help in the improvement of rural school conditions." He said that as many of the teachers of rural schools receive their only education in the high schools the courses in agriculture could be made useful in their preparation.

The high school might own a Pabcock milk tester and loan it to a rural school for a weels or so at a time and if necessary the teacher could be shown how to make the tests.

The principal might furnish reference books when they are not to be had in the rural school and he could go out to these schools and give talks to the pupils and their parents.

The following question was debated: "Resolved, that liberal state aid for high schools will do more for effective teaching of agriculture than the creation of special serondary schools of agriculture."

Supt. G. A. Works, Madison, opened the debate for the affirmative. He said:

The special schools doing secondary work in agriculture may be classified as follows: 1. State type of which the Minnesota school in connection with the state college of agriculture is an illustration. 2. District typc. (a) The congressional district is the unit as in Alabama and Georgia; (b) The judicial district as a unit. This is the plan of organization in Oklahoma. There are other district types such as exist in Arkansas where the state has been divided into four districts. 3. The county school. Wisconsin was the pioneer state in the establishment of these schools. In the discussion of this question special secondary schools of agriculture will be applied to schools of any and all of these groups.

In consideration of this question we are called upon at once to consider what constitutes effective teaching of agriculture. We see that in order to be effective two things must be possible, viz.: (1) Use of adequate materials and proper methods of instruction. 2. A wide patronage in the schools must reach the people of their territory and give to the young people who desire it an opportunity for an agricultural education.

Commissions that have made careful investigations with reference to the possibility of organizing the materials and to consideration of the possibility of handling this work in the high schools have been favorable to the idea of putting agriculture in these schools. Fortunately we are not limited to theory. In Minnesota and Michigan it has been demonstrated that this work can be carried on with a high measure of success.

A careful investigation of the territory from which the special schools are drawing their pupils show that only in a very meager way are they reaching the patrons of their territory. If special aid were granted to the high schools it would be possible for them to reach a much larger number and at a greatly reduced expense per pupil.

Principal W. W. Sylvester, county school of agriculture, Menomonie,
spoke for the negative. He said that it was difficult for high school teachers to get out onto farms to see stock or to do other field work. Superintendents of public schools are not qualified to supervise the work in agriculture of the high school. The subject of agriculture is too broad for one to teach.

Mr. E. L. Luther, student of the University of Wisconsin, continued for the affirmative.
I. The special school is local, requires excessive advertising, is uneconomical, and of slow growth, and does not meet a general need.
II. The reasons for this are as deep as sentiment can plant them in the human ear.
a. Pupils have to be removed from home.
b. Attendance upon costs individual too much.
c. Deprives the home of assistance from pupils.
d. Habituates pupils to being away from home and so will but drill them to migrate from agricultural communities.
e. It is short and narrow in its curriculum.
f. Inefficient to meet general educational need: the job too big for it.
III. Conclusion: The special school is not an effective means for teaching agriculture and we must turn to some more effective means.
IV. Education must be more generally disseminated than is done by the special school. Also more quickly disseminated.
a. The American high school can do this.
b. Examples: Minnesota, Michigan, Illinois, etc.
c. Favorable reports of state commissions.
V. Benefits to be derived in teaching the people agriculture by putting agriculture into the high school.
a. Benefits to already existing academic courses.
b. Agricultural courses benefited by academic courses.
c. Personal and individual character of the education: pupils at home nights, carry out what is learned at school by practice at home. The height of correct pedagogy.
d. Agriculture as tools and means of education brought to the high school, the rural college.
VI. The American high school the most effective educational instrument ever devised. It will not be helped by depriving it of doing all it can for the people. Fair play will give it an opportunity equal to untried schemes. It will meet every need and do it effectively.

Principal A. A. Johnson, county school of agriculture, Wauwatosa, continued the debate for the negative. He outlined work that is possible for special agricultural schools but which would be impossible for high schools. He mentioned dairying, blacksmithing, and carpentering.

Mr. Sylvester closed the debate for the negative by saying that the agricultural school at Menomonie draws from a large area. Some of the high schools of Minnesota have failed because of untrained teachers.

Mr. Works closed the debate by saying that no special school of agriculture in Wisconsin has a thorough herd of stock. The high schools of Minnesota are doing successfully the same work which is now being done by the county agricultural schools of Wisconsin.

The section adjourned.

## WISCONSIN PHYSICAL EDUCATION SOCIETY.

Nov. 10, 1911.
On November tenth in the Milwaukee Normal School the usual November meeting of the Wisconsin Physical Education Society was held. Four papers were read and discussed as follows:

1st. "Administration of Physical Training in the Elementary Schools," Mr. George Wittich.

2nd. "Administration of Physical Training in the High Schools," written by Mr. Richards. Read by Mr. John Wilce.

3rd. "Physical Education of the High School Girl," Miss Edith R. Dunham.

4th. "Educational Athletics," Prof. George W. Ehler of the University of Wisconsin.

During the discussion of the first paper, the fact that for the last two and a half years, pupils in the grade schools of Milwaukee have received a complete physical examination, was stated.
The business mecting followed the reading of the papers and was called to order by the president, Mr. George W. Ehler. The minutes of the last two meetings were read and approved. The business report was read and accepted.

The officers for the following year were then elccted as follows:
President-Mr. George W. Whler.
Vice president--Mr. John Wilce.
Secretary-Treasurer-Miss Florence S. Winton.
Mr. Geo. Ehler was elected member of the National Council.
There being no further business the meeting adjourned.
Edith Dunham,

## SPECIAL EDUCATIONAL SECTION.

Chairman-Miss Stella Flatley, Principal of School for the Deaf, Green Bay.

Secretary-Treasurer-Miss Julia L. Dean, Principal of School for Deaf, La Crossc.

Meeting called to order by Miss Flatley at 2 o'clock.
The first number was a class demonstration in obtaining the elements, very ably conducted by Miss Clara Kranzusch of the Milwaukee Day School for the Deaf.

Miss Levy, principal of the Day Schocl for the Blind, followed with a concert demonstration by pupils from the Day School for the Blind of Milwaukee.

Supt. Hutton of the Industrial Schcol for Boys, Waukesha, next gave a splendid and inspiring address on Boys.

He began by saying, "I came to talk about 'boys.' I have no doubt, many of you, for one brief day, are trying to forget them. You have been doing your part to solve the great absorbing problem, the problem which alwsys has been and always will be the supreme problem of civilization, 'What shall we do with the boys?' The problem is the problem not only of mothers and fathers, teachers and the church, but a problem of all forms of civil government. The boy is worth saving. We do well to conserve our scils, our coal and iron, our forests, water powers, lakes and rivers and all other natural resources, but there is little meaning or purpose in our care and thrift, unless we conserve the boy, who, in his turn is to be the steward and conservator of them all." .

He went on to say that children had rights, which must be realized fully less we see the ruinous consequences when these rights are ignored or denied. A child has the right to be well born, he has the right to a happy childhood, he has the right to the good example of his elders. The dearest right of the child is the right to be guided and controlled by the wisdom of his elders. And the most precious virtue is a willing obedience to his elders.

Mr. Hutton closed his address by reminding us of the dignity and importance of our calling-the making of men-men able through training we have helped to give, and willing through the character we have helped to form, to serve well their fellowmen, in all the stations in life that they may be called to occupy.

Miss Wettstein, Principal of the Milwaukee Day School for the Deaf, next addressed the meeting on "Vocational Training for the「eaf."

She said that it was important for the deaf to learn a trade for they are usually compelled to gain a livelihcod by means of the hand. The deaf boy can do well, at carpentry, cabinet-making, inside furnishings, decorating, designing or anything that demands skill of the hands. In Engiand special trade schools for deaf boys and girls are established. In Germany, boys are apprenticed to a master and the state pays a certain amount for the extra attention given the deaf. In Norway and Denmark special agricultural schools are established. But much depends on the condition existing in the communities, in determining what assistance should be given. Miss Wettstein closed her paper by saying, "If we wish the deaf to be happy in hearing communities, we must throw them in contact with hearing people, while they are learning a trade as they are inclined to be timid and lack self-confidence:"

Mr. Winnie, State Inspector of Schools for the Deaf, then gave a short talk on "Helps and Hindrances in T'caching the Deaf." He said that his remarks were not meant so much for the teachers of the deaf as for the visitors. He explained briefly, the oral method of teaching the deaf.

After a short business meeting, during which Miss Nugent was elected chairman, for the next meeting, the meeting was adjourned.

Julia L. Dean,
Secretary.

## DOMESTIC SCIENCE SECTION.

Friday, November 10th, 1911
Mrs. Jennie Jamison, Neenah, chairman.
Miss Erma Hessel, Antigo, secretary.
Meeting called to order at $2: 50$ by the chairman.
Paper by Miss Cora Binzel, of La Crosse-Sanitation.
Miss Binzel spoke of
A. Alr.

1. Composition of pure air.
2. Composition of air when breathed out of body.
a. Organic impurities.
v. Inorganic impurities.
3. Effect upon and danger of breathing impure air.
4. Necessity of breathing pure air when
a. awake.
b. asleep.
5. Natural means of purification.
a. sun
b. Rains.
c. Winds.
6. Methods of ventileting houses.
B. Water.
7. Composition.
8. Source.
9. Impurities and their sources and dangers.
10. Treatment of water, the purity of which is questionable.
11. Water used for the toilet and laundry.
12. Functions of water in the body.
C. Food.
13. Review impurities in air.
14. Cause of the spoiling of foods.
15. Preventatives.

## D. Shelter.

1. Systematic cleaning of house.
2. Study of the plumbing.
3. Wastes and Disposals.
E. The Individual.
4. Body cleanliness.
5. Care of clothes.
6. Habits.
F. Community Sanitation.

A discussion of the subject was opened by Miss Marshall of Oshkosh.

Miss Ruth Heller of Winneconne spoke of the work done in "Dietetics" in the Winnebago School of Agriculture and Domestic Economy.

Miss Conley also discussed the subject.
A paper on "Garment Making" was read by Mrs. Taft.
Miss Jenny H. Snow of the University of Chicago, spoke of "Some Problems Being Workea Out in the College."

Miss Snow spoke of simplifying the work of the home. She spoke of Cake Making and read experiments that had been made at the University.

Miss Conley of Wausau read the courses of study in Domestic Art and Science for the Wisconsin Public Schools, outlined by the committee.

The outline was voted upon and accepted.

Courses of study in Domestic Art and Science for Wisconsin Public Schools outlined by committee appointed by Wisconsin Teachers' Association 1910

COURSES IN COOKING AND sEWING IN THE GRADES.

| Subject | Correlation Study | School year | Time per week. |
| :--- | :--- | :--- | :--- |
| Sewing | Drawing <br> Arithmetic | 5th and 6th grades | 2 periods of 45 min. |
| Sewing, Adv. | Drawing <br> Geography <br> Hygiene | 7th grade <br> Arithmetic <br> Geography <br> History <br> Hygiene | 7th grade |
| Cooking | Arithmetic <br> Geography <br> History | 8th grade | 1 period of 90 min. |
| Hygiene 90 min. |  |  |  |

COURSES IN DOMESTIC SCIENCE AND ART IN HIGH SCHOOL

| Subject | Correlation Study | School Year | Time per week | Credit |
| :---: | :---: | :---: | :---: | :---: |
| Sewing and Textiles | Art and Physiology | Freshman | 3 periods of 90 min. <br> 2 periods of 45 min. | One |
| Dressmaking <br> Millinery <br> House Decoration | Sewing and Textiles Art and History | Sophomore or Junior | 3 periods of 90 min. <br> 2 periods of 45 min. | One |
| Food study <br> Applied Theory Science of Cooking <br> Preservation Adulteration Dietaries | Physiology <br> Chemistry <br> Biology or <br> Bacteriology or Botany | Sophomore or Junior | 2 periods of 90 min. <br> 3 periods of 45 min. | One |
| $\begin{aligned} & \text { Hygiene and } \\ & \text { Sanitation and } \\ & \text { Household } \\ & \text { Management } \end{aligned}$ | Physiology <br> Chemistry <br> Biology or <br> Bacteriology or Botany <br> Physics | Senior | 2 periods of 90 min. <br> 3 periods or 45 min. | One |

REPORT OF THE DRAWING CONFERENCE.<br>Chairman-Miss May B. Moulton, State Normal School, Oshkosh.<br>Friday, Nov. 10, 1911. 2 P. M.<br>"Handwork in the Elementary Grades."<br>Mrs. Sophie Hauser Harris, State Normal School, Milwaukee. General Discussion.<br>"Works of Art in Elementary Schools." Miss Ida M. Cravath, Supervisor of Drawing, Madison. General Discurssion.<br>"A Practical Course in Drawing for Smaller Towns". Miss Marion Gregory, Supervisor of Drawing, Beloit.<br>"Discussion". Miss Nellie Adams Smith, State Normal School, Oshkosh.<br>Informal Round Table-Topics suggested by those present or selected from the following:<br>(a) Pencil Technique.<br>(b) Basis of Landscape Study in Color.<br>(c) Methods of Outlining Work by Supervisors for their Teachers.<br>(d) The Place for Copying.<br>(e) The Place for Dictation.

The handwork, or manual training, or industrial arts are based not so much on the technical skill as on the power of stimulating thought development through the various experiences or activities.

The child should become a worker, conscious of the value of his work, willing to assume an obligation and feeling joy in its completion.
The contact with the various kinds of handwork will insure a broader point of view, with not only the power to do but with the tendency and the ability to feel a sympathetic appreciation of what others are doing in the world about him. "Works of Aft in the Elfmentary Grades."

1. One way of getting them.

2 . Use to be made of them.
Most of our pictures and casts were secured through the efforts of the Madison Public School Association which was incorporated in 1905. The objects of the association are:

1. The fostering of Art Education in the public schools of Madison.
2. The artistic improvement of public school buildings and their equipment.
3. The obtaining and holding in trust for the public schools of Madison works of art and the placing of the same in the various school buildings of the city.
The Board of Education co-operating with the Association, consented to tint the walls of the schoolrooms if the Association would provide the decorations.

Gifts of money came from many patrons. Rummage sales, candy sales, coffees, and lantern slide talks added to the fund, until we now have three thousand five hundred dollars worth of pictures and casts.

As a psychological basis for the selection of the study of pictures, the classified results given by Miss Mary Smith, associate editor of the School Century, have been found helpful.

1. Emotional: Feeling of Pleasure in the Story told.
2. Intellectual:
A. Informational:
(a) Life of artist.
(b) Mediums used.
(c) Where pictures in original may be found.
B. Aesthetic:
(a) Distribution of light and dark.
(b) Harmony.
(c) Rhythm.
(d) Balance and Unity.
3. Spiritual: The uplift of genius.

I find it helpful to group grades one and two about the emotional; grades three and four about the emotional and informational; grades five, six, seven and eight about the emotional, the intellectual and the spiritual.

How to interest children in pictures.

1. Let pupils attempt to express the feeling the artist has expressed.
2. By relating exercises in pictorial composition to the pictures on the wall.
3. By relating exercises in pictorial composition to the pictures to be studicd.
4. By relating work in foreshortening and convergence to the pictures on the wall.
j. Make use of pictures in composition work and English.
5. Through interesting incidents in life of the artist.
6. Use of the Turner Picture Study Series.
7. Bureau of University Travel pictures.

In closing, I wish to make a plea that while we as art teachers are heartily in sympathy with the present day movement to make our work practical, to further the application of art principles in dress,
in the home, and in all civic interest--that we do not lose sight of that deep satisfaction and spiritual uplift that comes to those who are trained to appreciate the masterpieces of art.
"A Practical Course in Drawing for tite Smaller Towns."
Aims: To teach the child what is beautiful, that he may enjoy it.
How to make beautiful things, that he may satisfy his taste for the beautiful.
I. Selptember \& October.
A. Field work,-Nature.

1. Out-of-door sketching.
2. Gathering material for future use.
3. Making stains from berries, etc.
4. Gathering seeds and leaves to help in design.
5. Recording cross sections of seed pods for design and using them as woodlocks to experiment with in spacing units of design.
6. Noting color schemes in birds, butterflies, flowers, insects, etc.
A. Indoor work,-Nature.
7. Theory of color.
8. Perspective of flowers and leaves.
9. Study of pictorial composition.
10. Careful drawings of parts of flowers and seed pods.
(a) As aid to correct pictorial interpretation, and
(b) To furnish basis for design units.
C. Illustration.

Based upon pet animals, games, occupations, lines of poetry describing the natural environment of the town.
II. Novembet and December.
A. Field work,-Nature.

Observations of sky colors, fields, bare trees, etc., taken on the way to and from schools.
B. Indoor work,-Nature.

1. Scales of neutral values.
2. Effect of complementary colors when placed near each other: when mixed.
3. Color schemes in nature reviewed and applied to design.

## C. Design.

Use of seeds, pressed leaves, sprays of seed pods, botanical drawings as material for developing units to be applied to construction work.

Repetition by means of stencils and woodblocks of designs for postcards, calendars, etc., sold to earn money for the school.
D. Landscape.

1. Lower grades-sketches from memory or imagination.
2. Upper grades-Window sketches, selected with finders.
E. Illustration.

Based upon the games, stories and holidays of the season.
iII. Jatudary and February.
A. Perspective-object drawing.
B. Picture study.
C. Practical lessons in interior decoration.
D. Illustration.

Based upon holidays of the season and the means of food, shelter and clothing in countries studied in geography.
IV. Marcil and April.

Study of type growth.
Studying and painting various phases of nature and of animal life.
V. May and June.

Nature work.

1. Landscape.
2. Plant forms.

## VI. A Spring Pagrant.

Furnishes opportunity

1. For studying color effects and stenciled design on
a. Costumes.
b. Programs.
c. Invitations.
d. The decorations on the stage.
2. The grouping of characters to form a series of unified pictures.
"Discussion".
3. Advantages and disadvantages as compared with larger towns.
4. Influence of Environment: needs of the ungraded school as well as the graded school.
5. Nature Study: aim and mediums most suitable to be used.

Nature in design and used as a motive for craft decoration.
4. Picture Study: Pictures selected from artists who deal with subjects of interest to the school. A Study of Japanese prints for line, color, harmony and compositiqn.
5. Co-operation of the community with the school. Use of home still life, animal life, etc. Making of useful articles to be used in the home.
Selection of fabrics; pictures, etc., for general observation. Use of any means to arouse interest which may result in co-operation. Working toward home decoration.
6. Questions to be considered:
(a) Few teachers, many of whom are inexperienced.
(b) Scarcity of material.
(c) Lack of time.
(d) Short term-.
(e) Most useful lines of work to follow and mediums with which to do the work.
7. A limited Course in Drawing for the small town high school.
"The Place for Copying."
Miss Elsa Ulbricht, State Normal School, Milwaukee.
It may be an aid, when used within proper limitations, in acquiring a desirable technique and knowledge as in copying trees in pencil, and Japanese studies for their brush stroke. A study may be used as the foundation in composition, interpreting it, however, in another medium: for studying composition and space relations: to reduce to a few tones, or simple light and shade: to use as a basis of convention in design: for study of color.
"Pencil Technique-Plant Study."
Miss Emily M. Dorn, Supervisor of Drawing, Milwaukee.
Theoretically it is desirable to let the child find himself through expressing in his own way his study of the specimen-but practically he docs not get very far, ialling into bad habits and establishing no foundation on which to proceed unless he is given some definite scheme for working out his study.

A technique should be developed which indicates the character of the medium used-a pencil is specifically a means for a stroke: the aim should be for this effect instead of a rubbing such as comes from the use of charcoal.

Scales of values may be made, keeping the stroke in the one direction and working for a crisp effect.

Study the plant specimen to determine the values to be used. In first and second grades a flat massing with but one tone is sufficient gradually using more as the higher grade pupils have the ability for closer study.

While the mass of flower and foliage is expressed by the strokes kept in the same direction those of the stems should follow the lines
of growth. Study to see the specimen in masses, omitting details. Work for a strong expression, with strokes crisp, getting into the texture of the paper.

Emily M. Dorn,
Secretary.

## REPORT OF THE MUSIC SECTION.

Chairman-F. F. Churchill, Platteville Normal.
Secretary-Mrs. Georgia C. Hyde, Janesville, Wis.
Friday, 2 P. M. Milwaukee Normal.
The program was opened by the Girls' Glee Club of the Milwaukee Normal under the direction of Miss Bach.

Mrs. Belle Porter Heath, of Madison read a paper on "The Development of Musical Taste in the High School," which was followed by a mixed chorus from the -_-_ high school of Milwaukee under the direction of Charles Stackling.

Mrs. W. H. Dudley of Platteville then gave a recital of the following songs of nature: "Snowflakes," "Bendemeer Stream," "An Open Secret," "Oh, That We Two Were Maying," "World Wonders," "Autumn," and "When the Frost is on the Pumpkin."

The address on "The Educational Value of Music" by Prof. Barbour of Ypsilanta, Michigan, which was delayed by conflict with another program, was given at the close of the section.

## SCHOOL LIBRARY SECTION.

The Library Section of the Wisconsin Teachers' Association met in the City Library on Friday afternoon.
'The chairman, Miss Brewster, appointed a committee, consisting of Mr. O. S. Rice, Prof. W. H. Cheever and Miss B. Gardiner, for the purpose of nominating a chairman and secretary for next year. Miss Hazeltine of Madison read a paper on "Inspirational Reading for Teachers." She said in part "We cannot inspire those who sit under us if we are not ourselves inspired. What inspiration bigger than ourselves and our work have we at hand to keep us on the heights? Those who wish to make their work flourish, who wish to inspire into their pupils the fiery message of education should learn always to have on hand books that will bring pleasure, inspiration and power to the reader.

Miss Hazeltine recommended the following books for careful reading:

Addams: Twenty years at Hull House.
Palmer: Alice Freeman Palmer.
Mulier: Carla Weackebach.
Gilchrist: Life of Mary Lyon.
The following books by Edward A. Steiner are a vital contribution to one problem of immigration. There is also a deep human element in them over and above their compelling interest in this problem.

1. On the Trail of the Immigrant.
2. Against the Current.
"One Way Out" or "How a Middle Class New Englander Emigrated to America," is worth while.

Miss Hazeltine also made suggestions for the reading of historical books and poetry, including the drama.

The paper was discussed by Mr. Rice, who gave the results of investigations made as to the books which are most popular among high school girls and boys respectively. Supt. Schulz of Eau Claire then read a paper on "Systematic Training in the Search for Information." "A child should be led to believe that it is desirable for him to possess certain information, then he should be taught to find the information in the shortest possible time. The intermediate grade teacher should reduce the reading of fairy tales, stories and kindred literature to the minimum, for fiction defeats the desire for informational reading.

It is the making of practical applications which become the leading factor in the minds of the children for more reading along practical lines. The questions "What have you read that has been of use to you in your school work? What have you read that has been or use to your mother? to your father? What have you read that will help you in understanding your surroundings? What have you read that will help you to vote? can be used. Efforts along this line succeed easily. The work is interesting. The results are gratifying.

The general subject program to develop interest along informational lines would be about as follows:

First, Little studies of personal interest for comparative and reflective purposes and the extensive reading of the best biographies.

Second, Little studies in nearby social interests for comparative purposes, historical studies.

Third, Little studies in science and civic interests.
Systematic training for informational reading should not be something that breaks off when the school days are ended, but on the contrary it should become a searching for knowledge which continues while life lasts."

This discussion was followed by a paper on, "The District School Library--The Teachers' Opportunity," by Supt. Julia Servaty.

She suggested that country teachers should do more along the line of putting right reading matter into the hands of the boys and girls.

The cily child through his contact with manufactures, commerce, different people, languages, libraries, and entertainments of various kinds learns what country children must learn from books.

He must seek the world. Jt is not thrust upon hin as is the case with the city child. The proper organization and administration of the country school should bring to the farm art, music and libraries.

Through the children even the parents may be influenced. Men and women who never had good books in their own childhood, take up the volumes that their boys and girls bring home and get a breath from the broader life.

This paper was ably discussed by Prin. W. E. Smith of Reedsburg and Supt. Roberts of Shawano.

Mr. Smith made a strong plea for the placing of practical reading in the hands of the country boys and girls, and especially emphasized the value of the bulletins issued by the Agricultural Departments at Washington and Madison.

President Sims then gave a very inspiring address on, "The Influence of a Good Book-The Mental and Spiritual Attitude with which a Person Should Come to a Book-Teacher's Love for Good Books as a Means of Promoting the Same Spirit in Her Students." Who can measure the influence of a good book? No influence greater except the influence of a mother.

One should take up a book with the purpose of getting something specific from it, and should be ready to challenge the statements in the light of actual experience. Reading brings to our firesides the best people of all ages.

Find some book you thoroughly love and read it many times.
We love good books because of the influence they have had upon us, which influence was led to action.

Mr. Sims left so little to be said and so much to be thought about that no discussion followed.

The Nominating Committee then submitted the names of Supt. . Rhoades of Waukesha County for chairman and Miss Frances Walsh of Milwaukee for secretary, and the secretary was instructed to cast the ballot for the persons named.

Motion was then made and carried that the library section be given a room at the auditorium.

Motion made that the subject of "Libraries and Schools" be given a place on the general program next year. Carried.

Meeting adjourned.
Mattie McMillan,

# EXCERPTS FROM PAPERS PRESENTED AT 

MEETING OF

WISCONSỊ MORAL EDUCATION LEAGUE

November, 1911.
Dr. F. C. Sharp-Chairman.
W. J. Hamilton-Secretary.

## SOCIAL ORGANIZATION OF THE HIGH SCHOOL.

Prof. Franklin W. Johnson, University Chicago High School.

## (Excerpt)

Sociability is a marked characteristic of the period of adolescence. Young people of this age form natural groups for team games, for literary and artistic pursuits of a more or less serious nature, and for less serious enjoyments such as dancing. The reason underlying the formation of all these groups is their desire to be together.

But while the home, the church, and similar organizations have been unable to meet the social needs of the adolescent boy and girl, the high school is peculiarly adapted to this end. It is the natural center for the promotion and proper regulation of this side of the pupil's life. Thrown together intimately during a large part of their waking hours, the pupils most naturally form their social groups from their schoolfellows. The classes for natural units and athletic games; the pupil's interest in literary, musical, or artistic activities often makes it possible to turn his social instincts in directions which promote his intellectual and aesthetic development. There is also the additional advantage that the authority of the teachers, which controls the pupil as no authority outside of school does, if extended sympathetically to the social life of the pupils, assures a better regulat:on than can possibly be provided in any other way.

It is apparent that the high school has generally failed to recognize its responsibility in this direction. Athletic, literary, debating, musical and art clubs, with other forms of social activity natural to this period have not until recently been thought of by school authoritics as a means of securing an important educational end. Save as a principal or teacher has chance interest in some particular form of the social life of his pupils, little attention is paid to these features of school life except to repress or control their troublesome developments. For proof of this one need only look through the proceedings of our educational societies and the periodicals of secondary education,
where he will find numerous papers dealing with the difficulties arising from the financial mismanagement of school athletics and low standards of sportsmanship prevailing in high schools.

We cannot change the nature of the boy nor should we try to do so. Instead some are now asking if there is not behind these expressions of the nature of boys and girls a force which, if fully understood and sympathetically guided, might be made to contribute not only to their social but to their moral development.

While in most schools inter-school games with the preparation of the teams for these contests comprise all the athletic training and are participated in by a very small number of pupils, in the University High School, Chicago, the inter-school games comprise but a small part of those actually played. For example, last autumn while there were more than one hundred boys, one-third the total number in the school, who played in football games, there were only four games played with teams from other schools. In some other forms of sport, the number of inter-school games is larger than in football, but, in all the sports the number of games played between teams within the school is much in excess of those played with teams from other schools.

It has sometimes been urged that distinct advantage would be gäined if all inter-school athletic games could be given up and all contests be confined to teams within the school. The high schools of one city have tried this plan and reports indicate that the results have been most satisfactory. This is doubtless an effective method of getting rid of the serious difficulties that have attended inter-school games in the past. But these difficulties are not without possibility of remedy and giving up inter-school contests is a distinct loss to a school.

Dr. Gulick has shown that while the physical results of interschool athletics are inconsiderable, the chief end sought in these contests is not physical but social and moral training in which the whole school shares. By being loyal to his school, whether a boy is developing "the qualities of loyalty, of social morality, and of social conscience;" these are the essential elements out of which social loyalty and morality may be developed. With clear vision and firm insistence upon high standards of sportsmanlike conduct on the part of athletic teams, school officers may lay the foundation of traditions for clean and gentlemanly sport which every member of the school, as well as the members of the team, will take pride in maintaining.

When it is also considered that the privilege of representing the school in any form depends upon the satisfactory performance of scholastic work it will be understood that the school emblem is perhaps the most coveted possession one may secure. At the last as-
sembly of each quarter the successes of the teams are recounted by representative students and the members are called upon the platform where amid great enthusiasm they receive their emblems. But opportunity is never lost at these times to point out the real meaning of the occasion and to restate and strengthen the traditions for manly sport that are becoming every year more effective in the school. The captain of a most successful track team at our emblem day last spring spoke with great satisfaction of the fact that his team had maintained the tradition of the school that no track athlete has ever been disqualified for fouling.

## MORAL INSTRUCTION IN THE HIGH SCHOOLS OF WISCONSIN.

Supt. W. J. Hamilton, Two Rivers.

Excerpt.
Moral instruction is not a new phase of secondary or elementary school work. It has always been presented in many forms in the schools of this state but always correlated with some other study in the curriculum. What the Wisconsin Moral Education League desires is that since so much time and money has been spent in years past for the purpose of developing the intellect and increasing manual skill and since these phases have been so well developed, that now some attention can be given to developing systematic courses in moral instruction, thus training heart as well as head and hand.

We do not feel that moral apathy in civic and commercial life at present so disconcerting in America is due to lack of training in the public schools any more than in the church, home, or other moral and educative agencies.

We dare to say that never in the history of human civilization has there been a wider knowledge of ethical ideals and moral responsibility than that of the modern American. This is what makes the situation so altogether unhappy. Men are able to discern between right and wrong but lack the dynamic power to carry these convictions into the life problems they must meet daily.

The aim in the course is to awaken the sense of moral responsibility of each individual causing a person so trained to see life problems in the light of their moral values as well as the commercial, political or other. This is not to be accomplished by offering a course in the History of Morals nor in tracing the rise of moral codes among primitive people. Neither can we hope to strengthen moral perception of our young men and women by insisting that they shall conform to
certain moral beliefs. The world today has little need for men with beliefs but it does need men with convictions. The impression we wish to convey, is that while in school the pupil should be daily called upon to meet and solve problems that actually test his moral appreciation.

As yet no course of study has been prescribed as the workers in the Moral Education League are still investigating the field. From comparing the courses now offered it would seem that a tentative course might be offered here and frank discussion of same be entered upon at this time.

1-For the First Year, classes of boys and girls meeting together once each week for the study and consideration of American Biography, the theme for the year being "Why Some Succeed" and endeavoring to determine the elements of success in the lives of noted Americans of the present and past. This has been found readily adapted to the library reading requirements of many high schools.

2-For the Sccond Year classes, the theme is "The Spirit of Altruism" and has proven highly entertaining and instructive in many of the schools. "Twenty Years at Hull House" and "How the Other Half Lives" are types of study which awaken a new sense of personal responsibility in students of this age and is a never ending source of pleasure to the teacher conducting the work. The plan for conducting the class work is the same as for the first year.

3-The work of the Third and Fourth years can be conducted to a better advantage if the young men and women are segregated. Here the more personal problems are discussed. The problems here presented should be actual life problems rather than metaphysical speculations.

In conclusion, we may say that systematic moral instruction in Wisconsin high schools is no fad but a sane attempt to "vocationalize" our moral and ethical codes as well as we have our multiplication tables. In the past much of our morality has not been justified upon utilitarian grounds but rather owing to a peculiar sanctity or tradition. The experiments thus far conducted in Wisconsin show results decidedly favorable to this branch of instruction in our high schools and we are glad to note that the interest in the work is growing as rapidly beyond the borders of our own state.

# TEACHING RELATIVE ETHICS. <br> Prof. Earl Barnes, Philadelphia, Pa. 

## Excerpt

In discussing the problem of moral education, we would avoid much confusion if we recognized that there are two different forces involved in all moral action and these develop on different lines. The first of these forces is the desire to do right, and the second is the moral judgment which tells us what is right. In the past, we have generally treated these two forces under the common name of conscience, and we have taken it for granted that this conscience both urged towards righteousness and pointed the way. Every page of history disproves this view, for at all times of acute feeling we find opposing groups urged to action by the desire for righteousness but seeking to destroy each other because directed by different moral judgments.
The hunger for righteousness, Kant's categorical imperative, like all other hungers, insists that we do right; but it does not know the way. In this respect it is like the hunger for food which drives a man to eat mushrooms, but does not know them from toadstools. This hunger exists in all children, but unless exercised, it becomes weakened and may even cease to be effective. Exhortation plays little part in developing it. Most of us recognize the uselessness of urging a child to like eggs; it is equally foolish to urge him to love righteousnesis. If: we obey the command and form good habits, we have done what we can to keep this driving impluse effective.

The moral judgments, on the other hand, develop along genetic lines like all other judgments. The consequence is that conduct, resulting as it does from a combination of hunger to do right and moral judgments, must change from step to step in the development of the individual. Acts which are right at one stage of growth may be wrong later on; and acts once wrong may become right with advancing standards. The educational condition produced by the recognition of this developnient is very hard to meet. Children demand absolute standards, and since the teacher must meet them on their level, he must teach absolute standards though he knows them to be relative. Practically we do this in almost every line of our education. We teach creeping as thongh a baby were always going to creep, and we teach Santa Claus as though he were going to continue his annual visits forever. Human life is always passing through these transitions and finds very little difficulty in making them if too much emphasis is not laid on the finalty of what is taught. Only


HON. FRANCIS E. MCGQVERN
highly developed adults can endure the agony of a suspended judgment, and so for children and youths our teaching must seem final though we know that it will change.

As an illustration of the relativity of moral judgments, take our attitude toward truth-telling. The law of the jungle is: Whosoever telleth the truth, he shall surely die. Thus the fox who successfully deceives his enemies escapes those who would eat him, and eats those who cannot escape him, and his progeny inherits his virtues. At most the truth is told only in the family group or, possibly to a less degree, within any particular species. The same condition holds among savages, and even among primitive men, the family group where truth is told does not extend beyond the city state and does not hold very strongly even within the family. The Odessey is a glorification of a man of many wiles. In the story of Jacob, he lied three times to his blind old father with the definite purpose of robbing his brother, and he was aided in the process of deceit by his mother. Not only did he prosper exceedingly, but his descendants form one of the most important races in the world today.

It is only with the coming of trade and with the participations of many people in political life that truth becomes established as a universal virtue. The new conscience of science imposes truth even outside our personal relations. And yet today diplomacy prevails in the relations of nations, and honorable men are tempted to lie about what they bring through the customhouse. Truth as a universal principal of life wins its way only slowly with the passage of the centuries.

Studies which I have made on large groups of children show that they tend to pass through these same stages with regard to truth or revenge that nations have lived through. Young children seek the line of least resistance in conduct, for fraud is the force of weak natures:

The problem of the teacher must be to keep the hunger for righteousness active and to train the moral judgments toward even higher standards. He must accept many actions as right for the time and seek to improve them for the future.

ADDRESS OF WELCOME TO THE STATE TEACHERS' ASSOCIATION, MILWAUKEE.

Hon. Francis E. McGovern, Governor of Wisconsin.
There is little need this morning of conventional or formal words of welcome. The teachers of Wisconsin understand very well without assurance from me that the great heart of the commonwealth
rises up to greet them. As in the oiden days when teachers boarded around and were received everywhere as members of the family, so are they welcome still. And so are also their guests from other states. We want you all to feel at home and without let or hindrance to take possession of whatever may be necessary for your comfort or convenience.

Ordinarily a Governor is not expected to take orders from anyone. But like so many others this rule is subject to exception. At any rate when this association, acting through its dynamic if somewhat diminutive ex-president set me down for an address of welcome and at the same time informed me that the teachers of Wisconsin, having had quite enough of captious criticism demanded that $I$ and all the other speakers must sound a note of "optimism, inspiration and constructive suggestion", I meekly and promptly consented.
"Optimism, inspiration and constructive suggestion" is a splendid text and I want to congratulate the association upon having had Mr. Parlin as its president, especially at the time this meeting was planned. The foreword to this program alone justifies his election. His removal to Boston is a loss to Wisconsin and to the cause of education in the Middle West. Let us hope that his professional influence may continue to abide with us as certainly as will the recollection of his stimulating personality and our friendship for him.

And now for the stipulated word of optimism. Before uttering it however I trust you will pardon a personal reference. It may not have occurred to you, but I want to say that it seems good to me to be here. I find in the present occasion no cause whatever for pessimism. I am not at all depressed by the thought that a former humble member of this association is now fortunate enough to be Governor of the finest state in the Union and has been called upon in his official capacity to welcome you here. But I am no whit prouder of any temporary honor the present may hold than of the fact that years ago I was a member of this association and had my name enrolled as one of the public school teachers of Wisconsin.

There are other reasons, wholly impersonal, why we are justified now in looking on the brighter side. At the last session of the legisJature this association finally successed in passing a teachers' pension bil. To some this designation is bald and almost brutal in its frankness. They prefer to call it a "law for the establishment of a teachers' rotirement fund." But the name is immaterial so long as we make ourselves understood not only to the members of this association but also to those upon the onts:de. We hope it will work well; but it marks a new departure and aftor all you may not like it when put in operation. It may need amendment. If so, all you will have to do so far as the executive branch of the government is concerned is to make
your wishes known. Last winter we gave you this law just as you drew it and it will be for you to say after you have tried it whether or not you want it changed. For one I believe the teachers of Wisconsin are entitled to everything they desire-at least everything they can agree among themselves is desirable. We know from experience they will not ask too much.

There is still another justification for optimism at this time. We all know that because of false ideas of economy teachers are sadly underpaid. That it is not true economy requires no extended argument; for all experience shows that no investment, public or private, pays half so well as money laid out for education. Our law makers are coming to accept this view as is shown by the fact that never before were more generous appropriations made for school purposes. The increase in the levy for the maintenance of common schools this year was over $\$ 138,000$; for high schools $\$ 25,000$; for normal schools more than $\$ 150,000$ and for the University almost $\$ 320,000$. The growing intorest in edrcation manifested in this most practical of all ways is alone suffcient to justify the fuliest measure of optimism those who prepared this prcgram intended to inculcate.

So much for the first division of my assignment. As for the second-inspiration-I shall not undertake to comply with the requirements of the program conimitiee. I take the likerty to rebel at this point because my poor abilities are not adequate for the task. I feel also that inducements stronger than anything I can suggest are presented each day to every one of you and I much prefer to let the open-eyed wonderment of the four-year-olds who are just entering school, the eager questioning of the boys and giris in the grades and the generous enthusiasm of high school students speak for me upon this theme.

In Boswell's Life of Johnson the anthor tells about a conversation with the great lexicogranher that took place while they were being rowed across the river Thames. It was about the value of Greek and Latin as essential requirements of a good education. Boswell remarked that people go threugh the world very well and carry on their business to good advantage without learning. Johnson replied: "That may be true in cases where learning cannot possibly be of any use; for instance this boy rows us as well without learning as if he could sing the song of Orpheus to the Argonauts, who were the first sailors." He then called to the boy: "What would you give my lad, to know about the Argonauts?" "Sir," said the boy, "I would give what I have." Boswell tells us Johnson was much pleased with this answer, gave the boy double fare, and turning to Boswell said: "Sir, a desire for knowledge is the natural feeling of mankind; and every human being whose mind is not debauched will be willing to give all that he has to get knowledge."

This desire for knowledge, this striving for perfection on the part of the pupil and the opportunity to direct and stimulate the growing mind-this is the true inspiration of every teacher. If brought in daily contact with these golden opportunities they are nevertheless not perceived, no amount of exhortation by others will help much. Colonel Ingersoll whose wonderful imagination almost rivalled Shakespeare's tells a story of Horace Greeley that' illustrates what I mean. It was at a lecture by the great publicist on the subject "Across the Continent." At last the speaker reached the mammoth trees of California and Ingersoll thonght: "Here is a chance for the old man to indulge his fancy! Here are trees that have outlived a thousand human governments. There are limbs above his head older than the pyramids. While man was cmerging from barbarism to something like civilization these trees were growing. Older than history every one appeared to be a memory, a witness and a prophecy. The same wind that filled the sails of the Argonauts had swayed these branches." But he tells ins the trees said nothing of the kind to Mr. Greeley. Upon these subjects not a word was told him. Instead he took his pencil and after figuring a while remarked: "One of these trees, saweă into inch boards woulă make more than 300,000 feet of lumber."

The sources of inspiration are all about us, not only in the willing minds waiting to be instructed, in the unstudied impulses of childhood and youth pausing to be directed but in the splendid educational system of Wisconsin of which every school forms a part and the exalted ideals that have directed the administration of this system from the beginning. To the teacher who is candid, intelligent and kind no further inspiration is necessary.

And now to complete the task assigned me, permit one word of constructive suggestion. In my message to the legislature last winter I ventured to make a number of recommendations for the improvement of the common schools, some of which were not enacted into law. Meanwhile I was fortunate enough to see adopted every suggestion I had made upon every other subject. So I have been emboldened to think that one of these defeated proposals is important enough to justify me in again calling it to public attention. It is that there should be a county board of education elected by the people to have general charge of the schools of the county, after the pattern of the present system of city schools, and authority to appoint the county superintendent and his assistants.

I shall not attempt to submit an argument in favor of this plan. But a ferv simple facts plead most eloquently for a change. At present the weakest part of the entire educational system is the country school and some inuprovement in the supervision of it is absolutely necessary. 'The customary visit of the county superintendent to each
district school once a yar is practically no supervision whatever. Those in charge of city schools, compact and therefore easily supervised as they are, spend sixteen times as much money for this purpose. In consequence the city schcol has rapidly advanced while the country school has either stood still or retrograded. The ratio of sixteen to one which expresses the respective liberality of city and country school administration for supervision is no more sacred here than when applied to its time-honored associate, the coinage of silver and gold. But better supervision would not be the only advantage of such a change. It would make the county superintendent independent. Independence here will operate powerfully to secure a higher standard for the certification of teachers. Raising the standard for certification will in turn inevitably result in increasing teachers' wages; and with increased wages for teachers and better and more helpful supervision we shall witness nothing short of a revolution in the character of country schools.

If it be said that the proposed change is undemocratic because it contemplates making an elective office appointive, our reply is that it has not proved so in the cities where it has been tried. Democratic rule dioes not require and never has demanded that all officers shall be elected. The demand for a short ballot now sweeping over the country though contemplating the appointment of many officers now elected is essentially and fundamentally democratic. The county superintendent and his assistants should be educational experts; and I have yet to hear a valid argument'for the selection of experts by popular vote. More conclusive however than all else is the consideration that anything which improves and strenghens public education must inevitably promote true democracy.

This is the most important reform now pending before the friends of public education in Wisconsin. Let me counsel you who have endorsed it in the past to concentrate your energies and influence in favor of its accomplishment now. One good thing achieved is worth more than many admirable reforms attempted. If the idea still meets with your approval endorse it herc and see to it next year that it is incorporated in the platforms of all the political parties. This done, you may be sure it will not again fall by the wayside when the legislature meets.

And now, on behalf of all the people of the state, I extend to you a most hearty welcome. To the distinguished visitors from beyond our borders who have come here to speak to the teachers of Wisconsin let me say that no cause could better commend them than that which has brought us together. Consciously or unconsciously we are all teachers; for education is broader than the schools. But set instruction is therefore none the less essential. May your sessions be suc-
cessful, your stay in Milwaukee enjoyable and your deliberations profitable. No body of men or women anywhere enjoys more fully the confidence of the public or the good will of the entire state:

## OPTIMISM, INAPIRATION AND CONSTRUCTIVE SUGGESTION.

Charles C. Parlin, Boston.

It is easy today to be an ortimist, for 1911 has been a year of progress. In Wiscunsin it has been marked by important legislation. The teachers' pension act has become a law and a tardy piece of justice it is. The woman who devotes her life to the rearing of her own children, has as a reward sturdy sons and daughters to care for her declining years, but the woman who in the schoolroom sacrifices her own life for others, giving unsparingly the God given qualities of womanhood to the children of the state, has been allowed to suffer from want and to die in poverty. The pension act is a step in advance, but it is insuficient; for it is, in no sense, a retirement fund for principals. A man with a family cannot afford to voluntarily retire on a pension of $\$ 400$, and many a man as he approaches his prime, realizing that he must provide for the education of his children, and that he dare not face the problem of old age in the profession, leaves the schoolroom for more lucrative employment at just the time of life when his accumulated experience makes him most valuable to the state. A retirement fund that would provide half pay, with a maximum, if you please, of $\$ 1,200$, would insure to the state the best years of the lives of those men whom the state is constantly training, only to lose at their prime.

But the most important piece of school legislation, if it is ratified by the people at the referendum, is the act for woman suffrage; for woman, with her keen intuition is ever the friend of education, ever ready to sacrifice for her children. The magnificent high school building at Madison, the finest in the state, is a monument to woman's superior interest in education. At the vote on bonding the city, separate ballot bexes were used for the sexes, and the results showed that while the men voted the proposition down, the women carried it by sufficient majority to more than offset the adverse vote of the men.

It will be a great day for education when women vote. Then indeed, will pensiou laws for teaching, minimum salary acts, consolidated school districi legislation, county board of education bills, and every act that looks to the betterment of the schools be readily passed; ior wonan is intelligent enough to see the value of educational measures and self-sacrificing enough to tax herself for the benefit of
her childaren. In the day when the five thousand members of this association are, as of right they should be, voters, then indeed will governor and legislator lend an attentive ear to the requests of this organization.

Teachers, if you would do a service for education, arouse an interest in woman's suffrage; encourage the boys to debate the issue against the girls. There is nothing better to take the conceit out of a budding Lord of Creation than to let some keen witted girl thrash him on this issue of woman's suffrage. He will be subborn enough to still be unconvinced, but later, with due humility, will vote for the measure.

It was my boyhood delight to argue against woman's suffrage, but I married a school teacher, and, as you see, she converted me. If each one of these attractive young ladies before me would convert just one man, what an impetus the cause would receive!

Our motto is "Optimism, Inspiration and Constructive Suggestion," and our speakers have all been notified that it was adopted not to adorn our stationery, but to dominate this program. I trust that your sectional meetings will furnish an abundance of specific constructive suggestion, and I hope that the general program will breathe the spirit of optimism and inspiration.

We, in the school work, should all be optimists; for we live in the midst of a marvelous growth, and where there is growth, there is life and hope. We have fived in the midst of the most remarkable educational revolution in the history of the world, and have known it not.

In twenty years the enroilment of the common schools has more than doubled, of normal schools, has trebled; of college, nearly quadrupled; and of public high schools has increased sixfold. May I attempt to make this seem more real by a concrete illustration? You remember the description of the lady, "She was fair, fat and forty." Now it has always been an ambition of mine to fulfill that description in my own person, but not yet have been able to attain to any one of those estimable qualities. But though not yet forty, I taught long enough in a single high scinool to see it grow from a school of one assistant to a school of more than twenty assistants, from a school of fifty odd students to a school of 525 students; and what took place in one school has taken place in many throughout the land. How marvelous the growth! How fraught with meaning for the future! The day of universal secondary education has already dawned, and will ere long light with dazzling brilliancy a world vastly wiser, and richer, and more beautiful than man has ever known.

To be an optimist in education is, indeed, easy, but this very growth which, to the observer with a wide vision, fills his heart with hope and optimism, tends only too often to stifle in the souls of the youth that inspiration which is motive power of all education. For with the
handing of vast numbers, organization has tended to replace that vital relation between teacher and pupil that in the last analysis is education. Do not misunderstand me, organization is necessary. Without it, the instruction of vast numbers would be impossible, but organizations have multiplied, organizations within organizations, organizations for every conceivable phase of education and life until we need just one more organization-an organization to prevent further organization. For while organization is useful, while it is necessary, yet organization alone cannot inspire souls; it can only create a vast grinding machine that turns out human bricks, useful but lifeless, usable by an overseer, but incapable of initiative. If you would have for your product not bricks but men, you must have for your educator not a machine, but a soul, a teacher filled with inspiration.

What is inspiration? It is that vibration of the soul that creates in its possessor, noble thoughts and high ideals and which, transmitted by contagion to another, fills him with an ambition to dare and to do. Pardon my humble attempt at original definition; inspiration is undefinable, unknowable; yei it is real. Let me describe it by what it accomplishes. Without it, a teacher may take a class of alert children and deaden their souls and send them out to plod through all a lifetime, if not, indeed, through all eternity, the treadmill of listless, hopeless mediocrity. With it, a teacher takes a dull and listless boy and awakes him to a keen thirst for knowledge and sends him forth to be a doer of deeds and a leader of men. The difference between these twe teachers is not ten dollars per month, it is not one hundred dollars per month; it cannot be measured in dollars and cents, it can only be measured in the infinitude of God's eternity.
"I am not much on inspiration, give us constructive suggestion," says a schoolman. Ah, poor blind soul! A maker of bricks shall he be, but never can he inspire the souls of children.
"Optimism, inspiration and constructive suggestion." I am not a preacher: I am no longer a teacher, I am only a business man coldly studying industry, but fresh from my labors of coldly analyzing industry, let me voice my humble opinion that the greatest of this educational trinity is "inspiration;" for inspiration is the force that moves the child to move the world. Do you think me extreme? I submitted the paper to a keen, shrewd business man who has had an unusual opportunity to know men and motives that control the great business interests of the land, and asked his criticism. I have just one suggestion to cffer, he said, you bave not made your paragraph on inspiration $\in \mathrm{n}_{\mathrm{H}}$ Lat:c enough. * If you could only make the teachers of this nation, know as I know, how the power of inspiration and enthusiasm sways our business world, ynu would transform the school system of the court: $y$.

But this greatest of all qualities is not alone for the teacher. How much more should it be possessed by the principal; for to him comes the opportunity to lift an entire school. Of course your successful principal must be strong in organization, but organization is easy; for any responsibility is light which may be fully met by fair intelligence and patient toil; but the responsibility for touching the lives of others with a spark of inspiration, that is a weight that no thoughtful man will lightly assume or easily carry. To control a school is not difficult, but to stand before a great high school and see before you not five hundred mischievous boys and girls, but five hundred souls just unfolding into manhood and womanhood and to think that your words may be an inspiration to lift them to a noble and useful life or a deadweight to drag them down through all eternity, that is a sight to make the strongest soul shudder at his spiritual responsibility.

The rewards of a schoolmaster's life are not dollars and cents, far from it-the great reward of a schoolmaster's life is the pleasure that comes from sceing the stalwart men and women that, in the formative pericd of their lives, have been roused by a spark of his own inspiration, to strive for better things. I confess that this pleasure is marred by the lives of other men, who, leaving the schoolroom full of hope and ambition, have had the call of ambition drowned in the hum of machinery and now have a vision limited by a hope for two dollars a day. Shall this dwarfing of the soul be for eternity? I hope not. I hope that in some other land, ambition shall again light the eye and the soul shall again have the opportunity to attain that fuller development for which its Creator designed it. But for this world at least the destiny of men and women is moulded in the teens, and to you principals and teachers of high school students and professors of the early years of college comes a tremendous responsibility, but with this responsibility-a glorious opportunity.

But this greatest of all qualities is not alone for the teacher and principal; how much more shonld it be possessed by the superintendent, for he has an cpportunity to uplift an entire school. The superintendent should have a rare combination of qualities, a keen, cool business head to finance the institution; a warm heart that sympathizes with child life; a vivid imagination that creates lofty ideas and inspres cthers to strive for them, and besides all that a domnant courage that stops at no obstacles, failure at no rebuffs, but pushes fearlessly on to the attainment of an ideal. The superintendent who would have a great educational factory must work out for every teacher what she shall do and how she shall do it, and must have a sufficient number of assistant supervisors to see that his requests are carried out to the letter. Such a superintendent will have a great educational machine, that whether he sleeps, or whether he wakes,
whether he is at home or far away, will grind out finished product; but that finished product will be only human bricks. If instead of a machine he desires a school that will turn out men, stamped with individuality, and lighted with enthusiasm, he must allow to every teacher sufficient latitude both as to subject matter and as to method, to enable her to display that personality and power of initiative which she should inspire in others.
"Fine theories," says a superintendent, "but impractical. In this age of efficiency organization, impossible."

Do you know that the greatest wholesale and retail establishment in the world is organized on a basis that leaves so much latitude to the heads of departments that they are almost independent merchants? Do you know that the greatest magazine publishing house in the world is organized on a basis of allowing a maximum of individuality to its various employes? Do you know that the necessary and essential quality of any entinently successtul organization must be to allow to every employe that measure of individuality and power of initiative that will place the act:ve thought and the enthusiasm of the great mass of employes under the organization?
"But," again says your superintendent, "that is all right for the men who think, but the man at the machine has no power of initiative, he only watches the paper go through the press." That is the trouble with our school organization. We have followed too closely the analogy to industrial organizat:on; we have thought that the teacher was like the man a.t the machine. but, as a father-I care very little who is the superintendent or the principal; what I want to know is-who is the teacher of my child? The man at the machine is but a part of the machine; if he is absent today, another man takes his place and the work is done just as perfectly. But not only is the teacher not a part of the machine, she is the whole soul and life of her schoolroom. Superintendent and principal exist cnly for the purpose of inspiring her to do her work.

Constructive suggestion is good; if I give a teacher a constructive suggestion today, tomorrow I will fund her dutifully attempting to apply it,-but it is not her idea. But if I have inspired that teacher to think out a constructive suggestion for herself, I will find her next day with her eyes aflame with enthusiasm-pouring out to her children a lesson which they will carry with them through all eternity. The chief function of a superintendent is not to organize his school, for organization is easy, nor is it to furnish constructive suggestions, though sume constructive suggestions are good. It is to furnish inspiration, that shall lead every teacher to strive for the unfolding of her own powers until at last in the fullness of her strength she gives to the service that greatest of all human gifts-a human soul.

But inspiration shnald not stop with our secondary schools, it should animate our higher institutions of learning. "In our State University we should have eminent scholarship." So I once wrote in a report; but the chairman made an unpardonable blunder in reading my writing, and the printed report read, "In our State University we should have animated scholarship." I thank the chairman for that blunder. "Animated scholarship" is what we need, scholarship that is alive, that touches not only the intellect but the souls of men, that arouses them not only to know things but to do things, a scholarship that shall light the way for the progress of humanity.

Especially in our state supervising officers, our inspectors, and most of all in our state superintendent do we need power of inspiration. Mr. Superintendent, you have a wonderful opportunity. You alone reach the ear of every one. Send to the patrons of our schools a message not of criticism but of encourasement that they may feel pleased with their past efforts, and be willing to make still greater sacrifices for education in the future. Supply every teacher in the state with constructive suggestions, but even more important fill every teacher with hope and inspiration that will lead her in the fullness of her own soul's power to do her best, and then as the spokesman for the great state of Wistonsin, carry the Wisconsin message of constructive suggestion, of optimism and inspiration to the great educational meetings of the laud.

Ladies and Gentlemen, life is serious, life is earnest, life is worth while. You are the teachers of life. Does your part seem humble? No teaching service is humble, for teaching is divine. The teacher of the cross-roads schocl with but a single lad, may be training a man to shape the destinies of nations, while a superintendent with a great city system may but only be making a machine which will perish with him. A wonderfal opportunity is yours-courageously assume your responsibility, and with optimism in your heart go boldly forth to do your part, however humble it may seem, to inspire the child to make the world of tomorrow, vastly richer, and nobler, and happier than is the world today.

## THE WASTE OF WAR.

David Starr Jordan, California.
The aim of the Peace Movement is to do its part "to keep unreasoning anger out of the councils of the worid." The absence of unreasoning anger between nations is the beginning of peace. But our ideals of peace are not met by "bankruptcy armed to the teeth," the state of

Europe today, a condition which, as Gambetta once said, finds its final climax in a "beggar crouching by a barrack door."

International peace means mutual respect and mutual trust, a condition in which the boundary line between states is not a line of suspicion and hate, but, like the boundaries of provinces, a convenience in judicial and administrative adjustments. Such a boundary as this is found in the four-thousand-mile line which separates Canada from the United States, an undefended border which for nearly a hundred years has not known a fortress, nor a warship, nor a gun. There is nothing of which the two great-North American nations have a greater right to be proud than this boundary of trust and confidence.

The end of our efforts is found in the conception of peace through law. A natural law is the expression of the way in which things normally come about. Human law is the expression of the best relations among men. In war, the conceptions of right and duty disappear. In arms, the laws are silent. Worse ways of doing things take the place of better, to the detriment of society and of the individual man.

The whole movement of civilization has been from strife toward order. In barbarism every man's hand is against every other. The life of every man and woman is a tragedy. As man has risen co-operation has taken the place of compulsion. Men have brought peace to their families and their neighborhoods by working together to exclude war. They have learned more and more to leave their differences to the decision of others, either through arbitral settlement or judicial decision. The one brings about a condition of mutual tolerance; the other strives towards ideal justice. And in the world of today both methods find their center in the councils and tribunals at The Hague.

In such fashion, step by step, men have passed from tribunal wars, municipal wars, struggles of robber barons, and of rival dynasties, marauding expeditions, holy wars and wars unholy, to relative peace within the borders of the nation. The only place where killing on a large scale is legalized is on the line where great nations meet. Along these borders today the most crushing burdens of war machinery the world has ever imagined are steadily piling up. All this is avowedly in the interest of final peace, "the peace by preponderance," to use Lord Roseberry's descriptive phrase, not that peace which comes of mutual confidence and mutual respect.

The chief purpose of national existence is to ensure local peace. Its extension defines a limit in which peace shall exist. This does not inhibit riots, violence or civil wars, because no one can guarantee that a nation shall be just within its own jurisdiction, nor that a people shall be docile and law-abiding, even when fairly treated by those in
authority. But the tendencies of national development make for national peace. The growth of popular government makes everywhere for better understanding among men, and groups of men who know each other recognize their common humanity and common interests as far outweighing their desire for fight.

Along the international borders, or rather along the boundaries of races, ill-feeling and violence are most likely to appear. Across these same borders a thousand emissaries for good are also passing from day to day. The miss.onary has been a powerful agency for peace. So likewise is the commercial traveler, the board of trade, the international commission, the world congress, and all other agencies for bringing men together on the basis of common interest and common trust. The world over, men engaged in similar work, though in different nations, have more in common than the men of the different groups within a single nation.

The unification of international life is a guarantee, obvious to all save the politicjans, that international war among civilized nations has already come to an end. The old impulses for international war have passed away. The dream of a unified church and a unified state, including all Christendom, and both held together by force, has passed away. The Holy Roman Empire exists only as a memory. The maurading nation, which lives on the spoils of its neighbors, has not been possible for a hundred years. No war can bring financial, social or political gain to any nation, as the world goes today. This idea, dominant so long, has been lately characterized as "the great illusion." Victory or defeat alike bring disorder, confusion, debt and bankruptcy. An aroued peace, by which nations are supposed to be frightened into acquiescence, is in the long run likely to be equally ruinous. Though war has ceased, its cost still goes on. Since Jean de Bloch sounded his first najestic warning as to the financial ruin involved in war, the war debts of the nations have mounted higher and highor, and the yearly budget for war machinery has doubled and doubled, and is still rising at an accelerated pace. To borrow money implies money lenders, and an adequate group of such could not be developed save on an international scale even as is now actually the case. A gigantic national debt involves an invisible empire which shall direct and control credit. The foundation of such an empire was laid less than a century and a half since by the pawnbroker, Mayer Amschel called Bauer, of Frankfort-on-the Main, doing business under the sign of the Red Shield. He was the financial "uncle" of the Landgrave of Hesse-Cassel, and the honorarium paid him for furnishing the Hessian troops in the war of the Revolution made him a factor in large affairs. As "uncle" to the king of Denmark, his importance was enhanced and the ingenuity of his gifted son, Nathan

Rothschild, at Waterloo and at London forced the downfall of the house of Bonaparte to ensure the rise of the house of Rothschild. In every subsequent financial transaction of every nation of Europe, the princes of the Unseen Empire have taken the leading part. From the battle of Waterloo until his death Nathan Rothschild was the actual ruler of Europe.
"This iittle man," says Bismarck of his agent Bleichröder, "this little man has counted coins since the birth of Christ;" and as an agent of the Unseen Empire, Bleichröder told to a franc what could be extorted from France. A loan of this same sum from the Rothschilds was for the time being France's salvation. The crown of the last Napoleon was bought and held in its place by the gold of the Unseen Empire, while the struggle in which this same crown fell was financed on both sides alike by the same majestic masters of finance. These money lenders on both sides anike belonged to the group that knows no nationality and never acts on cross purposes. The drastic exactions of Germany were fixed by the Invisible Empire. By the same men, these vast sums were advanced, the loan being finally repaid in large part by the patience and thrift of the people of France. And the debt once paid, the sum was borrowed again, in part for railway extension, but for the most part the loan went into the bottomless pit of militarism, and the debt of France today overtops that of all other nations of the world. The bonds which guarantee these loans and those of other nations are controlled by the members of the Unseen Empire, whose silent nod today determines all incidents of war or peace. To control, it is not necessary to own. We find the difference in our American problems of railway management. As one may control a railway without owning it, so may one control likewise a nation. It is necessary only to control its debts. The debt of Europe, mostly for war and war implements and mostly contracted in the last sixty years, is controlled by "das Consortium" of bankers, by the sixteen to eighteen families, the Rothschilds at their head, who constitute the Unseen Empire of Finance.

A hundred years ago there was published in France a cartoon of finance. A farmer plowed in the field, on his back a frilled marquis of the old regime tapping his dainty snuff box. Not many years ago appeared another cartoon. The farmer still plowed in the field, on his back a soldier, armed to the teeth, and on his back in turn a bondholder. It would have been truer had there been seventeen of these bondholders.

The war debt of France today is six thousand millions of dollars. The interest paid each year is two hundred forty millions of dollars. The war debt of Europe today approaches twenty-six thousand millions of dollars. The yearly interest is over a thousand million of
dollars. The debt will never be paid, can never be paid. Two of the great instruments in nationsl slavery are the deferred payment and the indirect tax. "The system of laying burdens on posterity," says Goldwin Smith, "removeis the last check on war." By the means of indirect taxation, the people never know what they are paying. By means of war debt, the cost is shifted to generations still unborn.

The interest money exacted and the millions spent from year to year on armament mean the final collapse of European industry unless the process is somehow checked. The interest is beyond the capacity of the people. The world's annual production of gold is little more than one-third the interest money due in Europe. The world's entire stock of gold is little more than one-fourth the war debt of Europe. The unpaid balances must be added to the principal, which mounts higher with its attendant interest. Most payments are made in credits, of course, and credits must be added to the principal. It is said of the great house of Rothschild, the center of this empire, in every nation of Europe, that it has two great maxims, one to deal fairly, the other to work together, each branch in each capital cooperating with all the others. The first is well; the credit of the world could not be maintained without it. The second means that the Unseen Empire knows no distinction of nation. German, Russian, British or French, all need and all debt is alike to them. Whatever their seats of power, the masters of Europe work together. They know no cross purposes. Whatever loans they may make, in their hands is the peace of Europe; and they will see that Europe keeps the peace. A great European war would mean only the destruction of credit, and as the credit of the world is their stock in trade the emperors of finance will see to it that no petty king or ministry shall imperil their holdings.
Put this condition is not one of real peace. The great ogre war, says Bastiat, "devours as much when he is asleep as when he is awake." The interest charges of France and England represent approximately the cost of all rentals of houses in those countries. Without war taxes, each man conld have his house free, were the money to be used in such a fashion.

The annual expenditure of the world on armies and navies in these times of peace passes $\$ 4,000,000,000$ every year. This is extorted by taxation, a present load on industry and commerce over and above all demands made by the war deht which no man and no nation ever intends to pay.

The deferred war debt, the malignant device of Pitt a little more than a century ago, has now become the overshadowing danger of national life. It is nol clear where its operations may end. No check remains to its operations today, nor any prospect of a check in the
near future. Democracy does not arrest it. A nation can borrow when a king cannot. The sordid deals and extortions of the kings of the eighteenth century are but petty transactions compared with those of the free nations who put their money into ships of war. So long as Great Britain, by virtue of her primacy in commerce and civilization, is entitled to twice,-with ten yer cent. added,--the number of warships possessed hy any other nation, and so long as Germany is more populous than England and more effective industrially, while yet possessed with the mediaeval spirit of military rivalry, there seems no way out. France unwillingly and the United States with joyous recklessness are swept on the same path. All seem possessed with the beliel, once true, that all peoples are watching to pounce on the nation which leaves itself unarmed. In this feeling, all consideration of the growth of civilization, common interest and common decency, is thrown to the wind. The Great Illusion remains that such invasions would be profitable, that they would be even possible. Neither profitable nor possible could they be at the present time; nor can it be long possible for debt and armament alike to increase as they are now increasing.

The entire wealth of six leading countries of Europe is estimated at $\$ 240,000,000,000$, a little more than ten times the war debt of these same countries. It is an interesting question in mathematics to know how long the wealth may outrun the debts. For the wealth rises by arithmetical progression, the debts by geometrical progression, the rise of compound interest. It is not strange that the average wealth of the citizen is greater in the small countries of Europe than in the large ones; in Switzerland and Holland than in Germany; that the commerce per capita is greater in these small ones, and that the bonds of the smaller nations sell on a higher basis than those of Great Britain and or Germany. It is not strange that Booker Washington in a late visit to Europe should declare that in certain regions of Southern Europe the common folk had less property, less opportunity, less hope, than is the lot of the negroes of Alabama. It is by the condition of the common folk that the prosperity of all nations should be measured. It is not the status of the banker, the trader, the landholder, the professional man, the university, the theater, the art gallery, which determines the place of the nation. It is the chance of the common man to make the most of himself. We may not judge England by the neighborhood of St. James nor France by the Place de $\mathbf{r}^{\prime}$ Opera, nor Russia by the fair streets of her capital. We must value the nations by the kind of life lived by the generations that come and go unnoticed in the pages of romantic history. And before this court of judgment the war debt is a monstrous wrong, a crime committed by the last generations against the rights of those that follow.
"In war time," says a writer in the Boston Transcript, "always the contractors, the money-Ienders, the grafters, the whole catalogue of parasites preying on the life-blood of the community, are winners, no matter which of the combatants may lose, even when the loser is their own country. There is the same opportunity at the other extreme of the social scale in the Invisible Empire, as that seized on by the criminal classes and the baser elements of mankind in a city given over for the hour to rioting. The looting mob suddenly makes its appearance and takes full advantage of the situation reaping the same sort of greedy harvest as the dealers in foodstuffs and arms and ships, shoes and clothing and government bonds do in their field of operations, when for a time the wonted order of civilization is broken between nations."

In similar vein, Burke speaks of certain traders in war time as "scenting with delight the cadaverous odor of lucre." When nations struggle for life or death, this is the pirate's opportunity.

One of the momentous periods in the political history of the world is that of the coming together near the beginning of the nineteenth century of these various conditions: constitutional government, mechanical invention applied to war and enormously increasing its expense and destructiveness, the change of war itself from disputes between politicians to a life and death struggle between nations, the growth of a cooperating banking system with ramifications wide and strong enough to take whole nations in pawn in exchange for ready money, and, lastly, statesmen ready to pledge the future to any extent for the sake of temporary advantage.

Constitutional government gives stability enough to make deferred paymentis on a vast scale possible. The old kings had to pay on the spot and made their way by extortion, graft, sale of favors, debasement of coinage, by fawning and by violence. A nation could borrow money it was never expected to pay, if it could keep up the charges of interest. Hence the debt of France today is nearly a dozen times as great as Louis the Magnificent was ever able to make it. Even the interest charges alone today equal the highwater mark of the royal loans of the eighteenth century.

Mechanical invention has supplanted the old wooden frigate with the Dreadnought and the Superdreadnought, gigantic floating forts, each one costing an emperor's ransom, and each one sending all previous vessels as worthless to the junkheap. Twelve millions of dollars is the standard cost, I am told, of one of these vessels, and a few more years will raise this to $\$ 25,009,000$ unless indeed by that time such vessels can be had for their worth in old iron. Equal progress has been made in the art of destroying ships. Shore guns, mines and torpedoes now forbid the entrance of any battleship into any hostile
port, and already their existence is threatened from the air. Guns, powder, ball, all have moved onward since the days of Napoleon in unfortunate parallelism with the applications of science in all other directions-a srience which has grown through peace, for all science was impossible in the days when war was the chief business of all virile men.

Lately the statesmen willing to borrow, on the plea of Pitt that the nation belongs to the living generation, on which posterity has no claim, have abounded in all times and under all forms of government. For one Turgot, there are a hundred Pitts and John Laws and Calonnes. And because this is so, the outlook is very dark today for debtcrushed Europe. Because this is so, even free America and free Canada stand today at the parting of the ways, and the easiest way is that leading towards debt and waste. It is easier for a nation as for a man to follow the lead of its associates than to strike out for itself toward thrift, honesty and prosperity.

But greater than the waste of the "carnings of poor men's lives," is the waste of life itself. It is a fundamental fact of biology that the laws in heredity which apply to man are those which govern the lower animals as well. "Like the seed is the harvest"-this is the fundamental law. The men you breed from determine the future. Heredity runs level. No race of men nor animals has improved save through selection of the best for parentage. None has fallen save through the choice of inferior stock for parentage. Whatever influence may cause the destruction of the strong, the brave, the courageous, the enterprising, will ensure a generation which shall show these qualitics in lower degree. Rome fell because the old Roman stock was for the most part banished or exterminated. There was no other cause. The Romans were gone and that was the end of it; while the sons of the slaves, camp-followers, scullions and peddlers filled the Eternal City. The Republic fell when "Vir gave place to Homo," real men in Rome to mere beings. The Empire fell when the barbarians filled the unoccupied city, unoccupied so far as the men of the old Roman type was concerned.

The latest historian of the Downfall of the Ancient World, Dr. Otto Seeck, of Münster, tells us how after the wars of Marius and Sulla, "only cowards remained, and from their brood came forward the new generations." We ask no other reason for the disappearance of Greece. Greek art, Greek philosophy, Greek literature, the perfection of form in thought, in action, in speech-all these were impossible save to men of Greek blood; and when these had fallen in suicidal war, there was no longer the heredity which could replace them.

Some twenty years ago, I. visited the city of Novara in northern Italy. South of the town was a wheat field where the Sardinian army
was once encamped and from which they were driven by the Austrians. From the field the Sardinians fled,-you can still trace their flight by tne marks left by bullet and by cannon ball on the houses,-down the long street to the city of Noyara. 'Here the King, Charles Albert, sat in his palace, and when the fleeing army came by he gave up his throne to his son, Victor Emanuel. History tells the rest, but the significance of such events lies not in the fate of kings, nor does it lie in the fate of men, nor yet in the waste of their lives, nor even in the sorrows of those who loved them. It is found in the effect upon the race.

On the battlefield of Novara the farmer had plowed up the skulls of the slain, had stacked them up until they formed a pyramid some fifteen feet high. Over these, twenty years ago, was a little canopy which kept off the rain. Now they have been given a more secure shelter within a memorial pyramid, a little farther down the road.

But however preserved, these were the skulls of young men between eighteen and thirty-five years of age, young men from the farms and shops and schools, some from France, some from Italy, the rest from Austria. And as these were, according to custom, the best among the peasantry, so in their homes since then the generations have arisen from inferior stock. By the character and fate of the common man and the opportunity offered to him, the nations must be judged. On him the fate of the nation depends, and the waste of Novara is a waste which is enduring. It is like cutting the roots of a tree while its flowers and fruitage continue. The roots of today determine the fruitage of the future. Those nations who have lost their young men in war have in so far checked their own development.

Not one Novara could work ruin to any nation. But no Novara ever stood alone. Down the road in Lombardy is the little town of Magenta. You know the color we call Magenta, the nue of the blood that flowed out under the locust trees in the park, the blood that stained the river below the hard-fought bridge. Here the French came up from the west. In due time the Austrians fled from the bridge to the park, from the park down the long street toward Milan, and at last out of all Lombardy. Here is a cloister of the old cinurch of Magenta you will find the pile of skulls-skulls of brave men. You can know it by the bullet holes which the spiders for half a century have vainly tried to heal.

You will go down the plains of Lombardy, west to Desenzano, on the Lake of Garda. Here is the field of Solferino, bloodiest of all, where thirty or forty thousand killed and wounded men were left by the cowardly armies for three days on the field untended save by flies and mosquitoes. It was here that Henri Dunant of Geneva, a
tourist in Verona, organized the work of relief which grew at last into the Red Cross Association. Dunant died at Heiden on October 31, 1910, but not until he nad earned the Nobel prize, not for his work for peace, but for doing his part to make war a bit more human and less horrible.

And these do not stand alone. Scarcely a town in Italy that has not somewhere its pile of skulls. I like the frank Italian way of showing without shrinking the spols of war-the men wiom war has spoiled.

But there are other piles and piles of skulls, none the less significant because the bones are buried. The walls of Paris tell their story, Metz, Worth, Sedan the terrible. Then we can trace our lines across Germany; Jena, Leipzig, Austerlitz-names called glorious in the history of the slaughter of young men-Lützen, Bautzen, Ulm, Wagram, Hohenlinden. Let us pass them all to recall the grand army of Moscow, 600,000 men, the finest body of men that ever stood in line. Then let us recall the blasts of winter, the vurning city, the hatred of the people of the invaded country. And after that let us behold, with the historian, the pitiful retreat of the 20,000 men who remained of this great army. The bistorian tells us that-
"Amidst ever-deepening misery they struggled on, until of the 600,000 men who had proudly crossed the Nieman for the conquest of Russia, only 20,000 famished, frostbitten, unarmed specters staggered across the bridge of Korno in the middle of December."

He continues:
"Despite the loss of the most splendid army marshaled by man, Napoleon abated no whit of his resolve to dominate Germany and discipline Russia . . . . He strained every effort to call the youth of the empire to arms; . . . . and 350,000 conscripts were promised by the senate. The mighty swirl of the Moscow campaign sucked in 150,000 lads of under twenty years of age into the devouring vortex . . . . The peasantry gave up their sons as food for cannon . . . . Many were appalled at the frightful drain on the nation's strength. . . . In less than half a year, after the loss of half a million, a new army nearly as numerous was marshaled under the imperial eagles. But the majority were young, untrained troous; and it was remarked that the conscripts born in the year of Terror had not the stamina of the earlier levies. Brave they were, superbly brave, and the emperor sought by every means to breathe into them his indomitable spirit. . . . Truly the emperor could make boys heroes, but he could never repair the losses of 1812. . . . . Soldiers were wanting; youths were dragged forth." Human harvest in France was at its worst.

The inevitable result of all th:s must be the loss to the nation of the qualities which are sought for in the soldier. It leaves the nation crippled, une nation blessee. The effect does not appear in the effacement of art or science or creative imagination. Men who excel in these regards are not drawn by preference or by conscription to the life of the soldier. If we cut the roots of a tree, we shall not affect, for a time at least, the quality of its flower or fruit. We are limiting its future rather than changing its present. In like manner does war affect the life of the nation. It limits the future rather than checks the present.

Those who fall in war are the young men of the nations, men between the ages of eighteen and thirty-five; they are the men of courage, alertness, dash, and recklessness, who value their lives as naught in the serv:ce of the nation. The men who are left are, for better and for worse, the reverse of all this, and it is they that determine what the future of the nation shall be. They hold its history in their grasp.

However noble, encouraging, inspir:ng the history of modern Europe may be, it is not the his'ory we would have the right to expect from the development of its radical elements. It is not the history that would have been made had these same elements been released from the shadow of reversed selection cast by fratricidal war. The angle of divergence between what might have been and what has been is measured by the parentage of strong, capable, and courageous men slain on the bloody fields of glory.

All this applies not to one nation alone nor to one group of nations, but in like degree to all nations that have sent forth their young men to the field of slaughter. As it was with Greece and Rome, with France and Spain, Mauritania and Turkestan, so has it been with Germany and England; so with all nations that have sent forth "the best they breed," to foreign service, while retaining cautious, thriifty mediocrity to fill up the ranks at home.

Three millions, and seventy thousand men-this is the estimatefell in Napoleon's campaigns. No wonder the life of Europe is impoverished. No wonder that France is a wounded nation, as are all others whose men were caught up in that holocaust. Napoleon, it was said, "has peopled hell with the elite of Europe". Stacked up as on the field, their skulls would make a pile more than a hundred times as high as our own Washington monument. To this cause almost alone we may ascribe the social and personal deficiencies of the common folk of Europe. To be "him that overcometh" one must have a lineage made up of those who were "cuptains of their fate" and "masters of their soul?" in treir cay and generation. If we send
forth the best we breed, there is no way by which those of the future shall be other than second best.

In the breakup of the Roman Empire, no province had a better future than Hispania, and she like others had staked and lost her future in war.
"Against the credit for redeemed souls," said, in 1620, La Puente, the Augustian friar, "I set the cost of armadas and the sacrifice of soldiers and friars sent to the Philippines. And this $I$ count the chief loss. For mines give silver and forests give timber, but only Spain gives Spaniards, and she may give so many that she may be left desolate and constrained to bring up stranger's children instead of her own."
"This is Castile", says another writer. "She makes men and wastes them." "This sublime and terrible phrase", says Captain Calkins, "sums un the whole Spanish history".

In his charming studies of Feudal and Modern Japan, Mr. Arthur Knapp mentions again and again the great marvel of Japan's military prowess, as shown in the Chinese War, after more than two hundred years of peace. It has been even more conclusively shown in the RussoJapanese war since Mr. Knapp's book was written. His astonishment was that after more than six generations in which physical courage had not been demanded, the virile qualities which made up such courage were found unimpared.

In the light of the reverse of this condition which we have been considering in the case of European nations, we can readily see that the experiences of Japan were just what we might expect. In times of peace there is no slaughter of the strong, no sacrifice of the brave. In the peaceful struggle for existence, there is a premium placed upon these virtues. The virile and the brave survive. They and their descendants are not wasted on the battlefield. It is the idle, the weak, and the dissipated that go to the wall. "What won the battles on the Yalu, in Korea or Nanchuria," says the Japanese writer, Nitobe, "was the ghosts of our fathers guiding our hands and beating in cur hearts." If we translate this from the language of Shintoism into that of science, "we find it a strong testimony to the fact of race-heredity, the survival of the strong in the lives of their selfreliant and effective sons. The shades of the soldiers who fell before Napoleon are not guiding the hands or beating in the hearts of the men of Europe today.

If after two hundred years or even twenty years of incessant battle Japan should remain virile and warlike, that would indeed be a marvel. But that marvel the world has never seen. It is doubtless true that military traditions are most persistent with nations most frequently engaged in war. But military traditions and the physical
strength to gain victories are very different. Other things equal, the nations which like Japan have known "the old Peace with velvetsandalled feet" are most likely to develop the "strong battalions" on which victory in war is most likely to rest.

What now of Germany? She has had her share of the desolation and the degradation of war. It is said that in the Thirty Year's War the population of Germany was cut down from $22,000,000$ to $8,000,000$ people. It is said that not before 1870 was Germany able to regain the ground she held in 1618. It is moreover claimed that while Germany is military she is not warlike. While there is no nation so dominated by the professional soldier with his mediaeval scorn of commerce, science and all civilian things, yet there is virtually not a man in the German army who ever saw a battle. The superiority of Germany lies in its science, its industrial art, its commerce, its exaltation of all civilian activities. The evidence of the havoc of war is not so clear in Germany as in most other lands of Europe. Perhaps massacre and desolation destroyed the weak as often as the strong. Perhaps again the fact of universal compulsory education and compulsory industriai training with compulsory insurance against old age, has greatly reduced the visible number of unemployed and of the unemployable. The factor of emigration which has filled the great cities of the new world with young Germans, ambitious and energetic, is cne which we cannot estimate in comparison with the effects of war. When the best emigrate, the home lands become impoverished, but emigration gives new ideas and new experiences. The loss of one region is the gain of another, and the gain with gocd men overbalances the loss. The men of the new world are old world men who have learned something in a new environment, lcst something perhaps in exchange for all that is gained, but in the long run the new advantages outweigh the old. But loss which is loss comcs from the sacrifice of the strong.

What shall we say of England and of her place in the history of war? In the Norse mythology, it was the Mitgaard Serpent which reached around the world, swallowed its own tail and held the world together. England has made this a British world. She has made it a world to be proud of. Her young men have gone to all regions where free man can live. They have built up free institutions which rest on co-operation and compromise. She has carried the British peace to all other lands save those from which our own Monroe doctrine has shut her out, and she has made it possible for civilized men to trade and pray with savages. "What does he know of England, who only England knows?" For the activities of Englishmen have been greater by manifold than within the little island from whịch Englishmen set forth to inherit the earth.

What has all this cost? It cculd not be done unless it was paid for, and we must not wonder if such strenuous effort, such sacrifice of life and force, has left her with something like exhaustion.

> There's a widow in Sleepy Chester Who mourns for her only son.
> There's a grave by the Pabeng River A grave which the Burmans shun.

If we would know why Chester is sleepy, we have only to turn to her great cathedral. The long north side of her red sandstone walls tells of her dead, the world over, and always the same story. Tablets to the memory of young men, gentlemen's sons from Eton and Rugby and Winchester and Harrow; scholars from Oxford and Cambridge, from Manchester and Birmingham and Liverpool, who have given up their lives in some petty war in some far off country. Their bodics rest in India, Zululand, in Cambodia, the Goll coast, the Transvaal. In England only are they remembered, men who should have been the rakers of empire.

> It is only my dead that count,
> She said, and she says today;
> It isn't my fleet and it isn't my guns That will sweep Trafalgar Bay.

These names are recorded by the score in every parish church, by the thousand in every cathedral, and the churches are numbered by the hundred thousand. The statement that in every parish church such tablets may be found might be questioned. As a test not long ago I chose a solitary church standing almost alone on a bleak plain, if I remember aright in Herefordshire, Whitchurch, once celebrated because it employed the young Handel as its organist. On opening the door I saw a tablet-"Sacred to the memory of Thomas Henry, eldest son of Thomas Hall Plumer, Esqu:re, of this Parish, and Lieutenant in the 49 th regiment of Bengal National Infantry. He died in camp while serving at the siege of Moallan, on the 14th of December, 1848, in the 27th year of his age. His Sepoys for the love of him bore his body to the grave. This tablet was erected by his brother officers."

Other tablets told of service in India, but this met the test, and tlis is typical.

The foreign service of England for a hundred years has furnished careers for sons of the squires and the gentlemen. For a century

Great Britain has sent her strongest and most forceful sons. "Send forth the best ye breed," and the nation breeds from the second best.
And in this loss of fair and strong, "the unreturning brave" we may find an answer to some of England's most desperate problems.

Where is the country squire of English life and English history? Where are his rosy-cheeked and strong-limbed daughters? Where indeed is the typical John Bull of the time-honored cartoon? Why is it that three or four-some say eleven-millions of Englishmen are unable to earn a decent living, or any living at all, in England today? Why is it that these same unemployed are found unemployable in Canada, in Australia, or wherever they may go? Why is it that the tendency in all average physical standards is downward, while the standards of the best are growing always higher? The answer lies in the reversed selection of war. Its effects are found in England and everywhere else where strength and courage have been rewarded by glory and extinction. England has exchanged her country squires for the memorial tablet. More than for all who have fallen in battle, or were wasted in the camps, England should mourn "the fair women and brave men" that should have been descendants of her strong and manly men. If we may personify the spirit of the nation, England should most grieve, not over her unreturning brave, but over those who might have been but never were, those who so long as history lasts can never be.

We have fed our sea for a thousand years
And she calls us still unfed,
Though there's never a wave of all her waves
But sweeps o'er our British dead.

Walk wide of the Widow of Windsor
For hall of creation she owns,
And we've bought her the same with the sword and the flame And we've salted it down with our bones.
Poor beggars its blue with our bones.

Peace, peace, we wrong our noble dead, To vex their solemn so.
Yet childless, and with thorn-crowned head, Up the steep road must England go!

By the law of probability as developed by Quetelet, it is claimed that there will appear in each generation the same number of potential poets, artists, investigators, patriots, athletes, and superior men of each degree. , This law, however, involves the theory of continuity of paternity, that in each generation a practically equal percentage
of men of superior mentality will survive to take the responsibilities of parenthood. Otherwise this law becomes subject to the action of another law, that of reversed selection, or the biological law of "diminishing returns." In other words, breeding from an inferior stock brings race degeneration, and such breeding is the sole agency of such degeneration; as selection, natural or artificial, along one line or another is the. sole agency for race progress. And all laws of probabilities and averages are subject to a still higher law, the primal law of biology, which no cross-current of life can check or modify: Like the seed is the harvest; almost alike but never quite, but on the whole always following the lead. There is in fact no law of Quetelet, save this: Under like conditions heredity runs alike, almost alike, but with like variations. When conditions change, so change the products of heredity.

What shall we say of our own country, with her years of peace, and her two great civil wars, the struggle of children with their parents, oî brothers with brothers?

It may be that war is sometimes justified. It is sometimes inevitable, whether necessary or not. It has happened once in our history, that "every drop of blood drawn by the lash must be drawn again by the sword."

It cost us 65,000 lives of young men to get rid of slavery. I saw not long ago in Maryland one hundred and fifty acres of these young men. There are some 12,000 acres filled with them on the fields of the South. And this number, almost a million, North and South, was the best that the nation could bring. North and South, the nation was impoverished by the loss. The gaps they left are filled to all appearance. There are relatively few of us left today in whose hearts the scars of forty years ago are still unhealed. But a new generation has grown up of men and women born since the war. They have taken the nation's problems into their hands; but theirs are hands not so strong or so clean as though the men that are, stood shoulder to shoulder with the men that might have been. The men that died in "the weary time" had better stuff in them than the father oi the average man oí today.

Those states which lost most of their strong young blood, as Virginia, Louisiana, the Carolinas, will not gain the ground they lost, not for centuries, perhaps never.

Dr. Venable, President of the University of North Carolina, told me not long ago, that one-half the alumni of that college up to 1865 were in the Civil War. One third of these were slain. We can never measure our actual loss nor determine how far the men that are, fall short of the men that might have been.

Dr. Hans Gadew of the University of Cambridge, who lately visited the United States, told me that the most vivid impression he got in all his travels from Boston to San Francisco and to Mexico, came from the statement of a friend in Massachusetts to the effect that his little state, with less than a million people, had sent 61,000 men into the Civil War because they believed that it was just. This gave an impression of the moral earnestness involved in that struggle, which he had gained in no other way.

There were in fact 156,000 men who enlisted in the sixty-one Massachusetts regiments. It took at times 2500 men to fill the ranks to keep in each regiment its full quota of a thousand men. We may recall Colonel Halpine's rhyme of "the thousand and thirty-seven" showing how, at the banquet of the officers there were "the remnant, just eleven," where once

Twinkled a thousand bayonets.
And the swords were thirty-seven.
Edward H. Clement, in the Boston Transcript, uses these striking words: "Ever since the middle of the last century, or rather its last quarter, the lamentation has been heard: Where are the poets of yesterday? Where are the "hundred Boston orators?" Where are the historians, the philosophers, the political leaders, the moral reformers whom the whole country and the world itself gladly followed in the liberalizing of thought and of religion itself?
"In the light of emphasis . . . on the degeneration of nations through their glorious wars, answer might well be sought in the roll of honor of Harvard Memorial Hall. The price was worth paying, no doubt. At all events, the ones who gave their lives in the Civil War most certainly thought so. But the price was exacted all the same. There stand the names of those who, but for this sacrifice, might have continued the Glory of Boston as it was in all the higher reaches of the intellectual life, in national politics and in social advance. In their stead we have been fain to put up with-well, what we have."

Through all time war has told the same story.
Sophocles once said, two thousand years ago: "War does not of choice destroy bad men, but good men ever."

Schiller said: "Der Kreig verschlingt die Besten." (War devours the best.)

An old French proverb says the same: "Ce sont toujours les memes, qui se font tuer." (They are always the same who get themselves killed.")

In our civil war, Captain Brownell tells us of

John Esten Cooke, in Virginia, when Pelhan fell at Kelley's Fora calls out:

O band in the pine wood cease, Gease with your splendid call;
The living are brave and noble, The dead are the bravest of all.

Again, in India, Bartholomew Dowling:
Cut off from the land that bore us, Betrayed by the land we find, When the brightest are gone before us And the dullest are left behind.

The same motive, the same lesson, lasts through all ages, and it finds keen expression in the words of the wisest man of our early national history, Benjamin Franklin, "Wars are not paid for in war time: the bill comes later."

## MEMORIAL TO ALBERT SALISBURY.

Duncan McGregor, Platteville.
Mr. President, Members of the Wisconsin Teachers' Association, Ladies and Gentlemen:
We mourn today a rare type of man. It is always a grievous loss to a community when a useful and beloved member dies; it is a serious loss to a profession when the career of one of its leaders is closed; but when community and profession suffer together, the loss is all but irreparable. In the community where he resided for so many years, where, in fact, he was reared, no man commanded greater respect than did President Albert Salisbury. It is very unusual that a man should live in the same community from childhood to ripe age, sharing in all the activities of citizenship, and still enjoy a respect that increased with the years. This respect was not of the mild and colorless sort; it was hearty and outspoken. Now, this was not gained through an attitude of indifference to the delinquencies that displeased him, for he was emphatic in his censure when censure was deserved. His righteous indignation found ready expression in terms of no doubtful meaning. He did not suffer from poverty of speech as you well know; on the other hand in Kipling phrase, he had the "magic of the necessary word." With the very highest ideal of civic life and social conduct he did not hesitate roundly to denounce the wrong and the wrongdoer. Mr. Salisbury could always be found in the forefront when a fight for right was on and no antagonist


ALBERT N. SALISBURY
could ignore him. If men of this type do not provoke open hostility, they are almost certain to arouse antagonism that vents itself in insidious detraction. Not so in his case. There were two good reasons why those who differed with him or felt his disapproval still respected him. These reasons were first, his recognized honesty and sterling uprightness of character, the best protection any one can have from aspersion or even censure; and second, the fact that so much of his life had been spent in the midst of the one community and at all times in the open, to be seen and judged of all. With the exception of a very few years, his life was spent in their midst, one of their own number. His neighbors knew positively that his life squared with his professions.
In President Salisbury we had a marked illustration of the happy combination of manhood and professional eminence; an example of the evolution of the successful teacher from manly character.
In his youth, Mr. Salisbury through employment in a nursery acquired a taste for tree culture, as well as skill in planting, pruning and cultivating trees and shrubs. His good taste and skill are evident in the beautiful grounds of the Whitewater Normal School, a model not only for beautifying the surroundings of public institutions but for the improvement of private grounds as well. It has often occurred to me that the good people of Whitewater might with justice credit much of the beauty so evident in the well kept lawns of that city of charming homes to the taste and skill of the late President of their Normal School, and they probably do so. The site is beautiful and commanding and challenges the best efforts of the landscape architect. But the very fact of its great natural beauty might have furnished an excuse for letting nature have full sway. Instead the dictum that the prime function of art is to heighten the attractions of nature is here well illustrated. Trees, shrubs and flowers in their season make here a picture to charm the layman and delight the eye of the artist, an object lesson, too, of great value to the community and to the student body. In addition to their artistic effect the grounds are an herbarium, wonderfully rich in variety of specimens, not of dried and pressed plants, but of trees and shrubs, growing, leafing, blossoming and fruiting, each tree and shrub a live specimen properly labeled with the botanical as well as the common name. This is one of the results of the taste, skill, and practical ideas of Mr. Salisbury.

Within the schoolroom President Salisbury was a master teacher. Clear in presentation, exacting in his own preparation as well as in the preparation of his students, he permitted nothing to interfere with the progress or purpose of the lesson of the hour. He made it very uncomfortable indeed for the student who undertook to switch
the recitation from its proper track to cover up his want of preparation. You teachers know that some students acquire great skill in using this device. Dodging to escape responsibility or to evade a question, and bluffing to hoodwink a teacher were soon detected and summarily dealt with by Mr. Salisbury. To him the recitation was a laboratory experiment in thinking in which he aimed to interpret the mental behavior of the pupil as he was brought in contact with the rich and attractive things of the understanding. Like the true teacher that he was he felt the message in every lesson and strove to have his pupils clearly apprehend it. He never lost sight of the fact that a lesson is taught only as it is learned. Of the details of his method in class work, many of you know infinitely more than I do. My observation was confined almost entirely to model exercises conducted in institutes, particularly in the annual conferences of Institute men as these were conducted in the sterner days and sterner ways of the long ago. Few now survive who understand the allusion in the last part of that last sentence. In the early days of Institute work when such men as Geo. S. Albee, Robert Graham, J. B. Thayer, W. H. Chandler, A. F. North, B. M. Reynolds, O. R. Smith, Albert Salisbury and others of like kind, were leaders in educational work, with such men as A. J. Cheney and probably Jonathan Piper on the side lines, as it were, you who knew these men, though only by reputation, can easily imagine that conferences were not lacking in strenuousness. When you remember further that in both theory and practice no consideration for friendship or respect for standing in the profession was permitted to soften the severity of criticism you can imagine that the meetings were not wanting in plain talk and sharp discussion. There was literally something doing all the time. Two of these conferences have passed into history as especially noted for the severity of criticisms and the effect upon those criticised. One of these meetings was held in Racine, where one of the normal school institute men was so severely handled in an illustrative exercise that he soon after resigned his position and left the state. The Sparta meeting was still more deadly in its effects for two men there made their last appearance as model teachers in the presence of Institute conductors. It was at this meeting I think while keen criticism was in the very air and pencils sharp and unfeeling, that Professor Salisbury conducted an illustrative exercise in civics. In this class if I remember, were with others, Messrs. Albee, Reynolds and North. You can imagine that some at least of the pro tem pupils were not as docile and as helpful as they might be. At the close of the exercise the duly appointed critic and observers unanimously pronounced it a great piece of teaching work. I have often taken occasion to refer to that exercise as a model of excellence in showing the wonderful power of
a real teacher exercised through the medium of the ordinary materials of knowledge. Mr. Salisbury was a teacher who could and did teach.

President Saliskury's morning talks to the assembled school were wonderfully stimulating, and I now wonder if they are not in such shape that they can be published. It would be a great misfortune should they be lost. In the evolution of the present courses of study, there was a time when the emphasis was laid strongly on orthoepy. Robert Graham, as institute conductor and as state superintendent, gave a very strong impetus to that line of work. As a necessary aid to teachers in carrying on that work so well begun by Professor Graham, Professor Salisbury published his book on orthoepy which was the best of its day, and so far as I know has not yet been superseded. A few days ago, in talking with a gentleman long intimately connected with educational affairs in this state, he remarked that he knew no more suggestive and helpful work on pedagogy than the one bearing the name of Albert Salisbury on the title page. Of late years I have not kept well informed as to publications in pedagogical lines, so must accept the judgment of those who have. However, from what I have known of the careful, painstaking labor of President Sal sbury on everything he attempted I can well believe that the publication is an extremely valuable one.

A few years ago President Salisbury made a visit to certain European schools making on his return a detailed report of his observations, a report which is a valuable contribution to the educational literature of Wisconsin. He had trained himself to see the vital things in schools and in teaching, and no man in the state commanded more serious attention to judgments that he might express. More display had little attraction for him. In fact, all his work, as teacher and as author, was marked by solidity. The element of display was conspicuously wanting. With him it was substance, not show; thoroughness, not display.

President Salisbury was an optimist as all great teachers, all truly great men are. Had he been spared to be with us today, no one would have entered into the hopeful spirit of this wonderful meeting with greater zeal and co-operation than he.

He was no growler, never engaged in the unlovely and unprofitable business of cultivating grouches. He made the best of conditions. This characteristic was frequently illustrated in his relation with school authorities. I remember that at a meeting of the board of regents not very long ago, he had urged some action in which he was keenly interested, but the vote proved unfavorable. As was his habit he accepted the result without a murmur. After a short intermission he was allowed the privileges of the floor and in his intimitable way said, that after a prayer meeting in which a good sister had made
a very long prayer, Henry Ward Beecher arose and said: "Nevertheless, I believe that women should be encouraged to speak in public," so nevertheless I believe that the measure rejected a short time ago should be reconsidered. The measure was reconsidered and resulted in his favor. His pleasant manner brought its natural reward.

He was unselfish as all true men are. Many years ago while an institute conductor, he was named to conduct an institute in one of our prosperous and pleasant cities where conditions were unusually attractive. The superintendent notified Mr. Salisbury that his teachers very much needed strong work in a branch that he named. Mr. Salisbury at once said; "Get such and such a man to do that work; he can do it better than I can." The change was made, Mr. Salisbury taking work for that week in a remote county where great inconvenience was his portion. Small men, selfish men, will not, can not do such things.

You need not be reminded of his services to this Association and of what it suffers through loss of its mature counsel and willing assistance. This inadequate memorial might more completely, as well as briefly be expressed in the one sentence: President Salisbury was a teacher worthy of that high calling, a scholar for the love of the truth and its value in life, a true man with noble ideals and impulses; in short, a Christian; in that Grand Army of men and women mustered for uplift in civilization and in righteousness.

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The Training of Our Lower Nerve Centers.

## Earl Barnes, Philadelphia.

Americans have always overemphasized the value of thinking. We consider it a compliment to say that a man is shrewd, alert, clever, inventive and smart. Of a clever business man we say, "You can't fool him," "He is a long-sighted fellow," "His head is not merely a rendevous for hair."

Our formal education has always bodied forth this national ideal. In many of our schools we have been content to gamble on the health, and neglect morals and social training, if we could turn out bright, clever, smart children. Our educational promotions are still based on ability to accumulate and retain a mass of learning or to do certain selected intellectual stunts.

This point of view had its origin in our modern democracies nowhere in the past has it prevailed. Even now, in England, the schools where the men who rule the British Empire are trained place mental skill and acquisition below other qualities of character. At Eaton, Harrow and Rugby a boy becomes head of his house of leader of the


1. F. A. Barbour
2. Henry G. Gale
3. F. M. Leavitt
4. W. N. Ferris
form, not because he can think, but because he is sound in character, a good athlete, a leader among his fellows and trustworthy in emer. gencies. Cecil Rhodes summed up the English ideal when he pro rided that the scholarships he founded in Oxford Úniversity should he awarded on a basis of ten points, four of which should represent physica! excellence, four character as shown in leadership, and two scholarship.

And we, ourselves, in all the higher concerns of our national life, have always recognized mentality as not the most important attribute of leadership. Almost all our men of great mental gifts, like Clay, Webster, and Blaine have longed to sit in the presidential chair of the United States; but we have steadily passed them by and have elected instead men like Hayes, Harrison, and Cleveland, men of medium talent, but of sound character. Lincoln we elected before we had learned his power; and Mr. Roosevelt came in by accident.
And in this attitude we have been right, for conduct is the main thing in life; and conduct depends far more on habits established in the lower nerve centers than it does on the thinking produced by our higher centers. The fact that thinking does not necessarily mean goodness is illustrated by the long line of reckless geniuses from Alcibiades through Abelard and Napoleon, to Benedict Arnold and our last defaulting bank president.

There are two senses in which we popularly use the term "lower nerve centers." Sometimes it means a body of sensibility representing the accumulated experience of living things. Some of this sensibility has been organized into special senses, like sight or hearing, which are supposed to give us our knowledge of the external world. Still no one can doubt that there still remains in higher organisms a great mass of undifferentiated sensibility. When I walk out in the garden on a May morning, my sense of well-being and happiness arises only partially from the reports of my special senses. It is instead largely reported through the easy action of my digestive system, the ready flow of blood in my arteries and veins, the way my joints rub together and the whole general response of my physical organism. Antipathies and likings for people, or for the work of men's hands often rest in equally vague and undifferentiated feelings. We say with conviction "I feel it in my bones." In this sense, these lower activities are said to be wise, religious and artistic.

In this lecture, however, I do not want to deal with this intensely interesting mass of undifferentiated sensibility, but rather with certain well organized activities of lower nerve centers, which tend to become automatic and on which much of our daily life rests.

What then do these lower nerve centers do? They direct our vital functions, such as the beating of the heart, breathing and digestion;
they direct our walking, our talking and the complex adjustments of our lives. They dress us, feed us, and look after our ordinary physical habits without our having to think about these matters. They do most of the world's routine work.

How do these lower nerve centers work? An impression from the external world falls upon one of our end organs of sense. Its impulse travels along an afferent nerve to a central ganglion composed of nerve cells, where it is recorded as a memory image, and then a tendency is set up for an impulse to travel out along an efferent nerve to a muscle directing it to contract producing an action that in some way corresponds with the impression. When this circuit is being established the action is subject to the will of the individual and he may stop it or hasten it by his choice. After a time, however, the connections become so established that if the sense impression appears it is almost impossible to shut off the whole reflex series. Thus the heart is run by steadily recurring nervous reflex which has become so well established that, independently of my will, it goes on from before birth until death. Breathing goes along without my attention, though I can stop it or hasten it at will. Walking, I must start in infancy with great effort, but once organized, I can set it going and it runs on with little attention, that is to say, with very little interference from my higher nerve centers.

Some of these activities, which are especially valuable for the persistent purposes of life, are accepted by individuals and repeated until they become automatic, and then being repeated by successive generations of individuals they become racial instincts. Whether this be the true explanation of instincts or not it helps us to understand them in an effective way. Of course, only those things are repeated by successive generations which are dictated by a fixed condition of environment. Breathing and sucking become instincts, but playing the piano or reciting multiplication tables never do.

The process by which these lower nerve reflexes are established is interesting. Some, like swallowing, are inherited, others, like walking, move along lines made easy by racial experience and are mastered by trying, almost in spite of the individual. Others, which are new, like learning to work the typewriter or recite a multiplication table, must be definitely willed and then done over and over under the driving direction of volition, either the individual's own will or that of a teacher, until the path becomes established so that the repetition is automatic and hence easy.

Imitation plays a great part in training all of these centers. This may be conscious and volitional, as when a student imitates his teacher's way of writing; or, it may be involuntary coming through the simple power of suggestion. We all unconsciously imitate man-
ners, inflections of the voice, tricks of behavior. Hence, in youth, when these reflexes are mainly formed, children should be as much as possible in the presence of good models. In the great English schools, like Eton or Winchester, no man can secure employment as a teacher who is not a gentleman's son, no matter how brilliant his scholarship. These schools seek to train primarily the lower nerve centers, and the aristocracy of England wishes its sons to behave like members of the aristocratic class. Because of this great power of sug. gestion, a striking leader may be a dangerous leader, unless he knows his power and guards his disciples. No one ought to be thoroughly modeled, after some one else, no matter how good the model. The result will be artificial, and for some reason individuality, even in many of the lower nerve reflexes, is desirable.
There are many forces in our times tending to over emphasize these lower reflexes. Nearly all our work does it. A man who stands all day raising and lowering a lever, as passengers drop tickets in a box, develops simply a short section of his spinal cord with its visual connections and adjustments to the muscles of his arm. The rest of his nervous system is left to go to seed. Most factory work is of this kind. A girl who sits all day wrapping cakes of soap soon gets to the point where some fragment of her nervous system runs the work automatically, and the rest of her nervous capital might as well be done up in a napkin and hidden in the ground. When the God ot Things As They Are calls for a reckoning she will be cast into outer darkness as a poor trader in life's opportunities. Jesus came to give life more abundantly; modern industry takes away all but one frag. ment of life from many of its workers.

Once we recklessly exposed men and women workers to dangerous occupations in mines and factories on the plea of necessity of production. When we become wiser, we cut out most of these occupations. We still place millions of human souls in positions of nervous and mental danger on the same plea of effectiveness. When we come to estimate our civilization in terms of men and women produced, in. stead of in terms of iron rails, cotton cloth and shoe pegs we shall cut out nerve and mind destroying activities. Efficiency may be bought at too great a price of human souls.

Absolute monarchies, privileged classes, and fixed theologies have always favored this education of memory, habit and reflex action. The result is the worker in the hive of bees, the fellahin in Egypt, the Chinese coolie, the unemployable army of scrap heaped human reflexes in England.

On the other hand, if the education of these lower nerve centers is neglected and serviceable habits are not formed, the action is un-
stable and the individual ineffective. Constant use of our higher powers makes us smart and shallow. The type is the individual straining for paradoxes in conversation. Reflexes give us economy of effort and leave the higher centers free for their legitimate work.

An illustration of this whole process is seen in the handling of a country store. If the storekeeper is wise he will put the things for which there is a constant daily demand in the most convenient place in the body of his store and keep them always in the same place. New goods he will keep in the front window, and all the commodities he handles will be related by natural association. Tea and coffee; and perishable bananas will be kept in front where every one can see them.

The following incident also illustrates the process. I recently walk through the early evening to the post office from my hotel in a city where I am little acquainted. As I turned back I involuntarily set my lower nerve centers to take me home. Simple roflexes kept me walking on the pavement and turned me here and there to avoid collisions. All my higher centers were free to see and understand the crowded streets. Suddenly, I crossed the street, I saw a store where I wanted to buy some stationery. On account of the difficult crossing I switched off the automatic control and took matters under the immediate direction of my higher centers. I made my purchases, turned on the automatic control, and coming out, turned to the right as I should properly have done had I gone into a store without crossing the street. Soon I became disturbed with a strange feeling inquiet, and calling my attention back to my destination I found myself once more in front of the post office and uncertain where to go. Instead of bothering to straighten out my own confusion, I asked a: passing man to reset my nervous system by telling me the way to the Fort Pitt Hotel. "Turn around", he said, "you are going the wrong way." What happened was that the sight of the store, by calling my attention to my need for stationery, dispossessed the lower nerve centers of their controi and as I crossed the street they failed to record or reckon that fact. It is always dangerous work mixing the action of higher and lower nerve centers. A man rides a bicycle best when he does not think about it.
If one applies this general principle to business, the application is clear. All routine matters should be reduced to reflexes. The opening of the place of business in the morning, the stamping of envelopes, the routine of wrapping packages, all this should be handled by the spinal cord of the firm. Advertising, new patrons and possible improvements in products, should be constantly passed upon by the cerebrum. From time to time, the cerebrum should go over the routine
work of the spinal cord and bring it up to date. A new man added to the firm sometimes helps to do this admirably.

The application to formal education is equally clear. Everywhere today there is a reactionary cry in education, "Back to the fundamentals!" "The children cannot cipher, spell or read," say the critics. Our trouble comes from the fact that we have had a wonderful development of human knowledge during the past few decades; and we have enriched and expanded the curriculum until no one knows what is really fundamental. We are carrying all our goods in the front windows and the bódy of the store is sometimes pretty empty. Wher the children want 9 times 9 is 81 , or b-e-li-e-v-e, they cannot find it.

Educators need to sit down and separate their curriculum into two parts. The essentials, such as simple combinations of number, the spelling of commonly used words, the basal facts of language, geography and history must then be drilled into the lower nerve centers until they are as automatically available as walking or articulation.

Educators need to take a little time today and divide the matter they have to teach into two parts. One of these parts would represent processes not subject to any considerable change, such as walking, articulation, habits of cleanliness, the fixed manners necessary, theological dogmas, reading, spelling, simple combinations of numbers, such as multiplication tables, the axis of universal history, and tho essentials of geography. These should be thoroughly drilled into the memory until they become habits controlled by our lower nerve centers. In arithmetic, reading and spelling this work is already fairly well done.

But in geography what is the irreducible minimum necessary for intellectual salvation? What is the multiplication table for geography? Some teachers maintain that it is a certain body of facts in mathematical geography; others who would insist on industrial facts; others on facts of political control and still others would give a mixture of all these. Surely there must be some facts concerning the earth that are of such paramount importance that every one should know about them. If so then these facts should be drilled into the lower nerve centers. In history our conditions are quite as unsatisfactory. The majority of the people in the United States know nothing of the crusades, little about the Protestant Reformation and almost nothing about the great period of discovery. Even such characters as Charlemagne, Louis XIV, Cromwell occupy an uncertain place in chronology, are related to indefinite movements and represent little more than nebulous prejudices. Surely it would be possible to arrange an axis of twenty-five or thirty great dates located in time and space around which gather significant personalities or movements. These should be
thoroughly established in the mind as an historical axis to which all our reading and experience might be significantly related.

If this work is to be done it will require drill and nothing is more agreeable to young children than drill if it is well planned and executed. Children love to function in almost any direction where they function well. The secret of good drill consists in always having berind the child some exercises in which he is thoroughly established so that he can fall back from time to time and run back and forth in set forms that will give him courage. The second condition of good drill is that the ground in front of the child should be thoroughly mastered as he goes. All experienced teachers know that there is no other. problem so difficult as the child who has messed over the essentials of learning without really mastering anything. Such a process is like vaccination; it will generally prevent a child's ever having the real thing.

But meantime, we must never forget that there are some things which must not be reduced to automatic or reflex action. All those things that appeal to the higher feelings, friendship, love, religion, literary feeling, noble aspirations, ambitions, all these must be kept in the forefront of consciousness and never be allowed to become unthinking processes. There is nothing more tragic in the world than a man who has reduced his artistic feelings, his religious life and his domestic expressions to reflexes of the spinal cord.

## THE GEORGE JUNIOR REPUBLIC.

Wm. R. George, Freeville, N. Y.

You have possibly read accounts of the "Junior Republic" in the magazines, have occasionally seen reference to it in the newspapers, and at educational conventions, conferences of charities and in other places you have possibly heard people refer to it. You have, no doubt. had a general idea that it is a sort of big playhouse and that quite likely it is anything but the real thing.

I want to dispel that idea, if you have any such hallucination, for the Junior Republic is the real thing. There are men in this room who have seen it in operation and will swear to that statement. There is nothing of play about it. It is the "simon pure" bona fide article. It is a miniature republic with no strange "isms" about it. The only "ism" connected with it is unadulterated Americanism. It is a village of young people between the ages of sixteen and twenty-one conducted just exactly the sume-note the emphasis-as any other village in any of our states. The only difference is the fact that these young people
reach their voting age when they are sixteen instead of twenty-one. The Junior Republic is a frank acceptance of the conditions which the boys and girls will be obliged to face when they get out into the lorger Republic. It is a government of the boys and girls, for the boys and girls and by the boys and girls. Within this village, naturally, the laws of New York state, plus the laws enacted by the citizens themselves, are the laws of the Junior Republic.

That zives you a general idea of what the Republic consists. You must forget, in thinking of the Republic, of any public school, boarding school or institution of any sort and of every place where groups of boys and girls are together, for you cannot compare the Republic to any of these. The only thing with which you can compare the Junior Republic is the great big Republic, because it is just the same.

The Republic was started as a fresh air scheme. I took boys and girls to the country for a two weeks' outing, provisions being genercusly supplied for us. I took a group of boys and girls whom the sccieties had rejected, not because of their proverty, but because of their general badness. Particularly was this the case among the boys. We got together a particularly "tough" tribe, took them to the country and kept them in a building by themselves, the people, as I said before, generously furnishing the provisions.
It did not take me very long to discover, however, that these boys and girls were being injured instead of benefited, because they were claiming charity as a right. I found out that they were in the country for what they could get out of it and that they estimated the good time they had by the amount of provisions and clothing which they took back to the city on their return. I was about to give up the work, but, finally, owing to the fact that their needs were so great, I determined to try another season with this selfsame material and to do some radical experimenting. This time I required them to render an equivalent in labor for the property which they received.

Previous to that time, I had heen obliged to make rules and regulations for the government of this little community and naturally I felt that I was a great lawmaker. The boys and girls, however, took no interest in the laws and I was obliged to enforce them. But just as quickly as a percentage of those young people came into possession of the things for which they were working, that element of the little community came to me and suggested new rules and regulations, generally relating to the protection of property. They had earned things and they were anxious to have them protected. And when I put those rules and regulations into operation they worked a great deal better, it is unnecessary to say, than any rules that I had made. In other words, as quickly as these boys and girls came into possession of property, they took an interest in laws for the protection of property
and we had the beginnings of government. That was the germ of the Republic.

I began gradually to evolve the plan in my mind and after I had sent the boys and girls back from the country, I spent much time in de'veloping the principles that had presented themselves as a result of the experiences of the summer. Almost unconsciously came the idea of planning a minature community whose citizens should work not only for the provisions which they took back to the city with them, but for their bread and butter as well, of making the struggle for existence one of the principal features of the Junior Republic. But how to do this was a problem. Finally the thought came: "I will do exactly as I would do if I were taking a group of men and women from any city or town into the country to spend the balance of their lives. Just as they would organize a village like other villages, I will establish a miniature village for the boys and girls and call it the Junior Republic."

We were doubted somewhat at first. People said the scheme was visionary, but we did not swerve from our purpose, and, finally, one year later, we started for Freeville with 144 choice specimens. There we started the Junior Republic on the 12th day of July, 1895. That summer I had boys and girls solely from the City of New York. I had planned, if the Republic worked well, to take them back in September, giving them something of a pleasure outing. But we had not operated the scheme more than three or four days before we discovered that we had something that would actually work. The moment we were honest with the boys and girls, the moment we removed the element of play from our community and made it the real thing, that instant we discovered that we had something that gave tremendous promise. The Republic succeeded. The news of it spread rapidly, and in a very short time a large number of people from different places came to study the Republic and to see it in operation.
I was so certain of success that I determined right there to make the Republic permanent, to send the majority of boys and girls back to the city, but, if possible, to keep a few of the boys in a building which we had on the place and to develop from that into a permanent Junior Republic.

We had some very unique experiences, but I cannot tell you about them. I am merely going to say that we put our scheme through after some pretty hard experiences. The boys nearly froze to death and we had nothing to eat for a long time except tomatoes and potatoes. We would have tomatoes and potatoes for breakfast and potatoes and tomatoes for dinner and, for supper, we would have a hash made of the two together, the smallest boy in the place being compelled to cook for the rest. We had no members of the fair sex there at that
time, there being no room for the girls. Just the five boys and myself made up the party. It is a wonder we did not die from indigestion, but we all lived to tell the story and we are a pretty "husky" set now.

The Republic kept on growing that winter and the interest increased. A great many applications came for admission, but at that time I took only boys who were bad. "No others need apply." As they worked their government day by day, I began to note that the fellows who had the most ginger in them-in other words, the fellows who had been the leaders outside and who had caused the greatest amount of trouble-after they had caused us a certain amount of preliminary trouble in the jail, gradually forged to the front in the Junior Republic, and, finally, became the best and leading citizens of the community. I was so impressed with this fact that after a little time I ceased to take any boys but those who were known outside as bad fellows. General badness was the qualification for admittance to the Republic. And we got plenty on that score.

I call to mind one boy who came out of the Trenton State's Prison with the idea of taking up burglary as an occupation. He could barely read or write. We got him into the Republic and three and one-half years later he entered the engineering department of Cornell University.

Our success with these boys was so great that I felt at once that, if we could keep them as long as we desired, we would solve a great many problems. The reason of our success was the fact that the boys were not puppets in an institution where individuality was destroyed, not in a place where they were a group of heroes together, looked upon as so many machines. Here they were a group of citizens with responsibilitics, with the possibility of enforcing the laws which they had made and, often, with a selfish interest in seeing the laws enforced because of the property which they had to protect.

People were interested because these very bad boys had come to the Republic. I discovered a few months later that the Republic was the one place in the world where a boy could enter, no matter what his record had been, even if he had committed murder. In the history of the Republic we have had three boys who had committed murder. A boy could enter the Republic with the worst of records hanging over his head and come out of it the peer of any one and regarded as such by people who were worth while.

After having made it known that general badness was a qualification for admittance, I began to get applications from well-to-do families and, in some instances, from rich families who had sons who were very bad. For a long time I hesitated about taking this group, because I feared that people who were supporting the poor boys by their contributions would feel that the rich ought to be excluded.

But I did nct see any reason why a rich man's son should not be saved as well as any other, so, finally, I took some boys of this type and found that we succeeded with them quite as well. That was the second step in advance. General badness, therefore, was a qualification for admission, but social standing made no difference whatsoever. Next, we began to take girls into the Republic. We did not take girls who wcre known as immoral girls. That was the one class which we barred. The girls we tock were nice girls, but they were girls who came from homes of danger, where the parents were careless, or girls who were being followed by some fellow or by some group of fellows with evil des.grs upon them and who were, therefore, in qreat danger.

I then noted that koth boys and girls kegan to feel that they were regarded as being within a reormatory by the general public and that though the general public (or at least the best of it) forgave them, nevertheless they were in a position to be ashamed of. This attitude was quite different from that of the reform school community, because there the children feel themselves to be heroes. But the boys at Freeville saw what the man who commits crimes against property and person is to society. Self-respect had been instilled within them and they did not wish to be regarded as criminals.

Then I began to say to myself: "If it is good for these fellows, why would it not be good for some other fellows?" I began to take boys who were not kad at all, just straight-out ordinary boys, providing they had a good mental make-up. We took some of those into the Republic and, of course, they succeeded splendidly and readily adjusted themselves to this new life. The jail features did not play as prominent a part in their early days in the Republic as it did in the early days of those I have just described. But I have doubted somewhat, when perusing the records, whether these boys ascended as high in the Republic-to the position of president or judge-as some of those fellows who had been known before they came to the Republic as "terrors." Some did rise, however, and we discovered, in time, that the Republic was a splendid thing for them, as it had been for the others.

The progress of the boys was remarkable. Their parents were pleased with them. Every one noticed that, after they left the Republic, they had a dash and individuality about them unusual among other boys. The boys who come out of the Republic are very independent in their thought; they are straightforward; they have minds of their own. The other day I was checking a list of my boys and I found certain ones who were on record as Democrats and others who were on record as Republicans, and yet I found that not one of those fellows up to the present time, so far as I could discover, had voted the
straight ticket of either party. The boss of that section (which is strongly Republican) is having a little bit of trouble with the Republic boys. He is not quite sure of them.

After the success of this experiment had been demonstrated, I made up my mind that I would go a step farther. We had discovered that it was good for bad boys, but incidentally for good boys and good girls as well. But do you know the writers would not write about this? It was not as picturesque and did not make as catchy write-ups. They, therefore, kept the criminal idea in the limelight. Whenever I or other friends of the Republic had a chance to speak to a group of people, we would always point out this mistake. We would introduce the subject by speaking, first, of what had veen done for the criminal boys, and, then, would work around to the good which was being done for the other boys. This, however, did not seem to ring quite true, so we finally said: "The Republic is not only good for bad boys, but it is, incidentally, good for good boys." The other day, after thinking the matter over, I started out on an entirely new line of action. I am going to twist the whole thing right straight around. Now, whenever I make a declaration, I am going to say: "As our big Republic and its form of government, which we love, is good for all of its citizens, providing we administer it rightly, so the Junior Republic, being just the same, is good for all boys and all girls, no matter what their position in life. It will make them better American citizens and will teach them to do things by actually doing them." The Junior Republic-it may not be in my day-will some day make it possible for every boy and every girl, a year or two before they enter upon the citizenship of the big Republic, to have an opportunity in a Republic by themselves, where, as citizens, they wili have all of the rigorous responsibilities that they will have in later life. Not only will this be the case for the boys and girls of our own dear country, but even for the boys and girls in other lands and other countries, not republics. They will have something to correspond to the system of government under which they live and will be given an opportunity for actual training before they assume the responsibilities of citizenship in the greater commonwealth.

There is no element of the population that can regulate the conditions of their life so well as these young people together. You remember when we were boys, we had a very wholesome respect for the opinion of the boys. A few perhaps had more respect for the opinion of the teacher, but we know what our opinion of those fellows was and we know what would have happened to them if we had caught them some time alone. But the average boy has respect for what other boys think. If anybody can regulate a fellow it is his peers. Therefore, we do not care how "tough" a fellow comes down the "pike" to the Junior Republic, we do not care how big a "boss" he has been outside, we do
not care how many "gangs" he has run. When he gets into that place he discovers that he is "up against" his peers and in many instances his superiors, and they do not hesitate to regulate him, not in the least.

EDUCATIONAL PIONEERING IN THE SOUTHERN MOUNTAINS.
Wm. Goodell Frost, Berea, Ky.
As one who has come perhaps the longest distance to this bright spot and hour I wish to say that I am already rewarded in what I have heard. I am hearing on every side the things which ought to be said and have that special gratification which comes to those who see the "gold of their own doctrines in a fellow heap of dust." It will be for me only to enforce some of these principles by a few examples. Allow me to begin with a true story which is also a parable.

Berea's first teacher came to the mountains of Kentucky in 1855. The people had subscribed the necessary logs, but there were freshets and delays, so that when the "college" was finally completed, and fifty strapping young men and women enrolled as freshmen to begin the alphabet, only seven weeks remained before the instructor must return to his own college' studies.

But the teacher rose to the occasion, and determined to give those young people something worth while in those seven weeks. He had no precedents, and he threw all preconceived notions to the winds. He sat up nights devising short-cuts, and he sifted over all the knowledge he possessed to find which was really of greatest importance. The pressure of that se'ven-weeks' course taught him to select and to invent. He boldly jumped the alphabet, drew a cow upon the blackboard, wrote the name beneath, and launche'd out in a lecture upon the animal kingdom.
Results followed. The whole region blazed with educational enthusiasm, and when the' seven weeks ended, his pupils could use the third reader, repeat the ten commandments and the law of love, explain the chief glories of America, and conduct a social gathering or a debating society with propriety.

This incident may well introduce the two errands which have brought me here this afternoon. The first is to remind you, and thru you the larger audience that follows the proceedings of this body, of the existence and value of the great uneducated masses of people that still linger in this age of light and privilege. The people who still live in log cabins constitute a very important element in our nation. And my second errand is to suggest some of the educational
adaptations which are called for in our attempts to reach our belated fellow-countrymen, and make them sharers in the best elements of modern civilization.

The largest body of uneducated Americans, the greatest mass of unprivileged people of our race anywhere in the world, is to be found in the southern mountains. But in describing them we shall describe a class which exists in greater or smaller numbers in all our states.

If we are to deal worthily with the belated and untrained people of America, we must approach them sympathetically and with consideration. They are not to be judged wholly by our somewhat artificial standards. We must appreciate their circumstances, and recog. nize their excellencies at the same time we are bringing them new cpportunities.

Probably the consideration which will most easily and certainly put us into a right attitude is the thought that these people are not a degraded people, but simply a people not yet graded up. Their speech, their customs, their ways of thought, are all survivals of former times. What they are today our own forefathers were $a_{i}$ few generations back. Our families have had the opportunity to change and to progress, while their familie's have not. All these conditions are seen most clearly in the recesses of the southern mountains.

It is a far cry from Taft back to Daniel Boone, but if you set your face toward eastern Kentucky, you may make that transition in twenty-four hours. The people of that vast region have been beleagured by nature. Call up the map of our country, and you will see, grouped around eastern Kentucky and Tennessee, the mountainous backyards of the Virginias, the Carolinas, Georgia, and Alabama. Here is one of the grand divisions of our continent, which we are beginning to name Appalachian America. It embraces great varieties cf climate, surface, and elevation, but as a place of human habitation it has one chief characteristic-it is a land of saddlebags.

And this means that it is a land of isolation. Passengers, messengers, preachers, and ideas cannot travel as swiftly on horseback as by steamer, railroad, and electric cars. You can never know what isolation means till you have ridden with me a hundred miles up and down the beds of streams. After hours of solitude we reach a picturesque $\log$ cabin, and behind it is a cornfield so precipitous that they must prop the pumpkins to keep them from breaking from their moorings and rolling down into the "branch." We may meet a man who will tell you, with a solemn drawl, that he has been "a leetle lame ever since he fell out of his cornfield." And the children of that cabin, if they wish to see the world, have only the
option of going up stream or down stream, where they will see other cabins and cornfields like their own.

A life of isolation is a life of deprivation. I remember the firsi time I rode into the mountains with my wife. We stoped for dinne'r some fifteen miles from home. Mrs. Frost was anxious to know whether she should see the woman of the house again-whether she came to Berea to trade, or went to Richmond, our county seat; and so she innocently inquired: "When you cannot get what you need at the little store down by the branch, where do you go?" The mountain woman smiled and said: "I go without." This "going without" leads to strange results. It seemed barbarous to find the people burning grease lamps with a floating wick, or using kerosene lamps without chimneys.

But consideration shows that it is a delicate matter to carry a lamp chimney on horseback over twenty miles of mountain road, and we concluded that if we lived where they do we should live very much as they do.

We do not pity them for the lack of lamp chimneys so much as for the lack of other means of illumination, such as schools and churches. In religion the people have really degenerated, and lost the great Protestant idea that a minister should be an educated man. These preachers are, many of them, good men, but they have not yet ceased to debate such questions as whether the world is flat or round, and whether the Southern Methodist or the Missionary Eaptist is the only true church. Not long ago two of our college students were carrying on a Sunday school near Boone's Gap. A native preacher ministered there once a month, and learned from our students that his next appointment fell on "Easter Sunday." He was too proud to ask what "Easter" meant, and searched his Bible in vain. When the day came he preached upon Queen Esther.

But the most interesting thing about our backwoods cousins is the survival of ancient words and customs among them. You notice it first in their speech, which glitters with Shakespearean English and Anglo-Saxon. The past tense of "help" is holp in the mountains, and we have the strong plurals like "postes" and "beastes." And it is well to remember that, while we are interested in all these queer things about the mountaineer, he is just as much inter. ested in the queer things about us. On one occasion they had adjourned court to hear me lecture on education, and I spoke to some two hundred men, not one of whom wore a collar. After the speech a man with a big voice said to me: "Wall, stranger, I could understand right smart of what you were telling us. Ye see, we had an officer in our regiment from New York or sum such part what spoke the same diatect as you do!" With the speech of colonial times
they maintain many of the arts of colonial times. I, for one, stand with respect before the loom and spinning wheel. No woman in this assembly can spin. Our mothers had already forgotten the' art. But our grandmothers, and our foremothers for a hundred generations, have been spinners. The dexterity of our young girls in piano-playing and china-painting comes from the deft fingers that once twirled the thread.

The mountain people are hospitable, patriotic, religious; and if they are much addicted to killing one another, that is only another honest survival of Saxon temper. In a word, these' people are "our contemporary ancestors."

This mountain region contains three million people, about two million of whom are living in the primitive conditions described. And, as we have before remarked, there are people of this class and condition, more or less numerous, in all our states. The mountain condition is the country condition intensified. In all the South where there is not the isolation of mountains there is the isolation of distance and a sparse population. Do we need to pause to argue the significance and value of our rural and mountain population? Here' are the giant forms that can accelerate the nation's industry, and the unjaded nerves that can steady the nation's thought. Here is American stock, only needing the motive and the guidance which elementary education can give.

It is not for me in any single address to point out all the adaptations necessary in bringing education to such people. But it may be of value to call attention to the fact that there must be adaptation. There is danger that the problems of the city schools may divert attention from the equally important work of the rural districts. The methods of the Boston Latin School will require some modification when applied to the children of a moonshiner in North Carolinachildren virtually living in the seventeenth century!

Our methods must be characterized first of all by patience. Our pupils are not to blame for not knowing what nobody has told them. A recent textbook in German was adopted in Berea because of this sentence in the preface: "It is impossible for the author of a textbook to overestimate the ignorance and stupidity of the learner-let him take nothing for granted." We owe them courses of instruction so planned as to produce some immediate results. For each unit of effort these beginners in education should receive a distinct reward. They have a right to an unusual proportion of the practical. They are perishing for lack of knowledge upon ordinary affairs like hygiene, agriculture, and the conduct of business. Of course, the teacher who is to be their friend in these matters must be a superior and an enterprising person.

Our plans for them must embrace more than the schoolroom. Thers, must be a certain education for the parents before we shall have their full co-operation. There must even be an education for the school trustees and school superintendents. Necessarily throughout the South today the public schooi is largely administered by men who did not come up through public schools themselves, and hence are hardly yet in fullest sympathy with it. It is here that private benevolence finds its place, in funds like those bequeathed by Peabody, Slater, and Hand, and in institutions like Barea College, which spends eight per cent of its income in extension work in the remote districts.

The great battle in the United States today is not to push the forward column, but to bring up the belated detachments at the rear. If I were the United States commissioner of education, I would concentrate my efforts on the backward states. If I were a state superintendent, I would devote my energies to the lagging counties. If I were a county superintendent, I would spend my time in the poorer districts. If I were a country-school teacher, I would look up the most unenlightened families in my district.
Let me invoke, then, a larger appreciation for the country-school teacher. It is he who must "identify" the "lad o'pairts"" and put him on the way to wider usefulness and honor. It is he that must adapt and invent and make himself into a whole faculty. It is he that will take the dry seed learning of the books and scatter it among the people where it may become fruitful.

American education runs too much to tops. Everybody is ambitious to be teaching advanced courses. The third-grade teacher counts it a promotion if she may set to teach pupils a year older in the fourth grade, and the college instructor will g:ve up his class of fifty lusty boys and girls in Homer in order that he may teach three or four dreary specialists in Sanskrit. It is all a mistake. Education is the formation of character, and this is accomplished most effectively in the earlier stages of the process. The Germans know this, and men of genius there give their lives to the work of elementary education.

What is "higher education?" If by that term you mean the educa tion that requires the longest time and the largest expense, then the universities monopolize it. But if "high" means dignified, important, weighty, momentious, then the highest things in education, the things that minister to soul-welfare and the happiness of the pupil and the community, these things must be crowded into the elementary courses.

It is cheering to find how the people of the mountains respond to education of the right kind. I love to recall the capture of my first moonshiner. I was lecturing at the little schoolhouses, and the people began to tell me of a mighty man whose dominions I was approaching. He had built his log castle at a point where three counties
jcined, so that on occasion he could move rapidly from one jurisdiction to another. He had killed a neighbor here and an officer there, and, in the jocular phrase of the mountains, "had so much lead in him he dassent' go in swimmin'." This distinguished individual attended my lecture and listened with rapt attenton. Evidently the subject of educaton was new to him. He followed me up and heard the same speech over again in the' afternoon. The next day, as I came up to my schoolhouse miles away, there was his familiar gray horse fastened to the hanging limb of a beech tree. He heard that speech for the third time, and the result was that he closed his still, moved with all his "plunder" to Berea, and put five children in school-the eldest being already in the penitentiary. That family was interrupted just in time.

The typical backwoods boy was Abraham Lincoln. He differed from his neighbors in that his mother had six books. Without that ray of education his great soul would have" been strangled $a^{\prime}$; the birth.

Lincoln has hallowed the log cabin, in a way, as Christ hallowed the manger. And I can never pass one of those humble dwellings without thinking of the possible Lincoln that it holds, and stiffening up my resolution to do all that in me lies to put some educational light into every mountain home.

## FINANCIAL STATEMENT

## REOEIPTS.

| Membership: |  |  |  |
| :---: | :---: | :---: | :---: |
| Men, 1,061 ......................................... ............ \$1,061 00 |  |  |  |
| Women, 4,846 |  | 2,423 00 |  |
| Interest on certificate of deposit....................... ............ |  | 1043 | ......... |
| Subscriptions to local fund: |  |  |  |
| Gimbel Bros. | \$7500 |  |  |
| Boston Store . | 10000 |  |  |
| Chas. F. Pfister | 10000 |  |  |
| T. A. Ohapman Co. | 5000 |  |  |
| Espenhain Dry Goods Co | 5000 |  |  |
| Pabst Brewing Co. .. | 5000 |  |  |
| Jos. Schlitz Brewing Co. | 5000 |  |  |
| A. S. Lindemann .. | 3000 |  |  |
| Bunde \& Upmeyer | 2500 |  |  |
| Edward Schuster \& Co. | 2500 |  |  |
| Alsted Kasten Co. | 1000 |  |  |
| C. Preusser Jewelry Co.. | 1000 |  |  |
| Hotel Men's Ass'n, on accoun | 20000 |  |  |
|  |  | 77500 | $\$ 34,269$ |

## DISBURSEMENTS.

## GENERAL SESSIONS.



## PROCEEDINGS OF FIFTY-NINTH ANNUAL SESSION

|  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |

## SEOTIONS

College, Normal, High School:
F. A. Barbour, $\quad$ Lectures......................................
I. H. Bailey, 5000

| ctur |
| :---: |
|  |  |

Expenses
1700
C. B. Atwell,

Expenses
555
$\underset{\text { Expenses }}{\text { Henry Gale, }}$,............................................... 700
Kindergarten:
Clara Wheeler: ,
Lecture $\ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~$
400
400 400
Expenses
175
Stationery and postage
2500
Lecture and expenses
School Arts and Home Economics:
Henry T. Bailey,
Lecture and expenses ........................................... 10000
Rural Schools:
W. G. Blair Leture and expenses ............................... \$50 00
L. H. Bailey Lecture $\ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .$.

Edith Smith Davis
1500
Lecture and expenses
11500
Music:
F. A. Barbour ...................................................... 2500

Manual Training Oonference:



City Graded Schools:
Henry T. Bailey,
Lecture and expenses ............................ $\$ 10000$
Edith Smith Davis,
Lecture and expenses ............................. 1500
Moral Education League:

Domestic Science:
Jenny A. Snow,
R. R. fare $\ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .$.

Meals and hotel $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$................................ 450
Lecture
1000
$\$ 4075$
$\$ 104$.
$\qquad$
$\qquad$

## PRINTING.

| Wausau Pilot: |  |  |  |
| :---: | :---: | :---: | :---: |
| Letterheads, envelopes, circulars, etc............ ............ $\$ 1700$ |  |  |  |
|  |  |  |  |
| 500 envelopes and letterheads, ${ }_{\text {C. }}$. $\times$ C. Parlin |  | 1200 |  |
| 500 envelopes and frtg..................... |  | 500 |  |
| Radtke Bros. \& Kortsch Co.:Preliminary programs and envelopes |  |  |  |
|  |  |  |  |
| Postage on pkgs. | $\begin{array}{r} \$ 3475 \\ 85 \end{array}$ |  |  |
| 1,750 letterheads, postage and express to officers 12 M programs | \$6 10 | 3560 |  |
| Envelopes for programs ....................................... | 26325 |  |  |
| W. D. Hoard Printing Co.: $\quad 2 \% 10$ |  |  |  |
|  |  |  |  |
|  |  |  |  |
| 700 envelopes .................. | 290 240 |  |  |
| 300 duplicate membership cards....................... | 240 270 |  |  |
|  |  |  |  |
| 1,000 letterheads | 265 480 |  |  |
| ${ }_{25}^{6}$ ply cardboard | 480 |  |  |
| 25 information signs | 125 |  |  |
| Postals for treasurer |  | 4235 |  |
| L. S. Keeley, printing. |  | 130 |  |
| Excess pages over 200 in Proceedings |  | $\begin{array}{r} 300 \\ 5989 \end{array}$ |  |
| Total |  |  |  |

## POSTAGE, EXPRESS, FREIGHT AND TELEPHONE.

| Postage on preliminary programs. |  |  |  |
| :---: | :---: | :---: | :---: |
| Long distance telephone bill of Committee on Pen. ............................... $\$ 1125$sion Bill and Retirement Fund as per vouchers.. |  |  |  |
| Proceedings distribution: 13000 |  | 13000 |  |
| Postage on single copies. |  |  |  |
| Express on packages | \$30 38 |  |  |
| Freight on packages for state. | ${ }_{10} 96$ |  |  |
| J. E. Rosenow, delivering proceedings in Milwau- | 1064 |  |  |
| Envelopes for proceedings | 2300 |  |  |
| Addressing labels for proceedi | 450 |  |  |
| Postage on programs ............. | 330 |  |  |
| Postage on circular letters sent out to announce program | 6432 |  |  |
| Freight on Milwaukee allotment.................................................... | 775 |  |  |
| L. S. Keeley: $\quad 18998$ |  |  |  |
| Postage and envelopes .......................... ${ }_{\text {Telephone and telegrams }}$. 21 |  |  |  |
|  |  |  |  |
| Express .................. | $\begin{array}{r} 120 \\ 50 \end{array}$ |  |  |
| Postage of Latin Conference. |  | 491 |  |
| Postage and envelopes for treasurer |  | 224 |  |
| Ceneral postage and express for treasurer. | ${ }_{2}{ }_{29}{ }_{29}^{67}$ |  |  |
| 700 government envelopes for secreta |  | 30 |  |
| General postage for secretary.... | $\begin{aligned} & \$ 1225 \\ & 1100 . \end{aligned}$ |  |  |
| Telephone rent for sec |  | 2325 |  |
| Long distance telephone for sec | $\begin{array}{r} \$ 1780 \\ 570 \end{array}$ |  |  |
| Express charges for secretar |  | 23.50 |  |
| General postage for C. O. Parl |  | 360 |  |
| Telephone and telegrams, C. C. Parl |  | $\begin{aligned} & 1650 \\ & 1675 \end{aligned}$ |  |

Total

## OFFICERS.

| President, C. C. Parlin: |  |  |
| :---: | :---: | :---: |
| Feb. 9, Ex. meeting, Oshkosh, |  |  |
| R. R. fare | \$400 |  |
| Hotel | 300 |  |
| Correspondence | 500 |  |
| One day's expenses in Milwaukee to meet Wood- |  |  |
| row Wilson | 350 |  |
| One day in Milwaukee to attend to contract for auditorium | 355 |  |
| Meeting of presidents of state teachers' associations in Chicago, |  |  |
| R. R. fare | 1070 |  |
| Sleeper | 300 |  |
| Meals | 390 |  |
| Parcels checked and car fare | 40 |  |
| June 24, Ex. Com. meeting at Milwaukee. | 500 |  |
| Stenographic work to June 24. | 900 |  |
| May 16. Ex. Com. meeting at Milwaukee, |  |  |
| R. R. fare | 790 |  |
| Meals | 250 |  |
| Sleeper | 150 |  |
| Cab | 25 |  |
| April 14, Ex. Com. meeting at Milwaukee, |  |  |
| Hack | 50 |  |
| R. R. fare and sleeper. | 1030 |  |
| Meals | 300 |  |
|  |  | \$77 00 |
| Acting President, L. S. Keeley: |  |  |
| June 24, Ex. Com. meeting at Milwankee, |  |  |
| R. R. fare | \$2 10 |  |
| Meals | 75 |  |
| September 16, Ex. Com. meeting at Milwaukee, |  |  |
| R. R. fare | 210 |  |
| Meals | 75 |  |
| Stenographer | 500 |  |
| February 17, Ex. Com. meeting at Milwaukee, |  |  |
| R. R. fare | 210 |  |
| Meals | 75 |  |
|  |  | 1355 |
| Sccretary: |  |  |
| June 24, Ex. Com. meeting, lunch.................. | \$0 50 |  |
| June 26, trip to Madison to look after proceedings, |  |  |
| R. R. fare ............ | 328 |  |
| Meals, bus, etc. . . . . . . . . . . . . . . . . . . . . . . . | 220 |  |
| September 30, trip to Madison to send out Proceedings, |  |  |
| R. R. fare | 3. 28 |  |
| Meals and bus .................................... | 200 |  |
| Stenographers for addressing envelopes and typewriting | 740 |  |
| Assistants in office Nov. 9 to 11, |  |  |
| Two girls for certificates of attendance..... | 600 |  |
| Secretary's assistant .. | 600 |  |
| Messenger and car fare three days. | 400 |  |
| Cartage on office supplies, etc.................. | 125 |  |
| Stamp for certificates of attendance.......... | 110 |  |
| Salary for one year................................. | 30000 |  |
| Telephone calls and yencils for office at Plankin- |  |  |
| ton Honse, Nov. 9 to 11......................... | 75 |  |
| Office supplies, |  |  |
| Ink ...... | 10 |  |
| Envelopes | 105 |  |
| Journal paper, three quires..................... | 25 |  |
| No. 701 I. P. covers............................... | 140 |  |
| Express on books sent............................ | 25 |  |
| Typewriter ribbons ................................ | 75 |  |
| Typewriter paper ................................ | 110 |  |
| Blotters and eraser .............................. | 20 |  |
| Trabels and postage | 80 |  |
| Cleaning typewriter . . . . . . . . . . . . . . . . . . . . . | 150 |  |
|  |  | 34516 |






## SUMMARY.

| Balance on hand Feb. 5, 1910. | \$1,282 85 |  |
| :---: | :---: | :---: |
| Receipts for 1911 | 1,269 43 |  |
| Total disbursements for 1910: |  | \$5,552 28 |
| General sessions | \$1,964 33 |  |
| Sections .. | \$1,904 595 |  |
| Printing . | 44874 |  |
| Postage, express, etc. | 46166 |  |
| Officers, committees, etc. | 81693 |  |
| Special appropriation | 8848 |  |
| Sundries | 10309 |  |
|  |  | 4,478 65 |
| Cash on hand to balance. |  | \$1,073 63 |

L. S. KEELEY, President.

NELLIE, MINEHAN,
M. A. BUSSEWITZ,

MARY D. BRADFORD,
M. V. O'SHEA,

Executive Committee.
KATHERINE R. WILLIAMS, Secretary.
-




Mary D. Bradford, President

## PROCEEDINGS

OF THE

## SIXTIETH ANNUAL SESSION

OF THE

# Wisconsin Teachers’ Association 

Milwaukee, November 8 to 10,1912

Assued by the officers of the Association, and printed by the State Printing Board by authority of section 335e, Wisconsin Statutes, as amended by Ohapter 657. Laws of 1911.


MADISON, WIS.
Democrat Printing Company, State Printer
1913
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# OFFICERS AND COMMITTEES 

President MRS. MARY D. BRADFORD, Kenosha
First Vice President B. E. McCORMICK, La Crosse
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MISS NELLIE MINEHAN, Vice Principal ..... Milwaukee
M. V. O'SHEA, Professor of Education ..... Madison University of Wisconsin.
ELLEN C. SABIN, President Milwaukee-Downer College.
L. S. KEELEY, PrincipaI High School ..... Mayville
COUNCIL OF EDUCATION.
J. B. BORDEN, Madison, Chairman ..... member for 1 year
EDWARD C. ELLIOTT, Madison member for 3 years
THOMAS R. LLOYD-JONES, Madison
member for 3 years
JOHN A. H. KEITH, Oshkosh member for 3 years
RUBY M. ACKER, Fond du Lac ..... member for 2 years.
W. J. HAMILTON, Two Rivers member for 2 years'
M. H. JACKSON, Grand Rapids ..... member for 2 years
FLORA CLARK, Milwaukee ..... member for 1 year
ELLEN C. SABIN, Milwaukee member for 1 year

## COMMITTEE ON ELECTIONS.

Members for One Year.
MARY D. BRADFORD, ex officio Kenosha
THOMAS J. BERTO Watertown
L. W. BROOKS Racine
C. E. SLOTHOWER ..... Platteville
MYRTES CLARK ..... Mayville
C. W. SMITH ..... Portage
Members for Two Years.
JOHN F. SIMS Stevens Point
W. T. REAM ..... Green Bay
C. W. MEISNEST Manitowoc
GUY D. SMITH Fond du LacWINIFRED EDSALLRichland Center
COMMITTEE ON LEGISLATION.
C. E. PATZER Milwaukee
LEO P. FOX ..... Chilton
S. P. TOBEY Wausau
C. P. CARY, ex officio ..... Madison
MARY D. BRADFORD, ex officio Kenosha
BUREAU OF INFORMATION.
WILLIAM F. SELL, Chairman, Third St. School, Milwaukee
LOCAL COMMITTEEE.
HERMAN P. FLEISCHER, Chairman, Ring St. School, Milwaukee
SPECIAL TOURS COMMITTEE.
WILLIAM F. SIMMONS, Chairman, Bartlett Street School, Milwaukee

## PROCEEDINGS

OF THE

## Wisconsin Teachers' Association Sixtieth Annual Meeting

 Milwaukee, November 8 to 10 , 1912.
## REPORT OF GENERAL SESSIONS.

Auditorium, Thursday morning, Nov. 7, 1912. The sixtieth annual meeting of the Wisconsin Teachers' Association was called to order by President Mary D. Bradford in the Auditorium, Milwaukee, November 8, 1912, at 9 A. M.

A mass chorus of the seventh and eighth grade pupils from the public schools of Milwaukee, under the direction of Miss Helen Poole, rendered the following program:

Folk Songs- (a) The Sandman, Brahms; (b) The Scarlet Sarafan, Titoff; (c) My Old Kentucky Home, Foster; (d) Hymn to Nature, Beethoven.

The formal program was opened with an address of welcome by Mayor G. A. Bading. (All addresses are given in full in subsequent pages of this volume). The response was given by Charles R. Vap Hise, President of the Wisconsin University. This was followed by the President's annual address.

At the close of this address, President Bradford announced the following appointments:

Upon the Council of Education for three years,
Assistant State Superintendent, J. B. Borden, Madison,
President, Silas Evans, Ripon,
Superintendent, Ellen B. McDonald, Oconto.
These appointments were ratified by the Association.
Upon the Committee of Legislation for three years, C. E. Patzer, of Milwaukee.

Upon the Enrollment Committee.

1. J. A. Hagemann, Chairman.
2. .Supt. T. J. Berto, Watertown.
3. Miss Margaret Brunstad, Lake Geneva.
4. Prin. Thomas W. Boyce, Milwaukee.
5. Merle M. Ames, Stevens Point.
6. Prin. C. W. Collman, Cedarburg.
7. Miss Bessie M. Erickson, Columbus.
8. John Gross, Ft. Atkinson.
9. Miss Mary Hargrave, Platteville.
10. Prin. L. F. Hillman, North Fond du Lac.
11. Prin. D. P. Hughes, Waldo.
12. Prin. Hugh B. Murphy, Kenosha.
13. Supt. Chas. A. Jahr, Brodhead.
14. Supt. Myron A. Keats, Oconomowoc.
15. Prin. P. C. W. Keller, Appleton.
16. Alfred Herrick, Stevens Point.
17. Miss Lillian McDermid, Grand Rapids.
18. Prin. J. H. Mills, East Troy.
19. Supt. A. B. Olsen, Reedsburg.
20. Supt. H. A. Pauley, Milwaukee.
21. Miss Elizabeth Perkins, Burlington.
22. Prin. E. F. Randall, Kenosha.
23. Prin. E. A. Reynolds, Deerfield.
24. Prin. Peter Sievers, Milwaukee.
25. Prin. Charles E. Slothower, Platteville.
26. Prin. William Urban, Sheboygan.
27. Prin. J. F. Waddell, Evansville.
28. Prin. Julius Windon, Randolph.
29. Supt. G. J. Zimmerman, Union Grove.

The Treble Clef Chorus of the Milwaukee Normal School under the direction of Miss Helen Foxgrove gave

- (a) In May
(b) Orpheus and His Lute Manny.
Then followed addresses by Dr. Allen, of New York, Prof. Patzer, of Milwaukee and Pres. Harvey, of Menomonie, Wis.

Auditorium, Thursday evening, Nov. 7, 8:15.
Organ recital by Lewis Vantine, State Normal School, Milwaukee, This was followed by an exhibition of moving pictures in geographical, biological, historical, physical, and other educational fields, under the direction of Edward J. Ward, of the University of Wisconsin.

Music was furnished by the orchestra of the School for the Blind, Janesville, which rendered at this time and subsequent periods during the forenoon the following program:

Overture, "Morning, Noon and Night", Suppe.
Overture, "William Tell", Rossini.
March from "Joshua", Handel.
The Committee on Elections, through its chairman, Thomas J. Berto, presented the following report:

Result of nominating ballot for president:John Calląhan

293
Frank Hyer ........................................................................... 35
A. E. Kagel .......................................................................... 30

Scattering
59
Mr. Callahan having received a majority vote, was declared elected president for the year 1913.

Result of nominating ballot for members of the Executive Committee:
L. S. Keeley, of Mayville ........................................... . . 164

Nellie Minehan, of Milwaukee ....................................... 138
Ellen C. Sabin, of Milwaukee ........................................ . . 101
Richard 0. Hanlon, .................................................................. . . 98
Rest scattering, with not more than 14 votes for any other person.
Upon the motion of Supt. Leverenz, of Sheboygan, seconded by Supt. Keats, of Oconomowoc, the Secretary was instructed to cast the ballot of the Association for the three highest on the list for members of the Executive Committee. This motion was unanimously carried, and Prof. Keeley, Miss Minehan and President Sabin were declared duly elected members of the Executive Committee.
The Committee on Election then placed in nomination the following:
First Vice President, Samuel Plantz, Pres. Lawrence College, Appleton, Wisconsin.
Second Vice President, H. A. Schofield, Prin. Blaine High School, Superior, Wis.
Third Vice President, Miss Helen Martin, County Training School, Elkhorn, Wis.
Treasurer, Supt. G. F. Loomis, Waukesha, Wis.
Upon motion, the report was unanimously adopted.
President Bradford appointed Prin. O. E. Wells, of Wausau, Prof. C. E. Patzer, of Milwaukee, and Prof. Frank Hyer, of Stevens Point, a committee to draw up resolutions on the death of James Sheridan.

The formal program of the morning began with an address on "The Book and the People," by Dr. Frank Gunsaulus, of Armour Institute, Chicago. This was followed by an address on the "Organization of the Teaching Profession," by Dr. Henry Suzzallo, of Columbia University.

At 11:30, Mr. Youker's constitutional amendment was taken up:
That Article II be changed so that it will read that the annual dues shall be $\$ 1.50$ for men and 75 cents for women, payable at or before the annual meeting.

Miss Sabins amendment: I move that the amendment just proposed by Mr. Youker be amended, making the dues of all members $\$ 1.00$.

Mr. Youker presented his side of the question. Then, Miss Sabin spoke in'favor of her amendment to the amendment. Miss Rose Swart, of Oshkosh, also warmly championed it. Upon motion, duly seconded, the amendment to the amendment was unanimously carried, and then the amendment as amended was also unanimously passed, making the dues for men and women $\$ 1.00$ per annum.

Friday P. M., 4:45-5:30, Kilbourn Hall.
The address on "Child Welfare in Home, School and State" was delivered by Mrs. H. K. Schoff, President of National Congress of Mothers and Parent-Teachers' Association, Philadelphia.

Friday evening, 8 o'clock, Auditorium.
The Lyric Glee Club of Milwaukee, Mr. Authur Dunham, conductor, and Miss Winogene Hewitt, accompanist, rendered the following selections:

1. The Sword of Ferrara
Bullard

(b) By Moonlight Othegraven
2. Creole Lover's Song ................................................................................
3. Prayer of Thanksgiving .............................. Kremser

Prin. Emma Gardner, State Director of the N. E. A. presented her report of expenditure of money allowed by the Association. Supt. L. P. Benezet, of La Crosse, then addressed the meeting urging all to support the N. E. A. during the coming year.

He was followed by Hon. P. P. Claxton, U. S. Commissioner of Education, who gave the annual evening address.

Saturday morning, Nov. 9, Plankinton Hall.
Prin. O. E. Wells presented resolutions on the death of James Sheridan as follows.

Memorial to James A. Sheridan.
Since the close of the last session of this association a worthy member, Mr. Sheridan, has been called to his reward. As member of a committee appointed Thursday by your president to make mention of his services in the cause of education, and at the request of my colleagues, it becomes my duty and pleasure to perform this last sad service.
James A. Sheridan was born of sturdy Irish parentage in Jefferson county, Wisconsin, in 1859. As a farmer's boy he attended country and
graded schools, accounting it rare good fortune to have been under the tuition of the stalwart teachers of those local institutions. He completed his course in the University of Wisconsin during the presidency of Dr. Bascom, a man whom he greatly admired and loved.

He taught in the common schools of his native county, was principal of the graded school at Stockbridge, Calumet county, 1882-3, and of the high school in Waterloo, 1883-5. Many of his pupils, among them Prof. F. S. Hyer and H. C. Buell, remember with gratitude the encouragement and inspiration received from him in their struggles for an education.

He married Miss Harriet Hoag on January 11, 1888, at Waterloo, Wisconsin.

In 1885 he was elected county superintendent of Jefferson county and was continued in that office until January 1st., 1891. Entering the state department of education at Madison in 1891 he served three and one-half years as chief clerk, and one-half year as state inspector of high schools. During these years he studied law and was graduated from the law school of the University in 1894.

Removing to Milwaukee he began the practice of law in which he achieved success. For several years he was a member of the Milwau; kee board of education, and its president for one term. His wide experience in the educational field made him a useful and influential member of that body. He never lost interest in the constructive work of this association, his voice often being heard in urging measures for the improvement of educational conditions in the state.

He was a diligent student of history and literature, and maintained an intelligent and lively interest in public affairs.

Twice, accompanied by his wife, he toured Europe, not simply for pleasure, but for a comparative study of conditions and the chastening influence of art, and acquaintance with dissimilar life and opportunities.

He had great natural gifts of speech, which were more and more utilized as recognition came and opportunity offered. The eloquence of a speech delivered at a Masonic banquet is still famous, and oft recalled in fraternal circles.

Apparently in perfect health with prospect of a long, happy and useful life, he was stricken with cerebral hemorrhage on the street in Milwaukee, March 9, 1909, and died in a few hours after a second stroke in Waterloo, October 13, 1912.

How shall we estimate such a man? We are too near the event. Our loss looms large and distorts the perspective.

He was loyal and firm in friendship, generous and just in judgment, sympathetic and helpful to the afflicted or downcast, companionable and entertaining, clean of life, high-minded, honest and honorable.

So many sided was he, it will not be possible for every one to recognize all his qualities as they were manifest in his relation to you, but you will be glad to recognize him in the incomplete composite picture I have tried to present.
O. E. Wells,
C. E. Patzer,
F. S. Hyer.

Committee.

Supt. W. J. Hamilton, of Two Rivers, presented the following report of the Council of Education.
To the Members of the Wisconsin Teachers' Association:
The Council of Education begs to submit the following report relative to the action of said Council in the consideration of resolutions referred from this Convention.

The Council recommends the favorable action of the Association on the following resolution:

WHEREAS, it is the experience of school authorities everywhere that high school fraternities and sororities are detrimental to the best interests of the schools and of the individual pupils, and

WHEREAS, in many states of the union such organizations are prohibited by law, therefore, be it,

RESOLVED, that this Association does hereby declare itself unequivocally opposed to the institution or continuance of all secret, selfperpetuating organizations among pupils of the public schools, and be it further,

RESOLVED, that our State Legislature be urged to pass at its coming session a law forbidding their existence.
RESOLVED, that we renew our demand, that the motto of Wisconsin be realized by legislation, relative to the country school and the professional qualification of teachers.

The committee further recommends the adoption of the following resolution:

RESOLVED, that we again express our approval of, and urge upon Congress the adoption of an extension of the idea and ideal of the Morrill Acts to the end that the prestige of national support, coöperation and leadership may the more speedily bring into our public, elementary and secondary education, the much needed practical work that prepares for efficient citizenship.

The Committee recommends the adoption of the following resolution, in respect to a matter proposed by the nestor of our Association, Robert C. Spencer, a man of faith in education as the only 'safeguard of our nation. The Council of Education reports as follows:

RESOLVED, that this Association is in sympathy with national aid to education to promote the progress and prosperity of our people.

The Committee recommends the adoption of the following resolution:
RESOLVED, that to the man and our fellow schoolmaster, Presidentelect, Woodrow Wilson, the W. T. A. extend cordial congratulations and wishes for a prosperous administration.

## Resolution Introduced by Prin. Richard O’Hanlan.

CONCERNING REMUNERATION FOR CIVIC and SOCIAL CENTER SERVICE of SCHOOL PRINCIPALS and TEACHERS:

WHEREAS, in nearly a hundred communities in Wisconsin the movement for community civic organization and social center development has begun, and

WHEREAS, in practically all of these communities the school superintendents, principals or teachers are giving their time and energy as secretaries and directors of this work, and

WHEREAS, this is distinctly public service of an important and valuable character, and

WHEREAS, this movement has now passed the experimental stage during which school men and women might be expected to contribute their time without remuneration, and has come to be a recognized part of the function of the public schoolman's work deserving compensation as does any other public service, therefore, be it

RESOLVED, that the Wisconsin Teachers' Association respectfully request the Wisconsin Legislature at its next session to make provision for adequate and systematic compensation, in addition to the present salaries of those school superintendents, principals or teachers who render efficient service as civic secretaries or directors of the social center development of the use of public school buildings.

As a substitute to the foregoing resolution, the Council of Education recommends the following:

RESOLVED, that this Association records its support of the movement for the wider use of public school buildings through their development as social centers.

WHEREAS, Wisconsin Teachers' Association has at several different meetings declared in favor of some system of fire insurance on school buildings and property whereby considerable economy of school funds for education would result, and

WHEREAS, the Committee and officers selected to bring about the organization of a mutual fire insurance company for schools along the line of other mutual fire insurance companies have carefully investigated the situation, and recommend that it will be advisable to get. the state to include all school buildings as now all county buildings are carried by the state, at the option of the counties, rather than build up a separate school fire insurance mutual, therefore, be it

RESOLVED, that the Wisconsin State Teachers' Association ask its Committee on Legislation to use all honorable means to get the next legislature to extend the law now giving counties permission to insure in the state all risks in protection from fire of buildings and contents, so that all public and private school buildings and contents, at the option of their governing boards, may be insured by the state.

The Council recommends the adoption of the foregoing resolution.
WHEREAS, we believe that a large amount of the wanton destruction of animal and bird life is due to ignorance, and whereas, the State Game Warden Department has attempted to carry on a line of educational work designed to bring the public into closer sympathy with the protection, propogation and conservation of these natural resources, therefore, we, the teachers of the state in convention assembled, do adopt the following resolutions:

1. That we approve of the educational work started by the game warden's department, and we urge that the law be so amended that
this work of education may be carried into every community of the state during the coming year.
2. That all rational enforcement of law must start first through and by means of education, and secondly by the proper execution of such law, therefore we ask that means be provided for dissemination of knowledge as to the values of animal and bird life, the necessity of the conservation and propagation of the same, together with the laws adopted for their protection and preservation, and that the game warden's department be authorized by law to carry on this excellent work of education.

## Resolutions Introduced by Prof. M. V. O'Shea:

WHEREAS, it is universally recognized by those who have carefully investigated the matter that the use of tobacco by pupils in the elementary and in the high school is a detriment, alike to effective intellectual work and to good discipline, and also a serious disadvantage to pupils themselves, who early contract habits which later they would be glad to be rid of, and,

WHEREAS, pupils do not at the outset use tobacco because of the pleasure they derive from it, but because it is deemed to be "manly" so to do, or because it has become the practice of the group, and it is imitated by the individual, even when he must endure a good deal of distress in order to accustom himself to its use, and,

WHEREAS, a concerted movement in the public schools of this state looking to the control of this evil would undoubtedly result in great benefit to the work of the schools and to the intellectual development and general well-being of indvidual pupils, therefore, be it

RESOLVED, that the Wisconsin Teachers' Association put itself on record as believing that the use of tobacco by pupils in the schools is from every point of view a misfortune, and that no effort should be spared to save pupils from contracting habits of using it in any form.

RESOLVED, that this Association urges all school people throughout the state to assist in having enforced the law relative to the sale of tobacco to minors.

RESOLVED, that this Association heartily approves of the plan of teachers coöperating with physicians, merchants, ministers, manufacturers, and other citizens in each and all of the communities of the state to the end that there may be concerted action looking toward the elimination of the use of tobacco by pupils in the schools.

RESOLVED, that this Association authorize the publication of a monograph, to be prepared by the Executive Committee of the Association, detailing the methods adopted in various cities and towns throughout the country in which the evil herein complained of has been successfully dealt with, and that this monograph be distributed gratis to each member of this Association in connection with the Proceedings and that a sum not to exceed $\$ 200.00$ be appropriated for the publishing and distributing of said monograph.
The Council of Education recommends that the foregoing resolution be adopted.

## RESOLUTION REGARDING PICTURE FILMS.

In view of the fact that a number of public schoolhouses in Wisconsin are now equipped with motion picture machines, and that in many other communities there is being expressed the desire to have motion pictures for use in the regular school curriculum, as well as in the wider uses of the school buildings, and

In view of the fact that the ordinary commercial supply of motion picture films is in a large degree unsuitable for use in the public schools, and is moreover so expensive as to be almost prohibitive, therefore, be it

RESOLVED, that the Wisconsin Teachers' Association respectfully request the state legislature at its next session to set aside sufficient funds to so increase the motion. picture film circulating library, which has been begun in the extension division of the state university as to furnish an adequate supply of educational motion picture films at cost for such public schools as are equipped with motion picture machines.

As a substitute for the foregoing resolution, the Council of Education recommends the following:

RESOLVED, that this association urge that proper provisions be made for the establishment of a circulating library of motion picture films, to furnish an adequate supply of educational pictures at cost to such public schools as are equipped with motion picture machines.

## READING CIRCLE RESOLUTIONS.

RESOLVED, that a reading circle board be established and organized to consist of five members, as follows:

First, the Committee on Nominations is hereby instructed to report the names of four persons to be voted on at the business meeting of this session.

Second, the terms of office of the persons elected shall be for one, two, three and four years, respectively, to be determined by lot at the first meeting of the Board, and annually thereafter one member shall be elected to hold office for four years, the election to be made in the same manner as that of President of the Association.

Third, the out-going President of the Association each year shall be come a member of the Reading Circle Board, to hold office for one year.

Fourth, the Board shall choose one of its own members as Secretary and Manager.

Fifth, the Board shall encourage and promote the work pertaining to teachers' reading circles throughout the state, and shall make a report annually to this Association.

Sixth, none of the expenses of the Board in prosecuting its work, nor any of its members for attending its meetings, or for any other purpose, shall be borne by this Association.

## SUGGESTIONS FOR READING CIRCLE BOARD.

The expenses of the Board in those states where the work is fully organized are met as follows:

The books are sold to the teachers at the regular list price. Publishers are expected to pay to the County Supervisor or Manager, to be appointed by the County Superintendent of Schools, ten per cent of the total sales in the county, to meet the local expense of handling the books; five per cent to the Secretary of the State Reading Circle Board; and three per cent to the Board for the expenses of its members in attending the meetings.
In some states a certain credit is given on examination for teachers' certificates, and in Missouri some credit is given in the state normal schools for the successful completion of a prescribed amount of Reading Circle work. Those would be matters to consider later-after the value of the work has been demonstrated-and would, of course, require legislation.

It is not difficult to prepare an open-book examination that will test the teacher on a course of reading and show to the Board either that he has or has not read the books.

As a subsitute for the foregoing resolution, the Council of Education recommends the following:

Be it RESOLVED, that the Council of Education be authorized to appoint a committee of five to make a thorough study of the desirability of reading circles in Wisconsin, and to make a report at the rext annual meeting of this Association.

The foregoing report is respectfully submitted for the action and consideration of this Convention.

Respectfully submitted, W. J. Hamilton, Chairman.

This report was unanimously adopted section by section and the meeting adjourned to the Main Hall of the Auditorium, where the following program, illustrative of the child welfare movement from the physical standpoint was given:

## EXHIBITION OF PHYSICAL EDUCATION. <br> PART I

Kindergarten Games. 9:30 to 10 o'clock. Under the direction of Miss Mary E. Hanan, assisted by the Milwaukee Kindergartners.
Group I-Rhythmic Games:
a. Bowing Rhythm.
b. Dancing Doll Rhythm.
c. "One, two, buckle my shoe."
d. Menagerie Rhythm.

Group II-Fan Ball.
Group III-Folk Games:
a. Ma's Piggiwigs.
b. Sewing Game-music and words by Miss Adelaide M. Ott, Director of Eighteenth Street School Kindergarten, Milwaukee.
c. "Oats and Beans and Barley Grow."-

Music by Clauder's Terzett and Miss Edith Podlasky.

## PART II

Exercises with one club in combination with exercises of the whole body. 10 to $10: 15$. Girls of the North and East High Schools. Director, Miss Edith Dunham.

Esthetic Dancing. Girls of the South and West High Schools. Director, Miss Nellie B. Havens.

## PART III

Gymnastic Games. Pupils of the graded and high schools. 10:15 to 11 o'clock.

The purpose of this part of the program is to present to the educators of the state a number of the most valuable gymnastic games that can be played in the hall and yard with little or no preparations. These games are valuable because of their beneficial influence on the heart and lungs, as well as on the development of a cheerful frame of mind; they are, if not overdone, devoid of all qualities that may become detrimental to mind, character and body.

The arena is divided into four fields for better oversight on the part of the spectators and better control on the part of the directors. The field in the south end of arena in Field 1 and that in the north end is Field 4.

The games are arranged in six groups; each of the first five groups consists of four and the sixth group of five games. The chief characteristic of these games, besides the wholesome influence on the child, is their simplicity. An illustration of progression is given in games 2,3 , and 4 of Group A and Group B; games 3 and 4 of Groups C and D, and in the first three forms of the relay race.

## Officers of the Arena.

Field 1. Edwin G. Luening, Henry J. Rademacher.
Field 2. Carl O. Stephany, Henry Speerbrecher.
Field 3. Charles J. Anspach, Thomas E. Torphy.
Field 4. Daniel W. Corcoran, Edward Wedekind.

## GAMES

Group 1:

Field 1. Beat me (if you can)

Field 2. Come (with me)

Field 3. Two deep

Field 4. Three deep

## Group 13:

Field 1. Cat and mouse

Field 2. Black and white

Field 3. a. Catching fish
b. Last couple out

Field 4. a. Lame goose
b. Fox and chicks
b. Fox and chicks

Miss 'Elsie Gruber and pupils of Second Grade.
Miss Hannah Marks and pupils of First Grade.
Miss Elsie Schulz and pupils of Third Grade.
Miss Hildegarde Glaubitz and pupils of Fifth Grade.

Miss Alida Van Sass and pupils of Second Grade.
Miss Nettie M. Whalen and pupils of Fourth Grade.
Miss Natalia Notz and pupils of Third Grade.
Miss Natalia Notz and pupils of Third Grade.
Miss Alice Connell and pupils of Fourth Grade.
Miss Alice Connell and pupils of Fourth Grade.

Group C:
Field 1. Simple passball

Field 2. Passball to and fro

Field 3. Passball in any direction
Field 4. Riderball

## Group I):

Field 1. Battle ball

Field 2. Chinese wall

Field 3. Circle dodge ball

Field 4. Progressive dodge ball
Miss Adelaide Sproesser and pupils
of Fourth Grade.
Miss Alice Nash and pupils of
Fourth Grade.
Mr. Henry Rademacher and pupils
of Sixth Grade.
Mr. William O. Becher and pupils
of Eighth Grade.

Miss Sara Callen and pupils of Eighth Grade.
Miss Alice Blumer and pupils of Third Grade.
Mr. Edward McCabe and pupils of Fifth Grade.
Mr. Henry Speerbrecher and pupils of Seventh Grade.

Group $\mathbf{E}$ :
Fleld 1. Captain ball with bases Miss Mary E. Kelly and pupils of (old form)
Field 2. Captain ball with bases (new form)
Field 3. Field captain ball

Field 4. Field captain basketball

Eighth Grade.
Mr. Thomas Kenny and pupils of Eighth Grade.
Misses Jane M. Fellows and Etna Strom and pupils of Eighth Grade.
North and South High School Boys, Messrs. Louis Freytag, Hans Goetz.

## Group F:

1. Relay race, simple, around objects.
2. Relay race with close pass of ball (various forms).
3. Relay race with long pass of ball (various forms).
4. Shuttle relay race. Girls of four high schools.
5. Pursuit-lap-relay race. Boys of four high schools. Starter, Edwin Hoppe. Colors of high schools: North, blue and white; East, orange and black; South, cardinal; West, red and white.

## Remarks:

Apparatus, such as hurdles, bucks, horses and jump-standards, can be used to good advantage as obstacles in relay races.

## PART IV

Apparatus and Popular Gymnastics. By pupils of the North, East, South and West High Schools. 11:10 to 11:30. Directors-Misses Edith Dunham and 'Nellie B. Havens, Messrs Louis Freytag, Hans Goetz and Carl Jones.

## PART V

Free exercises by 1,100 pupils of the Fifth and Sixth Grades. 11:30 to 11:50. Music-Sousa's "Manhattan Beach" March, by Joseph Clauder's Orchestra.

## Column Leaders:

Column I. (East Side) Principals:
Andrew C. Brown, W. Lincoln Smithyman
Column 1I.
Column III.
Column IV.
Column V.

William Promberger, Robert M. Derse
Henry Krueger, Schuyler C. Horton
Samuel H. Stivers, William O. Becher
John J. Finen, John Ulrich

Parts II to V under the direction of George Wittich; Director of Physical Education in the Milwaukee Public School System.

The meeting then adjourned.

# ADDRESSES READ AT THE GENERAL SESSIONS. 

Address of Welcome by Mayor G. A. Bading:

Ladies and Gentlemen: I am here this morning to discharge the pleasant duty of extending to you, on behalf of the citizens of Milwaukee and the administration, a sincere and hearty welcome and greeting. It may not seem anything new to you to come to Milwaukee for your annual convention, but I want you to know that we appreciate your presence here more and more and that we are always glad to learn that you have again selected Milwaukee for your annual convention. We are pleased to have you here and we are proud of your presence here because we realize that you are the forces that we must look to to train our children, the boys and girls, and make of them capable citizens. We are proud to have you with us because we realize that you are the people who must instill in the minds of our young, and fan into a flame, the spirit of patriotism which makes of them loyal American citizens with a love of country and a love of flag. We are proud of our educational systems-our state university which ranks second to none in our country; we are proud of our public schools, and we realize that it is you who have established for our schools the reputation which has made Wisconsin famous along educatinnal lines throughout the world. While you are here, I would like to have you remember, however, that during your labors with the young you. insist that they set aside certain times for recreation purposes, and while you are with us we insist that you also take time from your labors to enjoy yourselves and enjoy the beauties of our city so that you may help us spread the fame of Milwaukee, which is already great, the fame for hospitality and for being the most beautiful city on the Great Lakes.

In again extending to you a hearty and sincere welcome, I hope you will again decide to make Milwaukee your meeting place and make it the perpetual home of the Wisconsin Teachers' Association, and you will always be welcome, individually or collectively. I also desire
to say that we are delighted with the charm, the beauty and the culture of the audience here present, the teachers of the State of Wisconsin.

I thank you.

## RESPONSE TO ADDRESS OF WELCOME

BY<br>CHARLES R. VAN HISE, U. W.

It is a very great pleasure indeed to respond upon behalf of the teachers of the state to the welcome of the Mayor of the city. The teachers deeply appreciate the cordiality and hospitality of the citizens of Milwaukee, not only at the present meeting of the teachers' association but at all of our previous meetings.

At Milwaukee, in addition to the elementary and high schools, are the normal school, the Milwaukee trade school, the workshop for the blind, the school for the deaf, and a large public museum. In the city, the metropolis of the state, is a wider range of schools than in any other city.

It is commonplace to tell of the widening scope of the work of the public school system of the state, extending as it does from the rural schools to the university, and including the normal schools, the county training schools, as well as the schools for the different classes of defectives.

The fundamental importance of the field of education is demonstrated by the wide list of topics which are to be discussed at this meeting of the association.

All departments of the educational movement are in flux. While much progress has been made, and in various parts of the school system a reasonably satisfactory condition has been reached, nowhere has the system been perfected; and nothing but perfection will satisfy the enthusiastic teachers of the state. Hence from time to time in various parts of the state and annually at this association, the teachers come together to discuss their many problems, each seeking eagerly for information which can make him more efficient in his particular niche in the educational structure of the state.

It is also commonplace to say that the task of appropriate education for all of the children of the state is a recognized public function. While this is true with us in Wisconsin and for much of the United States, it is not true for all nations. But where there is a nation in which education is recognized as a public function, from the
lowest to the highest, there is a nation that is leading the world, buth intellectually and materially. The acceptance of education in all fields as a public function on the part oif Germany has given her a great advantage in recent years over England, our mother country. For England we have tender affection; but we cannot but feel that in respect to education, she has not kept abreast with the most advanced nations of the world.

If I conceive the new ideal of education aright, it is to develop a system under which the child, whatever the condition of birth, may find the way to an education adapted to his needs. The statement of this ideal once made will carry with it instant acceptance by all schoolmen.

But it should be realized that its acceptance carries many implications. It involves the widening of the present system of education so that a child may be guided to the field of work for which his natural endowments best qualify him. While holding to the importance or the old lines of education as the trunk of the tree, from this central trunk there must spring many branches, so that each child will find one suited to his abilities. The boy who is to remain upon the farm must have education adapted to that life; the boy who is looking toward the shops must have education adapted to that vocation. A sys tem of education such as that proposed will require the teachers closely to study each child in order to guide him in the right direction. If the system is perfected so as to give the right education in a large proportion of cases, it involves what President Eliot calls "sorting" of the children, and that rather early.

Further the system of education must so be worked out that without too great loss of time, the child, who late in his educational career develops unexpected aptitudes, may change his direction. This is possible, since virile education of any kind so develops the intellect that a transition from one line of work to another, under proper administration, may be made without too great loss of time.

The state which first succeeds in perfecting the system of education described will have an expensive one; but also its citizens will be so much more efficient than those of other states that its increased resources will be many fold the additional cost.

Thus the solution of the problem of education in this state is not inadequate support for any existing organism, but in increased support to those parts of the system which have to the present time not been sufficiently developed. A completely rounded out system of public education is the wisest investment the state can make; and if Wisconsin among the states of the union first succeeds in attaining this position, it will be truly the leading state, not perhaps in population and wealth, but the leading state because a larger percentage
of the children born in it will have a happy, successful, useful life, because each is doing work to which he is adapted, and therefore is doing it with joy.

ACTIVE MEMBERSHIP IN THE WISCONSIN TEȦCHERS' ASSO-
CIATION. Mrs. Mary Davison Bradford.

The membership of this Association for 1911 contains over 5800 names. It is hoped that 1912 will show an increased membership, for that would mean adequate financial support, and another good program in 1913.

But increase in numbers is not the only thing to hope for or to work for. We need also to work for the strengthening of this great association as an educational agency in the state. This can be done only by somehow enlisting a larger number into the ranks of the active members,-active, after the manner I shall describe.

THE IMPORTANT WORK OF THIS ASSOCIATION.
The Wisconsin Teachers' Association has for many years, through its leaders and through the work of its committees promoted the educational progress of Wisconsin; besides this, through these great annual meetings, hundreds have been helped to greater professional efficiency, and inspired to deeper devotion to their calling. But that is not enough.

## how to extend its influence.

This Association should have a larger proportion of its six thousand members active in the promulgation of the educational ideas and ideals for which it stands, and to which its programs give voice.

This Association should include a larger proportion who realize that to engage in teaching children and youth, is to engage in the most important task that men and women can set their hands and hearts to; that to do this well is a great patriotic service, in that it is helping to prepare the stuff out of which the Wisconsin of the future is to be made; that to be flippant, indifferent, inefficient, faithless or dishonest in the performance of this task; even for one year, weakens the possibilities of that future and in some degree endangers it.

The presentation and discussion of new educational movements has a large place in the program of this meeting. Leaders of thought

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and doers of things that provoke profitable thought, have been in vited from within and without the state to set before you educational causes of present moment. How much this will affect the educational progress of Wisconsin depends upon you, as individuals.

This meeting will have justified the large expenditure of time, energy and money needed for its planning, its preparation and its realization, not alone by sending teachers back to their various working places, east, west, north, south, with help for individual classroom needs, which is one of its aims; but by sending back to those communities men and women with the broader view, the clearer vision, the firmer conviction, the larger hope, the truer patriotism, that must result from the stimulating fellowship here afforded, and from an appreciative attendance upon these programs.

I have allowed myself but twenty minutes in this program because of my desire to give full time to the presentation by able speakers of two important subjects this morning; but I shall have accomplished my purpose in that time, if I have quickened in some, a sense of personal responsibility, and influenced them to become, in the sense here set forth, active members of this Association.

THE AUDITORIUM A SUGGESTIVE MEETING PLACE.
This great hall is a suggestive meeting place. Here have been assembled some wonderful exhibits of pure bred animals, flowers and fruits, and of manufactured products. Now for three days, it is opened that the teachers of Wisconsin may profit by an exhibit of less tangible but equally important things,-the rich product of thought, the ripe fruit of experience, the elusive things of the spirit. There are none of the usual warning signs in this exhibit; but there is one admonition invisibly placarded everywhere, "Observe the rights of others,"-observe the rights of others to a quiet, undisturbed audience. This exhibit differs also from others shown here, in that those who come to it may take away all they can. Natural law is the only restrictive influence,-psychological law expressed in the words: "To him that hath shall be given"-a thought unjustifiable when interpreted from the material point of view, but luminous with suggested truth when applied to spiritual things. Under this law all have equal opportunity here.

> the "profit-sharing plan" Urged.

It matters not whether you are a teacher in some obscure curner of the state, or a subordinate member of some large school system, your duty to yourself and to the community that made it possible for you to be here, makes it incumbent upon you to pick up, to absorb,
all the new ideas that are practicable for you, to take these into, your schools, to use them, and thus, not only strengthen yourselves professionally, but enable the children whom you teach to share in the benefits of this meeting.

Every teacher can do this, but many can do more. Some of you can bring into this sharing of ideas, the parents of the children. They should know about questions discussed here. Thus can you extend further the influence of the Wisconsin Teachers' Association, and increase its helpfulness as an educational agency.

I cannot prescribe the way for doing this, whether through public gatherings, the local press, through debate or otherwise; but each can do something if he really wants to, and each may be sure that some benefit will result from his efforts.

To those occupying executive or administrative positions, a large opportunity is afforded to build up educational ídeals through the public presentation and endorsement of questions and causes of vital educational importance.

## TAKING A HAND IN LARGER REFORM MOVEMENTS.

This meeting should, furthermore, arm some of you to do even more than that. There are social conditions that must be changed; there are obstructions to your work that must be removed. All these hard, hard things to be done are for the benefit of children $\varepsilon$ nd youth, and hence, fall within the duty of the educator. These duties demand of us fighting qualities; they take tact and forbearance, patience and courage, and steady faith, that no good thing can be a failure. It is risky, as many of us well know, to tell a community, complacently inactive in regard to its school affairs, just where. it stands. But it is necessary. Perhaps the condition exists because the people do not realize that they are behind the times. Then all they need is a kindly awakening by a demonstration of what others are doing. Worse by far than this condition is that of the community that openly confesses that its schools are behind the times, and yet does nothing to put those in office who will stand for the financial support needed for school improvement. It takes courage to cope with such a situation and to undertake to bring that community, especially its well-to-do portion, to a realizing sense that the public schools the the community's most important affairs, and that their condition, good or bad; is but an expression of the community's ideals.

> TO GROW REQUIRES PROPER SOIL.

They need to know as Graham Taylor has said, that the claim of being a community of up-to-date, progressive people will not be con-
ceded to those who are not maintaining an up-to-date, progressive community, and that the most convincing evidences of the legitimacy of this claim is the importance attached to educational interests.

Complaints may be brought to you about the manners and morals of the school children. The school is partly responsible for manners and morals. Considerable can be done, and this meeting has practical help for you along that line. These complaints may come, as one did come to me recently, from persons who decline having anything to do with "dirty" municipal politics. Such complainants aeed to be brought to a realizing sense that the school is not alone responsible for the conditions complained of. We teachers realize that the function of the school is not alone to cause children to know, but to cause them to grow, -grow lives that shall be happy and useful, and decent. But to grow lives, as to grow anything else, means that attention must be paid to the soil. The home is the first influence; then social conditions, largely determined by political conditions, are potent in affecting this soil,-this physical and moral environment of youth. These latter are beyond the control of the school. They are conditions that votes alone can change, and back of votes must be aroused public sentiment.

This stirring up of the social consciousness is, as I conceive it, a part of the work of our profession, and this meeting will have failed of one of its great purposes if it does not arm many of you, who are ready, because of years and experience, to do this needed work.

The times demand men and women in the teaching profession of unflinching stamp to stand by what they believe to be true, and to engage in active campaigning against social conditions that are inimical to true educational progress in the communities where they work.

I trust that it will not be considered irrelevant in this connection to speak of the recently ended political contest in Wisconsin. The result of the vote last Tuesday upon the suffrage constitutional amendment was a serious disappointment to all women who are animated with a desire for social service, and who realize that for real efficiency in that service they must be equipped with that modern weapon of tried efficiency, the ballot. This disappointment was shared by many men who realize the need of the help of women in the promotion of movements for social betterment. While grieving that Wisconsin could not get into the procession, we rejoice that Oregon, Arizona, Kansas and Michigan are in it.

This question is not settled in Wisconsin. It can't be really settled until it is settled right. This suffrage movement is but a part of a great movement which cannot be stopped, because it is the result of education, of industrial development, democratic government and peace.

If there is one question which the whole world seems to be coming to understand, it is that progress depends upon the conditions under which children are born and trained. It is those conditions that women want to help improve.

I am not here to argue for suffrage but to make a plea for better educational advantages for the children of Wisconsin.

Along with the announcement of election returns comes the statement of the great numbers of men who disregarded their franchise privileges. What is the matter? I believe that the schools are partially to blame for it. I believe that the preponderance of teachers who are not citizens has had something to do with it. Our boys should have teachers who have a share in the responsibility for the conduct of municipal, state and national affairs. I believe that the one thing especially needed in order to inspire the men of this nation with a full, deep sense of their political duties and responsibilities is to have them as boys trained and educated by citizens.

Let no woman be disturbed by this statement. Women must remain in the greater number of our schoolrooms. Their good services cannot be dispensed with; but they should be citizens.

Until knowledge born of experience in and with citizenship, takes the place of information about citizenship, the average woman-teacher cannot teach citizenship effectively, any more than city-bred girls can successfully teach boys to be practical farmers.

If women do not have the franchise bestowed upon them for their own sakes, and because it is their right by the fundamental law of our nation, they should have it for the sake of the boys whom they are to train and educate for voting.
"What you would get into the life of the nation you must first get into the schools," said the noted scientist VonHumbolt.

Suecess to the suffrage cause means not only an important addition to the intelligent voters of Wisconsin, but in a few years, through its strengthened women citizen-teachers a more intelligent, and more interested male electorate.

To. work, then, for political equality, is to work for educational progress of a vital sort.

## education vs. ignorance.

We all know the words of the great Declaration that "life, liberty and the pursuit of happiness" are the inalienable right of all. We also know that the deadliest enemy to each and all of these precious rights is ignorance, and that their greatest conserver, preserver, and insurer, is education.

While experience and observation everywhere impress us with the fact of the tremendous distance still to be traveled before the goal
set by the Declaration of our forefathers is reached, there is reason for great encouragement now.

## WONDERFUL EDUCATIONAL PROGRESS of Last decade.

The educational progress of our country as a whole during the decade from 1900 to 1910 is declared by the United States Bureau of Education in the report for 1912, to have been the greatest this country has ever known. "Never," says this report, "have the people shown more clearly their interest and faith in education and in schools of all kinds and grades." Everywhere the importance and necessity of education for civic, economic, social and spiritual welfare, are recognized more than ever before. Not only has there been this general awakening, but there is a second thing that makes the decade remarkable. No other period has such a wonderful story to tell of private benevolence toward educational ends. Within that ten years approximately $\$ 100,000,000$ was given from private fortunes for general educational endowments in the country at large; while twice that amount was bestowed upon different higher institutions by numberless givers. This enormous sum of $\$ 300,000,000$ marks the decade as the foremost in the history of the nation, perhaps in all history, with reference to educational benefactions.
How these two great facts, the general awakening and the financial support of educational activities, are related as cause and effect, might be an interesting and fruitful subject for discussion.

## LEADS IN EDUCATIONAL LEGISLATION.

But, however that may be, they stand in undoubted causal relation to a third fact of vital significance. It is that the year 1911 was productive of more educational legislation of value than any previous year in the history of the nation. Forty-three legislatures were in session; the year was one of peace, of prosperity; political differences were not in an acute state of aggravation and popular attention was, therefore, not distracted from the really important concerns of the state. It was the moment for educational advancement and able men were ready for it. The statute books of many states show the result, causing 1911 to stand for the high water mark of legislative achievement in behalf of education.

## WISCONSIN IN THE FORWARD MOVEMENT.

To this epoch-making result, Wisconsin coṇtributed no small share. Wisconsin too, had her able men and her statute books record for 1911, measures, the practical operations of which, are but just begun,
and whose far-reaching educational results the public in general have as yet little idea of.

MADE EFFECTIVE THROUGH YOUR SUPPORT.
Active membership in this Association includes support of this legislation.

The State Board of Public Affairs is as yet but a name to many. This Board formed in accordance with a law of 1911 and having as its prescribed function, the study of the various problems pertaining to the educational, social and economic welfare of our state, has but just entered upon its work. It is destined, it is believed, to operate in these important affairs, like the Biblical leaven in the lump.

Wisconsin needs your patient and faithful support of her efforts to make the compulsory education laws completely effective, and your influence to raise the minimum educational requirement from the fifth to the eighth grade.

Wisconsin needs your active coöperation in the health movement in the public schools, which recent legislation has instituted and whose success depends so largely upon you. Saturday morning is designed to further that cause.

Wisconsin needs your help in making operative the law relating to the wider use of the school plant. This meeting will give practical suggestions along that line.

## INDUSTRIAL EDUCATION.

Other important new laws are those providing for industrial education. These laws were not hastily compiled or hastily passed. They are based upon two years of exhaustive study by an able commission, of the experience of all the countries of the world, that had something to contribute to the question. I quote from the law this expression of its far-reaching purposes: "To instruct young persons in industrial arts and occupations, and to give such instruction as will lead to a fair knowledge of the liberal arts, a just and seemly appreciation of the nobility and dignity of labor, and in general to promote diligence, economy, efficiency, honor, and good citizenship."

What this new law when under successful operation will do for Wisconsin, the Page Bill is designed to do for the whole United States.

## THE PAGE BILL.

This bill is to be acted upon by the next Congress, and there are many who are interested and many more who should interest themselves in its passage. The speech of Hon. Carroll S. Page on June 5,

1912, before the Senate in support of this bill impresses me with the possibility of its mighty service to the Nation. It is the belief of many of the highest authorities in our country that the passage of this bill will solve better than any other plan before the American people at this time, one of the most vexatious, economic problems that now confronts us. The nation wants results at the earliest possible date. It wants a more abundant supply of farm products, more highly skilled workers in the trades and industries, and more efficient makers of the homes of the people. All these ends, the Page Bill is designed to bring about. It involves appropriations from the National treasury aggregating nearly $\$ 15,000,000$ annually. It is a broad, generous measure, and our representatives in Congress should support it. It is the duty of the members of this association to urge them to do so. The prominent place given industrial subjects in these programs is in accord with the prevalence of interest felt in them.

## higher education more prevalent.

While these educational movements which involve the betterment and the uplift of the sons and daughters of the men of our nation who toil, are absorbing the energy of many of us now, we must not forget other equally important educational concerns. I agree with the thought of a recent editorial article which says, "The old-fashioned humanities that inspired the college classes of the old schools have not been outgrown, and if they are neglected it will be at the peril of the practicalities of our nation." "We need" it further says, "a revival of literature, a new zeal in the teaching of history and poetry, an awakened curiosity concerning cosmic things, and a new enthusiasm for humanity, if we are to make our boys and girls more practical, correct the coarseness of life, the selfishness of business, and correct the women and child-killing industries."

## EDUCATION FOR LEADERSHIP.

The best interests of the industrial, as well, as of the civic and social life of the state, demand that a larger per cent of our citizens should have the preparation for leadership which our higher educational institutions, notably the state university, are affording. Broadly cultured, clear visioned, brave men and women, imbued with the idea of social service, are sorely needed in unnumbered places in our state to-day,-places where the elements exist out of which reform movements may be instituted, but where inactivity prevails for need of leadership.

Wisconsin has the proud distinction of being called the "University State," a title won, perhaps, for the wisdom she has shown in supporting liberally an institution that not only takes through its doors hundreds who ask admission here and trains them for leadership, but that through its extension division and its agricultural department, reaches out and helps thousands more, scattered throughout the state whom duty holds at home or in shop, in office or on farm; or won, perhaps, because through the educational influence of her University, Wisconsin has added each year, millions of value to her merely material product.

However the title was won, it may be construed rightly and consistently as meaning that Wisconsin has placed upon a pinnacle and is sustaining there a great educational luminary, seen and recognized afar off, and helping unmeasurably to dispell the darkness of ignorance wherever it exists. In that sense we are proud that this is a "University State." Some states have won less complimentary epithets.

My final word is to the young, who must carry on this work of education. Be sure that you have a full appreciation of what education means; be open-minded to the truth; know, grow, do; and through faithful doing and fuller knowing, grow again. Thus prepared, fields 'for still more important doing will open up. That is the law of gravitation in the world of service-duties gravitate inevitably toward those who are prepared.

There is enough work still to be done in battling with ignorance in Wisconsin, and urging more and more of our youth to higher and higher attainment, to employ all agencies, whether public or private, whether supported by general taxation or private benevolence, whether secular or sectarian. This Association, embracing as it designs to do, all educational agencies, will welcome as active members every one of these that is future-faced; that is working towards the better day; that is, in some essential way, helping Wisconsin to realize her watchword: "Forward."

# NEXT STEPS IN SCHOOL EFFICIENCY. 

By William H. Allen.


#### Abstract

Director of The New York Training School for Public Service and The Bureau of Municipal Research, Which Conducted The Inquiry Into The Management of 131 Rural Schools for The Wisconsin State Board of Public Affairs.


An important first step toward securing school efficiency is now well under way. "Efficiency" is in our vocabulary. It is almost a shibboleth. While a few reactionaries claim that we cannot measure school efficiency, the rank and file of us know so many things we can measure, that we do not need to worry about the fewer things which we cannot.measure; so we all proclaim and demand efficiency for others. Each of us is sure that his superior, or his subordinate, or his neighbor can be measured with respect to efficiency. Each of us is praying for the day when the particular class of school for which he shares no responsibility shall be subject to efficiency tests. We are like the Wisconsin Irishman who wanted to enlist all his wife's relatives for the civil war. Rural school teachers want efficiency tests for the university; high school superintendents demand efficiency tests for elementary schools; universities are sure that efficiency tests will help secondary and elementary schools. At great national gatherings superintendents of city schools deplore the benighted and neglected condition of our Cinderella in education-the rural school.

The first step in getting efficiency, therefore, has been taken. We want it-especially for other people. We like to use the word and to proclaim our allegiance to the newer ideals of scientific management. But saying "efficient" and being efficient are two different things. Saying efficiency, and believing efficiency, and wanting efficiency are marks only of our first steps toward efficiency.
The next steps in school efficiency are "getting done" steps, not "talking steps". These next steps have to do with ourselves-my school, your school; the progress of my pupils-the progress of your pupils; the efficiency of your subordinates, your superiors, your college.
Getting things done means that we must not only step, but we must step forward, and we must not only go ahead when we step, but we must go ahead in the right direction. Now, this means, when we talk about school efficiency, that we must enlist the individual teacher, the individual county superintendent, the individual principal, the individual city superintendent, the individual board member, the state supervisor, the state superintendent and the state legislator.

We must learn to test the teacher, the board member, the supervisor. If we test the testable, the untestable will fade away into insignificance. Not to test results in school and college is just as wasteful as not to test results in agriculture, in mining or in manufacture, or in state government, in which testing the state of Wisconsin has furnished such notable leadership.

Testing ourselves--taking our own next steps toward efficiency-requires that we learn to detect, to suppress, to squelch, to cure, to replace, eight kinds of thinking, eight habits of mind which have kept teachers, superintendents and the public from taking sadly needed next steps in school efficiency. These eight habits of mind, I am venturing to explain by reminding you of eight different kinds of men to be found in the state of Wisconsin, possibly right here in the Wisconsin State Teachers' Association.

## 1. the ten commandments man.

A young minister who asked his elderly preceptor the best way to present the ten commandments was told: "As commandments to the poor; as requests to the well-to-do; as recommendations to the rich". This same man in education preaches efficiency tests as commandments to his pupils and teachers; as requests to his distant colleagues; as recommendations to himself and his superiors. Our next step is to do away with the requests and recommendations and develop among school men and school women an attitude ioward efficiency tests which will preach them as commandments to each of us.

## 2. the hose man.

After life and property were needlessly lost in a New York fire, the fire department's mismanagement was investigated. When asked why he had not currently tested the fire hose the commissioner said: "Because I was afraid it would break and we needed all of it in case of fire". Do you recognize this attitude? Do you know superintendents who are "afraid it will break" if they test their own methods of supervision or their course of study? Do you know this mental attitude that shades off to the applicant for a position who insisted that while he was truthful he was not fool enough to say anything that would hurt his employer's business? Think a minute of some of the over-age tables we have been reading lately and of the scores of superintendents who started out to learn the number of children who were too old for their grade by using a method which compared last year's oldness with next year's grades.

## 3. THE TARGET MAN.

This is the man who found marksmanship uphill work until he shot at a blank wall, located his bullet, painted his target around that
bullet hole before inviting an audience to applaud. Do you recognize this attitude? Do you know educators who never apply efficiency tests until they have time to paint the bulls-eye around the bullet, who use statistics to prove theories and not to disclose needs? If this attitude has not been more fatal to the educator it is due to that near monopoly which he has heretofore enjoyed similar to a doctor friend of mine in Minnesota who asked me one day what timothy hay was worth. I asked him why he was interested. He said because he had bought ten loads from Pat Nolan. When I said, "Do you mean to say that you allowed Pat Nolan to fill up your barn with timothy without knowing the price", my doctor friend replied, "I don't care about his price, for I am doctoring his family and I have not yet sent him his bill". Would you be reminded of this attitude if you found among a superintendent's recommendations one for "a thoroughly qualified statistician-one trained in the complicated art of manipulating school statistics?

## 4. the statesman.

This is the schoolman who fits the definition of statesman recently given by one of Life's fathers to a Life boy: "A statesman, Freddie, is a man who finds out which way the crowd is going, then jumps in front and yells like blazes". Do you know that man? Do you know any educators whose idea of efficiency tests is to do what the big men with the bigger salaries in the bigger jobs will approve? Following the crowd has led hundreds of cities to adopt a curriculum promulgated in New York, which upon inquiry is shown to be fitted neither to smaller cities nor to New York. Prominence, personal and professional connections, have had too great weight in determining status and efficiency tests among educators. By mere force of numbers the superintendents in large cities are given prominence entirely disproportionate to their merit and often gives the impression of leading even when actually standing still or walking backwards.

Do you know schoolmen whose only idea of currently testing that kind of leadership is to imitate? For example, the method now in use for reporting children too old for their grade. It started well in St. Louis, Milwaukee and Boston several years before New York took it up. New York put it on a wrong basis. Last year's ages were compared with next year's grades, and children in over-age classes and children who dropped out before the end of the year, were not counted, and no effort was made to show how many times a child had failed. All over this country teachers, principals and superintendents imitated an example in spite of positive proof that the results were misrepresenting their children and their teachers. We are just beginning here, and there to see the necessity for imitating a
different kind of example which will bring out at one time in the beginning of the year, when the knowledge will help teachers to help their pupils, facts about progress and facts about age. (Show plan of Efficient Citizenship, 577, Schrader Fund, Bureau of Municipal Research.)

## 5. the samaritan man.

When my eldest boy had just learned to talk a friend whom he had made in Gramercy Square asked him what his father did. He said, "My father talks". Later questioning brought out his childish effort to explain a course of talks on "Who brings Up Your Child?" He said, "My Papa tells everybody else how to live." Did you ever see that attitude among schoolmen? Would this altruistic direction of the schoolman's worry account for our delay in applying current efficiency tests? If asked to state one overshadowing reason for our lack of adequate efficiency tests I would say: Schoolmen have not generally errough wanted to test their own efficiency or the soundness of their own methods. In other words, schoolmen have not gener. ally enough wanted taxpayers to be able to test the efficiency of teacher, principal and superintendent. It is desperately hard to carry around a halo without feeling very solicitous about other people's salvation. Just try it. I am going to some day.
How else can you explain a dialogue like the following which happened May 8, 1911? "Mr. Superintendent, why is it that one school promotes $100 \%$ while another promotes only $74 \%$ ?" "No school promotes $100 \%$ ". "Well, how about school X?" "Well, that is an exception, that is the crack school of our city. Refined parents, well-to-do neighborhood". "How about schools A and B, which promote only $74 \%$ ?" "Well, they are in slum districts. We cannot expect any more from such surroundings". The mere layman who was conducting this hearing was, of course, grateful for the explanation and the schoolman's halo stiffened, straightened and expanded. When I was told this generous explanation, I asked: "Well, what was the fact about the year before and the year before that?" Inquiry showed that for three preceding years the two slum schools had beaten the crack schools both as to average attendance and as to percentage of promotion. It also showed that eight schools reported from $100 \%$ to $110 \%$ of promotion last year. Such gaps between belief and evidence will not occur when schoolmen want their towns to know currently their own efficiency.

## 6. the don't go near the water man.

He likes to swim. He believes every child ought to be taught to swim. Only he does not want any school investigator to go near the
water until he has learned to swim. Do you recognize this man in the field of education? Do you know any men who believe in efficiency tests for schools, in school inquiries, in school records, but "deprecates attempts to measure purely educational results?" This is the man I meant when I said that if we test the testable there won't be much untestable left to worry us.

## 7. the personalities man.

Almost the hardest thing for me to understand about education is the impossibility of discussing methods or results without being accused of throwing daggers or bouquets. I wonder if one reason for this is that we have not been using current efficiency tests? Educators have been trying to think out explanations instead of letting the facts produce them.

Wisconsin teachers will show to-morrow and next month whether or not they are able to consider facts as facts without eulogizing or getting mad at somebody. To-morrow morning the report will be given out which the New York Training School for Public Service has made to your State Board of Public Affairs. It tells not what investigators thought, or wanted, or imagined, or liked, or disliked, but, what they actually saw in 131 rural schools and at superintendents' offices and at county meetings of district school officers. It gives concrete illustrations from the books of town clerks, school treasurers, etc. For every statement and report there are on file at the office of the State Board of Public Affairs concrete facts telling who visited, who was visited, what books were looked at, what recitations were heard, etc. etc. The investigators were animated by two motives.

1. A desire to get the facts.
2. A hope that the presentation of the facts in an impersonal way would help the school children of Wisconsin and the rural districts from one end of the country to the other.
As I have looked into your faces this morning I have wondered how you are going to take that report and am reminded of the winning stroke in a university debate. The speaker asked: "If you look into the looking glass and find your face is dirty, do you smash the glass or wash your face?" Which will you teachers and superintendents of Wisconsin do?

## 8. the undemocratic man.

Do you know any teachers who are not democratic in their relation to their pupils, or any principals who are not democratic in relation to their teachers, or any superintendents who are not democratic in relation to their publics, their principals and their boards of education? The greatest possible democratiser is information. Tests
which currently tell the truth about the significant problems of schools will put leadership where it belongs-with ability to lead forward and not with that ability which Woodrow Wilson mentioned last July and which he might easily have said characterized the school mind where current tests of efficiency are lacking. Two men were driving a team called, let us say, Principal and Teacher. They asked a stranger how near they were to their destination, let us say, School Efficiency. He replied, "Twenty miles." They drove and whipped and cajoled and asked another man after an interminable time. He said, "Twenty miles." After a decade let us say, they asked the distance to their destination and again they were told, "Twenty miles." Then the "big man" leader, representing the eight types of thinking which I have mentioned, said, "Well, thank God, we are holding our own, anyway."

Truly representative government will follow, not precede, the understanding of public school questions by parents and taxpayers. There can be no democracy where there is inefficient public education, where one city is twenty-five years ahead of another city in educational method, or where free discussions and suggestive criticism of school matters are not invited. Nor can there be true democracy where outside interest in public schools is lacking, or where such interest is sporadic, uninformed and incompetent. It is not a normal condition for beneficiaries or supporters of universal education to be more interested in almshouses and jails, or even in hospitals and colleges, than in public schools. It is profligacy itself for intelligent men and women to permit the schools which are shaping the character and capacity of $20,000,000$ children a year to go on stumbling for a whole generation when available experience currently analyzed would afford a short cut.

An informed public has been impossible heretofore, because those able to inform have not considered it worth while or necessary. If the public is to administer schools it must be given current knowledge of results including knowledge of failures. Civic judgment can never be based upon intelligence so long as every criticism is treated with contempt and regarded as reactionary criticism of free education, or so long as taxpayers are expected to "stand and deliver" and blindly accept as sound any and every plan for spending school money and school energy.

If citizen interest and intelligence are necessary, if the sacredness of the teaching profession is to be vindicated, if there is a limit to money required by schools, if the public may be led to coöperate by information as well as by cajolery or intrigue, if admission of error will promote education, then the potential value of current tests of school efficiency is inestimable. The beginning of such current tests is to deal
radically with the eight habits of mind and eight types of man just mentioned.

## THE EDUCATION OF GIRLS.

PRESIDENT L. D. HAṘVEY.

In discussing the education of girls, it would seem wise to take at the outset a general survey of what the problem involves.

In 1910 the population of the United States was, in round numbers, $92,000,000$, approximately half of which, or $46,000,000$, were women and girls.

The estimated number of children of school age, from 5 to 18, was about $25,000,000$. The number of youth of college age is estimated at $7,000,000$ more. The number of students in universities and colleges, both public and private, in 1910 was 184,712 , of which number 50,000 were girls.

The enrollment in public, elementary and secondary schools in 1910 , was $8,378,834$ boys and $9,448,473$ girls. The number of pupils in high school the same year was 915,061 , of whom 466,681 were girls, and of this number approximately 25,667 were preparing for college or university.

This would indicate, taking the total number of girls in the colleges and universities of the country at 50,000 , that a considerable number, of those who were preparing for college failed to enter, or that the number of girls entering college is very rapidly increasing.

It thus appears that of the three and a half million girls of college age, about 50,000 , or one in 70 is in college, and of the total number of girls between the ages of 5 and 18, about one in 22 is in high school.

I have not been able to secure statistics showing the number of girls of high school age in the United States and so I am unable to give the proportionate number of these girls who are securing a high school education. The fact that but one girl in 70 above eighteen years of age is in college indicates that for the great majority school education ends in the high school or elementary school, and since the total number of girls in the high schools is less than a half million, it is evident that much the larger number complete what education the school gives them in the elementary schools.

What this amounts to is shown by the statement of the Commissioner of Education that for 1910 the average amount of schooling for each individual of school age, that is from 5 to 18 , which includes the high school period, is 5.23 years of 200 days each. Counting in private schools the average is raised 5.79 years. This makes it very clear that
for the vast majority of girls their education is completed before or at the close of the elementary schools.

To-day we are realizing as never before the lack of efficiency in the vast majority of those who do the work that society demands. If the possible efficiency of the farming population were realized, the products of the soil now under cultivation in the United States would be increased at least $100 \%$. We are beginning to realize this fact, and hence the demand from all parts of the country for the sort of education for the country boy and girl that shall hasten the development of this efficiency. The manufacturers realize the inefficiency of their employes of every grade, and these employes, if they do not fully realize their own inefficiency, see the lack of those kinds of educational facilities necessary to develop efficiency in their children, and they unite with the manufacturers in demanding a place for industrial education.

The great transportation companies are admitting the lack of efficiency among their operatives and are providing the educational machinery for securing it. Workers for civic and social uplift find themselves handicapped by the inefficiency of the agents through whom they must work, and in response to their call for help, educational agencies are being provided to develop competent workers in these fields.

The impulse of this awakening to the call for efficiency is felt everywhere throughout the length and breadth of the land, and the demand is becoming more insistent every day for such a broadening of educational means and ends as shall make it possible for those who are to do the work that society needs to have done, to acquire the knowledge and training essential for efficiency in the doing. The demand is not less for the cultural element in education, not less for the highest professional and technical training for those who have the ability and inclination to secure it, but there is an added demand for the millions who have neither the ability nor the inclination to secure this train-ing-a demand that educational effort shall be directed toward preparing these millions to do something well that needs to be done in order that they and society both may be benefited by their increased efficiency in doing. A narrow range of useful knowledge couple with efficiency in its use is better for the individual and for society than a wider range of knowledge, useless or useful, without efficiency in action.

A generation ago the discussion waxed warm upon the question of the physical and mental ability of the girl to do the work prescribed for her brother in the higher educational institutions, in the same time and in the same way that he was to do it. The opening of the doors of these institutions to women on the same basis as to the mon, and

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the success of the girls in them is a sufficient indication of the answer to that quesion. The discussion has practically been closed. The girl has demonstrated and is demonstrating her ability to achieve success in the highest field of educational effort. But the settlement of that question has not settled the other-whether the girl needs and should have the same education as the boy. Until very recently the organization of the school systems, the framing of courses of study for elementary and secondary schools, and of the curricula of higher educational institutions have proceeded upon the assumption that the needs of the boys and the girls in education were the same, and to be met through the study of the same subjects. These subjects were chosen and their scope determined almost solely with reference to the boy. It was left for the girl to proceed along the same lines if she were to proceed at all. Some men and many women have argued effectively for the right of the girl to follow in the educational footsteps of her brother-until that right has been conceded. In recent years, the question as to whether this is the only right to education possessed by the girl has been coming to the front, until to-day it is one of the most important questions to be considered in connection with the development of our educational systems. Some concessions have already been made-the introduction of sewing and cooking as subjects of instruction in many public and private schools is a slight recognition of the fact that the girl needs for her training some things that have no place in the training of the boy.

The elective system in the higher educational institutions coupled with the conservative admission of subjects that might be attractive to girls if not to boys, and the election of these subjects by many girls, is a further recognition of this difference in needs. A serious consideration of the question discloses the fact that an adequate differentiation of the material, means, and methods to be employed in the education of girls and boys has not yet been made. We have been for years multiplying special, technical, and professional schools of varying aim and scope to fit boys and young men for the active duties in life, growing out of changed industrial, social, commercial, and political conditions. These schools have come into existence because of the demand for that kind of education which shall fit young men to do what, by reason of their manhood, they may do, and by reason of the requirements of society needs to be done. Many of these schools throw their doors open to women, and a few women have availed themselves of the opportunity thus afforded. They have not proved attractive to girls in the same measure as to boys for the reason that the world recognizes certain classes of work as peculiarly men's work, and other classes of work as peculiarly women's work. That some women and fewer men do not recognize this distinction, does not alter the
situation. If a woman conceives herself able to do the work which society at large has regarded as the work of a man, she has an opportunity to fit herself for it, and if she can find employment, she is at liberty to engage in it, but the fact remains that her entrance upon this field of activity is only an incident. With a man it is a life work -with a woman it is liable to be interrupted at any time by the demands of her womanhood for a home and family life. Few women have the physical and mental strength to meet the demands of the home life and the demands of a vocation or a profession outside of the home, and win success in both. That one occasionally does is no warrant for assuming that it is the general rule. That she wins success outside of the home at the expense of the home life is an admission of failure.

Throughout the country, and indeed throughout the world at the present time, the most marked tendency in educational development is the establishment of schools and modes of training designed to give special preparation or efficiency in some vocation. The demand for efficiency is so great and the value of vocational training in the schools is becoming so clearly recognized that provision is being made for special education in a large number of vocations, in many of which the number engaged is comparatively a small fraction of the whole number engaged in vocations. It is not the size of the group that is determining whether vocational schools shall be organized, but the need for special preparation of those who constitute the group.
In determining the need for vocational education for girls, we must take into account the activities in which they engage and the need for special training to properly perform those activities.
Of the $46,000,000$ girls and women in the United States, about $8,000-$ 000 are engaged in activities outside the home. Of this number about $1,000,000$ either have had the care of the home, or now have it in addition to their outside work. It must be remembered that of these $8,000,000$ the majority of them are either supplementing the work of the home by work in the industries, or are temporarily engaged in the industries, which sooner or later they will leave to take up the responsibilities of home life.

Whatever necessity exists for vocational training in the industries for boys exists equally well for the vocational training of girls engaged in the industries. More than three-fourths of all women who reach maturity will sooner or later assume the responsibilities of the home maker. Is this work of sufficient importance to be ranked as a vocation? Does it demand special preparation? If so, what should be the character and extent of that preparation? How can it be secured?

Let us consider the function of the home in society. The home is the unit of society; within it are found influences and forces that are
most potent in shaping the life of the individual, in determining the state of society and the character of the national life. From it have come the millions who constitute the population of this country. From it come every year more than two million new born citizens. Within the next decade there will be born more than five times as many children as there were souls in this country when we became an independent nation, and two-thirds as many as there were people living in the United States when the Civil War began. Through infancy, childhood, and early youth, the care and nurture of the individuals composing this vast army is a most important part of the work of the home. The physical condition, the shaping of tendencies, the character of habits formed, the mental and moral development of the child, the promise and potency of later life, are influenced most profoundly, one may say are determined almost exclusively, by the influence of the home life. ' Are those influences and forces of sufficient importance to demand intelligent effort to prevent their being left to the sport and play of ignorance or accident?
How much is involved in the two words care and nurture of the child! For its proper care, there must be intelligent action, and intelligent action must be based upon a knowledge of the physical organism of the mother and her child; of what is essential for both for the best physical development of the infant and, later, of the child considered solely as a healthy animal, and still further, as a spiritual being.

What are the duties of the home maker? It is thought to be necessary for a farmer who would raise hogs or poultry successfully to study the structure and organism of each type, the properties of food best adapted for their development, the preparation of these foods, and the proper times for feeding, and the variety and amount of food to be given at different times and for different purposes. Few realize how much more difficult is the problem of feeding the child. It comes into the world perhaps the most helpless of new born things. Of the two million children born annually, one in six dies before the end of the first year; one in three by the end of the fifth year. Boards of Health, physicians, and scientific experts who have investigated this subject unite in declaring that at least $40 \%$ of this death rate is due solely to ignorance on the part of those responsible for the feeding and care of the child.

A few months ago the world was thrilled with the message flashed along the wires telling of the loss of the Titanic with 1500 lives. This terrible loss of life due to causes entirely preventable aroused Congress and legislative bodies in other parts of the world to prompt action for the prevention of similar disasters. The fact that these 1500 lives were lost in a few hours and that their loss was unneces-
sary, shocked the world, and yet between the time that the Titanic set sail from Southhampton till she went down to the port of missing men, in the United States 2700 children under one year of age died and went to join the 1500 who were lost by the sinking of the Titanic. Before the survivors of that shipwreck landed in New York, as many more of these young lives went out and these were not isolated, exceptional instances. That loss of life has been going on steadily day by day ever since, is continuing to-day. During the meeting of this association more than 2700 infants under one year of age will die in the United States and $40 \%$ at least of this terrible mortality could be averted if the mothers of these children had had the proper training for their duties as wives and mothers.

It is impossible to say how large a proportion of the illness of adults in the home is due to the same kind of ignorance-ignorance of what is proper in food, of what is proper in its preparation and care, and what is essential in the amount and kind to meet the varying needs of the older members of the family.

Connected with this single problem of feeding the family is another of no small importance, and that is the economic problem. The bearing of this problem on the different members of the family is one of vast social and industrial importance. Proper feeding of the family, when no account has to be taken of expense, is a simple proposition compared with the proper feeding when at every moment the lack of money makes wise choice and proper preparation of food a much more difficult problem.

The health of the different members of the family as affected by other causes than incorrect feeding is a matter of vital importance. Knowledge of the proper means for the prevention of disease through proper sanitary conditions in the home, proper care of the person, and of means for the prevention of bad effects from unavoidable exposure, immediate treatment in case of accident, and proper nursing in case of illness, are essential to the proper discharge of the responsibilities of the home maker.
Sanitary conditions in and about the home as related to heating, lighting, ventilation system, water supply, sewage disposal, and care of drainage system, are factors affecting the health of the family.

The clothing of the family, involving wise choice with reference to economy, adaptation to needs, durability, care, and pleasing effect is another subject demanding a wide range of knowledge and skill in order to secure the best results:

The housing of the family, involving wise selection of furnishings and decorations, is another responsibility devolving upon the home maker, requiring special knowledge of wide range in order to secure the highest degree of comfort and aesthetic effect at a minimum cost.

The development of the child's mental power and spiritual nature while in the home, in such manner as to fix tendencies and develop characteristics essential for the most complete later development, is a problem that may well tax the mind of the wisest individual.
This is a brief, though thoroughly comprehensive statement of what may be regarded as the most important of the duties devolving upon the home maker. That these duties may be discharged efficiently is essential for the well-being of the home, of each individual in it, and of society at large.

Who is the home maker? She is the girl who is to be educated today and who, as the woman of to-morrow, is to assume these responsibilities. The home is a universal institution; it is found everywhere; practically every human being has come from it, and has been affected for good or ill by its influence, its direct or indirect teachings. More than three-fourths of the women of marriageable age assume sooner or later the responsibilities of the home maker. It is the one occupation which is the most universal for the woman. The perpetuity and well-being of the race depend upon the maintenance of the home and upon the proper administration of its affairs. As practically every woman looks forward to the time when sooner or later she shall assume the responsibilities of the home, (and, since for the great majority of them that time will surely come), and considering their importance to the race, it seems an inevitable conclusion that no education for the girl is adequate which does not take these responsibilities into account and provide for such instruction and training as shall insure their effective discharge.

It is sometimes argued that the place for the girl to secure this knowledge and training is in the home. The complete and sufficient answer to that argument is, that she does not there secure it, and that her mother is not competent to give such instruction and training, even if she had the time and inclination to do it, and if her daughter had the time and inclination to secure it. Every phase of knowledge indicated as essential for the proper discharge of the duties of the home maker is capable of being organized for instructional purposes and it may be taught in the schools. If it is not dealt with there, it will be dealt with nowhere in any adequate manner.
The woman's instinct is sometimes spoken of as a safe guide in all these matters, but in view of the results obtained, and in view of the truths of biological science, such a claim is too absurd for consideration. Not all of these matters have as yet been properly organized as pedagogic material, but this is rapidly being done. The great problem is to find a place in our present school organization where that work may be done.

It will doubtless mean the elimination of some subjects from the curriculum which girls have been required to study, not because the study of them best ministered to their needs, but because a tradition, harking back to the time when courses of instruction were organized for boys upon the theory of general culture and training.

We do not meet the situation by providing means for general culture of which at best only a limited number of girls can avail themselves. We recognize the need of special education of the masses to fit them to do something well. We are pressing vigorously for the development of this special education for efficiency in action in the agricultural, commercial, and industrial world, but we are practically ignoring the claims of the most important vocation in which human beings can engage and in which a large number are sure to engage than in any other vocation that can be named. We hear on every hand, the claims for a special education for the $8,000,000$ wage earners, women and girls, to fit them to earn a farger wage and to better their social and industrial condition. Too much cannot be said upon this point and yet we are ignoring the fact that by the majority of these $8,000,000$ wage earners, the present vocation is regarded as temporary, a mere makeshift until the opportunity presents itself to assume the responsibilities of home life, and that for the assumption of those responsibilities they have had practically no preparation whatever. The woman is the home maker, the wide range of activities demanded of her in this field of effort, the vital importance of these activities to all concerned, demand special preparation which she is not now receiving. The welfare of society, the well-being of the nation, depends upon the efficiency of the woman in the home, and that efficiency depends upon special education for such efficiency.

Not all the work needed can be done in the existing public schools, no matter how wisely reorganized the course of study may be. We are just beginning the educational activities designed to make more effective home makers outside the school for the millions of women whose school age is past; who are hampered by low ideals and ignorance in the discharge of their duties in the home; for the young girl who is compelled to leave the school and become a wage earner in the industries in order to help support herself and her family, very much needs to be done that has not been done.

The continuation school for girls that shall have as its chief function the preparation for home making, is of vastly more importance than the continuation school designed to increase her efficiency as a wage earner, when she is almost certain to leave the industrial field for the home at an early date.

The work of the visiting nurse, as being organized in some cities, is educational work of a high order. Here and there other agencies
are being experimented with for the purpose of promoting greater efficiency on the part of the adult women in the home. Millions of these women need such training to-day. Shall it be said in the coming generations that the same condition exists when by proper organization of educational activities the girls of the present generation may be prepared far better than their mothers have been for effciency in the home?

## REORGANIZATION OF THE TEACHING PROFESSION

## henry suzzallo, Columbia University.


#### Abstract

"We are in the habit of calling some types of work professional, implying that others are not. At the same time our phraseology carries the implication that one is more respectable than the other. Of course if there are inevitable stratifications in jobs as there are in men it is necessary to recognize the fact and act accordingly. The purpose of this discussion is to raise and answer the following ques tions: What are the valid distinctions between professional and nonprofessional employment? What constitutes the practice of a profession? More particularly what does or will make teaching a truly professional service?


SOCIAL DISTINCTIONS $\Lambda$ S TO WORK.
"There are the four traditional professions-law, theology, medicine and teaching. There are, too, some occupations that verge on the professional circle, or are recent recruits. Such are engineering, journalism, nursing, settlement work and the like. On the other hand we do not ordinarily include unskilled labor, the mechanic and the business man among our professional servants. At once we feel the tendency to give greater praise or blame to professional men and women, as though their work is more difficult or more important.

## NATURE OF PROFESSIONAL WORK.

"The reason for this suggested superiority or importance of professional service lies in the fact that there is greater power for general human weal or woe united with professional service than with business or unskilled and even skilled labor. A man who plants a field will get a larger crop. The man who does it ill, spoils a field of clods and some grain. But a good lawyer earns not only his daily bread, but at the same time protects something precious, as property, life, liberty or


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happiness. The bad lawyer, the unprofessional one, quibbling over technicalities and bullyragging witnesses, juries and judges, earns his daily bread to be sure, but he has violated the spirit of ancient laws, destroyed reverence for courts and justice, and walked rough-shod over the sanctities and rights of men. He has earned his bread, but he has incidentally destroyed institutions.
"In a rough way society tries to protect itself against the abuse of these large powers which are incident to the earnings of a livelihood in professional service. It demands more general culture preliminary to the study and practice of a profession. This merely means it requires that the professional practitioner, because of his peculiar powers and temptations, must be given a fundamental knowledge of those values, ideals, traditions which are fundamental to our social life. Hence the boy may go to a trade or a business at the close of the elementary school, but the youth may not start his work as a teacher, lawyer, doctor or nurse before he has passed through the high school. The secondary school means a broader and more intensive view of life in general than the elementary school. The professional work is not merely more scientific and complex than non-professional service -it has intimate connections with the fundamental values of life. It ramifies into the greater movements of our civilization. Hence the need for a wider, more intensive general education, which will foster a knowledge of and a reverence for human rights and institutions.
four qualities of professional service.
"If the practice of professional life must rest upon a foundation of broad general culture, what then are the special internal qualities which mark it off from other forms of service? We would suggest four characteristics of professional life.
"First, it is a ministry to crises.
"Second, It is an expert service.
"Third, It is a social servantship.
"Fourth, It is an ethical coöperation.

## TEACHING A MINISTRY TO CRISES.

"It is with particular reference to showing how public school teach ing realizes and fails to meet these standards that we are entering upon this discussion. Our purpose is never merely to find fault, but to get at the frank truth of the matter and to suggest helpful lines of advance.
"A man who spends his life in the ever-repeating and monotonous business of working the lever of a machine in a shoe factory has not much opportunity to meet new problems. It is not normal for him
to be facing and solving new situations, mental crises that require resource and thought. The very nature of his situation makes it impossible for him to become what every professional workman is-a master of crises.
"No such limiting situation exists in teaching. The teacher is master of the school, unless he makes of it a machine which masters him. Every child is in degree different from every other, and so with every class, and with every day with the same class. Always there is some new ignorance, doubt, hope or discouragement to be coped with. Here the resource and the tact of the teacher are called for fully. He must know and think. It is precious human stuff in trouble with which he deals.
"As a lawyer is called in to redeem a client from the situation which jeopardizes property, liberty, life and happiness, as a doctor protects life and health, as a minister faces down the danger of spiritual $\sin$, so the teacher protects the divine potentialities of childhood, conquers the deathlike touch of error and discouragement, fosters intellectual courage and the passion for goodness. The teacher is in short a minister to the intellectual and moral and spiritual crises of childhood.
"At least it should be so, if teaching is rightly practiced. If our teaching becomes a monotonous drill and grind, that the child feels to be of little moment to him, then teaching is not a professional service. Schools cannot become 'locksteps' and 'machines' and at the same time render professional service.
"The crucial nature of all teaching of the young is frequently missed because we are dealing with children and not with adults. Teaching Is a "calling," though the pupil does not personally "call" us into his life. We foresee his needs and serve them. Because childhood's troubles are solved situations to the adult it does not follow that they are not important to the child. Children's troubles are very real to them.
"To deny a child's curiosity as it pokes around the world may be to commit him to slow intellectual starvation. To hush up his play and his garrulousness will doubtless cripple his ultimate power to act, express and control himself. "And then it is also true that childhood's troubles come close together, as they do not in an adult's world. He is but a baby ushered into a great confusing universe. Nothing is old to him; everything is new. The very commonness of new problems in his life hides their crucial nature from us, who look for a new problem to appear only now and then. Only as we approach childhood with the traits of full sympathy and versatile imagination can we serve little children, and make of them men and women of the stature they were born to have.

## TEACHING AN EXPERT SERVICE.

"As teachers we are set aside to perform a specialized duty. We should not have schools if homes could do the work as well. Teachers must have more power about their business than ordinary laymen. Otherwise we are not expert in our workmanship. The authority with which we speak should be based not upon more years of service, though that ought to go far, but upon superior command of mental processes, an excelling personality for stimulating thought and action.
"In a world full of intelligent people, we shall have to stir ourselves to keep ahead in a work which has so much to do with life in general, a field in which all men play some part. To be expert, necessitates that difficult achievement of heightened power to transmit and rerealize a civilization in men and women.

To be really expert in teaching involves a superior possession of the world's knowledge and values and a superior ability to transmit both through pedagogical method and personality influence.

TEACHING A SOCIAL SERVANTSHIP.
"We must work always with regard to the social effects of our teaching. We are not teaching just arithmetic, reading, writing and the rest; we are making men, the pillars of social institutions. Let us equip our pupils with all the intellectual accoutrements which are needed in life, for life is a fight at best. But there is no worse mistake than to send a feeble child into the world with weighty weapons, that he has no interest in using, and the uses of which he scarcely comprehends. Let us make character, well-impulsed and robust, eager for life and courageous against obstacles-and then the facts of life will be well borne.
"Our danger as teachers is not that we shall become unprofessional, but that we shall remain non-professional. Like the minister, we have entered on our mission with the vow of poverty on our lips. A salary system, so inadequate in its provisions restricts any temptation to get rich. The fee system of the doctor and the lawyer is a temptation we do not have. We are not likely to neglect the plain social duty that we behold to be ours; we are simply likely not to behold it at all. Our monastic vision, along with that of ministers, may make us scorn the world a bit, when it is in that same world our product must be tested. To be social and not bookish, practical and not pedantic, is our professional salvation.

TEACIIING AN ETHICAL COÖPERATION.
"And last I would call your attention to the liberal way in which education must be conducted. Teaching is not a matter of might, but,
of right. It should not be a veiled coercion, the influence of which disappears when we are gone. Children for the most part should be led and not driven.
"The martinet makes only two species of human beings with his overuse of authority and power; a servile man with no will of his own who will become a henchman to the first ward boss he meets, or an obstinate reactionary who will disregard all authority once he gets free, becom. ing anarchistic or licentious, as his unrestraint expresses itself against government or virtue.
"If our children are to be free men and women, they must be given freedom enough to learn self-restraint. They must go toward the freedom of adult life by degrees and not by a single plunge. It is a paradox in the growth of human life that true obedience to authority in adult life is the product of a properly directed liberty in youth. Let the child's impulse play free while he is yet in awe of his world and its human masters, then he will take to heart the failures which his impulses register as they strike against human personalities. Lead children into life, and guide them. "They are not much conscious of right and wrong in the beginning, they merely wish to express themselves; give them the better way you know, else they will use their own crude impulses. The leader of men is he who reads the discontent and eagerness of men, and gives them voice. The teacher leads children by understanding their needs, and, out of his greater wisdom, offering adequate ways for expressing them.
"If he adjusts to their vague, mumbling desires with only his own selfish interests in mind he is only a cheap politician. If he gives outlet and form to their indefinite emotions, always with regard to their ultimate good and the final good of institutions, then he is a statesman. Teaching is only a form of statesmanship where the personal and public opinion of childhood is moulded to the good of the citizens of the state. It is different in one fact alone, that it is the leadership of little men and women, not primarily for the present, but for the future."

The ethical coöperation which the true professional practice of education requires is not restricted to the teacher student contact. It extends to every relationship which the teacher has:-to the community, to the board of education, to supervisory officers, to textbooks and other commercial houses, and to fellow teachers in the profession. The great need is to make the coöperation of teachers ethical and effective. This requires the reorganization of the present relationship of teachers. It requires a reorganization of more teachers than are now actively associated. It requires that the reorganization be upon a high ethical plane.
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## Some Defects of the Present situation.

There are more than a half million teachers in the United States. It can scarcely be maintained that the paltry thousands in any existing national association are an adequate basis.

The various state associations are themselves not sufficiently inclusive, varying from 1000 to 8000 members who are more or less transient in their interest and membership as geographical location of meetings and administrative zeal determine pressure.
While existing state associations enroll a larger percentage of the teachers, there is no adequate existing method for coöperation ameng state associations.
Both state and national associations are organizations with a merely occasional purpose. The chief function of the permanent officers is to arrange for the annual meetings, at which the main business of members is to listen to addresses. Such organizations usually have no power over practical educational affairs in the interim, and even the resolutions of such meetings have few consequences.

After years of such desultory and representative organization, the profession is without a code of ethics which is sound in principle or binding in its effects upon teachers.

The influence of partisan and personal politics still interferes with a full rendering to the public of an expert educational service, Teachers and books are still selected, in too many places, by boards of education rather than superintendents. Teachers still split their fees for the first month's work with teachers agencies, the chief purpose of which is commercial, not professional. Textbooks and supply-houses still exploit the public schools for their own ends.

The teacher or superintendent who stands against these influences encounters immediate hostility. Without the backing of an organized profession for his professional ideas of public service he is more likely to lose his position than not. Thereafter that one failure to hold his position is, in matters of reappointment or promotion with boards of education, a presumption of incompetency rather than of superior training and standards. Thus the present status of professional organization permits a handicap to be placed upon superior courage and idealism in maintaining high standards of service.

## The Need of Organization.

The need is for a more adequate national organization of all American public school teachers upon a permanent basis which will insure a day to day influence upon school affairs.

The central convention system must give way to one of local organizations with a capacity for frequent business and professional sessions.

To maintain a democratic spirit in the organization, the organization should proceed from the bottom to the top, rather than vice versa. Local teachers guilds should be the centers of activity, and all larger units, district, state and national, should be merely a federation of these, the permanent operations of each of which should be delegated to a truly representative council of carefully selected leaders.

The Method of Organization.
Local guilds of teachers should not be established by an arbitrary unit. The territorial unit should be highly flexible, the one standard being ease of affiliation and attendance at guild meetings. In the country districts, the county system might be followed, but not strictly, ease of congregation by roads, railroads, etc., being taken into account. Towns should have their own guilds. Cities of considerable size should have several guilds so that the size of each could be kept so companionable that free discussion of professional problems is really possible. Coercion for some partisan purpose is always more readily resisted where all the teachers can easily know each others state of mind.

The active membership in such guilds should be limited to those who are actively engaged in the public educational service, because this profession is peculiarly linked up with the public service through the state, as no other is. Any person specially interested in public education may become an associate member of a guild.

There should be a state association of teachers' guilds in each state. The affairs of this state association should be vested in a council consisting of one representative from each guild. The council should meet annually for the discussion of professional affairs, and at that time should appoint an executive board of seven to administer their affairs throughout the year. There should be a permanent office in charge of a paid executive secretary. It will be advisable for the state association to have its own educational magazine as a medium of communication under a paid editor, and to maintain a bureau for the registry and placement of teachers.

There should be a national council of teachers' guilds consisting of representatives from each state. Each state council should select at large as many representatives to this council as there are senators and representatives in the national congress. They should meet annually for two weeks for the consideration of problems of public education, to determine matters of common policy and comity among the states, to initiate investigations into the efficiency of teaching and administration, to establish standards of efficient practice and professional con-. duct, to provide ways and means for gathering and disseminating professional information and to attend to such other matters as have an important national scope. They should maintain a central office under
the charge of a paid executive secretary, who will have an advisory executive committee of five associates with him to aid in administering affairs. This executive committee shall be elected by the national council.
Conventions of guild members by districts or states might still be held annually or otherwise as the local guilds might determine.

## Support of Organization.

All fees should be paid through the local guilds, a certain percentage of which should be segregated for district, state and national organization.

Specific policies of Organization.
The primary purpose is to increase the efficiency of teaching as a public service. And as a mode of attaining this chief end, its secondary purpose is to improve the status of teachers.

More particularly the organization should finally accomplish the following particular things:
(1) To make professional efficiency in the public service the sole standard for employment, assignment, promotion, demotion, dismissal, and release of teachers.
(2) To realize in practice the principle that all expert professional officers should be selected by appointment and not by popular election.
(3) To remove the selection of boards of education from the domain of partisan politics.
(4) To eliminate the pressure of textbooks and supply-houses from educational affairs.
(5) To adopt such means as will finally eliminate the teachers' agencies in the appointment of teachers, recognizing the principle that there shall be no splitting of fees for appointment with any person or agency whatever, and that the registry, recommendation and appointment of teachers shall be in the hands of bureaus organized under conditions that guarantee the public good, e. g., appointment bureaus of normal schools, colleges and teachers' associations.
(6) To make it unprofessional for any teacher to use the influence of partisan or personal politicians, textbook or supply-houses, teachers appointment agencies, or any other means not calculated to render an unbiased and expert judgment. In fact, to make it unprofessional to use any argument for appointment save that of educational efficiency vouched for by some one in a position to render an expert judgment on the same.
(7) To make it unprofessional to apply or seek for a position or to cause influence to be exerted for the same when said position has not been declared vacant by teacher, superintendent or board.
(8) To guarantee to the chief educational officer of any administrative unit that he, and not the board of education, shall have the right to initiate action in all matters involvng expert professional knowledge and judgment, e. g. the nomination of teachers, the recommending of a course of study, textbooks, apparatus, and other supplies made necessary by the pedagogical needs of the schools.
(9) To improve and unify the standards and means of training, certificating and appointing teachers, so as-
(a) 'I'o insure that every teacher shall have received the cultural training of one more school unit than the school in which he teaches, e. g. elementary teachers should have at least high school training, etc.
(b) To insure that every educational worker shall have had some systematic training in the performance of the particular function entrusted to him.
(c) To widen the provision for and increase the practical efficiency of courses devised for the professional training of teachers.
(d) To provide for a better supervision of teachers in service so that the growth of the system in the care of new responsibilities shall not be lacking.
(e) To work toward a more nearly uniform standard of certification throughout the states so that interstate comity is possible in the recognition of certificates, thus relieving congestion and scarcity of teachers, and increasing mobility so that a wider selection is possible for both boards of education and teachers.
(10) To abolish the election of teachers for a stated term and substitute therefore a system of appointment to service wherein the presumption is that satisfactory service involves continuity of employment, that cannot be broken save by dismissal for cause. New appointees may be subject to review and dismissal within a stated time, but if not removed within the stated period shall hold their positions on permanent tenure.
(11) To establish the principle that contracts are mere fiscal arrangements for service, which do not imply a period of indenture wherein the freedom of movement of the teacher is interfered with. They simply guarantee a certain service for a certain pay and vice versa. The profession holds to the belief that our schools have a national purpose, and that the public good demands that a call to larger or more congenial service is a public and a personal right with which no board ought deliberately to interfere. Under such a principle it will be possible to enforce the ethical standard that suggests that no board or superintendent should seek the services of a teacher without consultation with the present employing authority and that no teacher should seek another position without notifying the officials of his own system.
(12) To improve the economic status of the teachers by favoring:
(a) An annual salary system with twelve payments.
(b) A minimum salary system.
(c) A gradual increase in teachers salaries over and above the increased cost of living.
(d) To provide a state-wide pension system with final comity between states, which recognize services in other states, with a system of apportioning costs among states on the basis of proportionate service. And, necessarily, therefore, to provide uniform pension legislation among the states as a preliminary stage.

## CHILD WELFARE.

## MRS. FREDERICK SCHOFF, PHILADELPHIA.

The last ten years have marked a new era for childhood, one that when translated from thought to action will revolutionize old methods of education, of child nurture, and of care given by the church and state to the children.

The old method was founded on the belief that children must be compelled to conform to a system carefully planned by men and women but with no relation to the child's nature and natural tastes.

It was like a ready-made suit cut without regard to the wearer. It did not fit, but the injury went much deeper than an ill-fitting suit. It chafed and distorted the tender body and spirit, and the consequences may be readily noticed by those who care to do it.

The present century is distinguished by the study of the child himself, his naural development and broad race tendencies, the conditions and influences favorable to normal, wholesome growth.

Scientists who have ventured into nearly every field of nature have at last directed their study to the child who was created in the image and likeness of God and of whom He said, "Unless ye become as a little child ye cannot enter into the Kingdom of Heaven."

The fact that all children are born with infinite possibilities for good as well as evil has made it a matter of vital interest to learn how to promote the good and thereby eliminate the evil.

All natural things are subject to man, made for him, so at the apex of the pyramid of created things stands the child, the embryo man. The science of child nurture thus becomes the greatest of all the sciences, one worthy of the thoughtful study of parents, teachers, clergy and statesmen.

The belief that parental instinct taught all that was necessary to know about children has existed so long that it will take time to batter down that wall of self-satisfaction which has been a large factor in causing infant mortality and juvenile crime.

The desire for knowledge of child nurture, the recognition that this knowledge is not instinctive must become universal before childhood will have its full opportunity.

4-T. A.

In speaking to you to-day on child welfare, I have taken it in the broadest sense because it is impossible to see cause and effect and proportional values unless one looks at the different forces which are shaping the lives and character of the children of to-day.

Home, School, Church and State are the forces which together are guiding and training the children of our Nation. Each has its responsibility. To insure efficient thorough work for children, the methods, influences and results of each force should be clearly understood by all. Coöperation and sympathetic teamwork should be done, for when home, school, church and state perform their functions as they should, humanity will rise to heights as yet undreamed of.

Disease, crime, corrupt politics, greed will disappear, and in no other way can they be eliminated.

It is no poet's dream, no unreal vision, that I am picturing to you. It is just as possible of realization as the conquest of yellow fever or smallpox. Mistaken methods of treating children and ignorance of child nature are the causes of the conditions which in adult life affect and jeopardize the nation.

The home is the largest factor in child life, the factor which to-day is just awaking from.its long slumber to a realizing sense of its great duty and opportunity.

I should have said some homes are waking. Unfortunately the majority of them are still slumbering in placid ignorance of their own ignorance of the great function they have to perform in the life of the world.

The fact that annually 300,000 infant lives are laid a sacrifice on the altar of parental ignorance is a proof that the majority of parents are still groping in ignorance of infant hygiene.

Heartaches and sorrow usually entirely preventable accompany this terrible sacrifice greater than that of any war.

Because the victims are unable to speak for themselves little attention was given to it, but it is a subject of moment to the nation when one considers that fully 100,000 American homes which might otherwise be established twenty-five years hence are prevented from existing.

The ignorance of parents as to child nurture is just as great when it comes to the physical and moral development. The most needed branch of education to-day is that which gives intelligent insight into child development and the methods which are most favorable to it.

The National Congress of Mothers in its scheme of work inaugurated parent teacher associations in the schools, and parents' associations in churches, because through these it becomes possible to reach more homes and more children than in any other way.

The Congress supplies the educational material for the parent teacher association, the entrance of parents into acquaintance and coöperation with the teacher makes the work of the school easier and more effective.

Thus without extra expense the educational opportunities of schools are doubled, for parent and child are both studying.

Education for parents must be given where they are.
The plan has proved eminently practical, and after seventeen years of effort to establish parent teacher association in schools, the Congress has won the most favorable opinions as to their value, not only to parents but to the teachers and the children as well as the community.

The Congress has spent much time and effort in the establishment or the parent teacher association because it is essential to have definite organizations through which parents may be reached and opportunities given them to learn more of child nurture. Child life depends on this knowledge being given to parents. The character of the citizens in the making will be greatly influenced thereby.

Seeing the great scope and purpose of this plan for parent teacher associations allied in city, state, and national associations, the door is opened for parents to give as much thought to child nurture as is afforded to teachers by their preparation and ever-continuing study.

It is a fact that most teachers are better equipped to train children than the average parent. They cannot hold a teacher's place without preparation but any one can be a parent without any previous thought or study of childhood's needs.

The primary responsibility for child life must always rest with parents. Therefore, the development of trained parenthood is of even greater importance than to have trained educators. The school becomes the common ground on which parent, teacher and child may stand in mutual coöperation, in sympathetic, intelligent work for a common purpose.

- I could tell you countless true stories of the benefits that have come from the parent associations, and, in speaking of benefits, I place first those things which have deepened the parental love and responsibility and have made better homes and better parents.

Second, I place the coöperation thus established between home and school; third, the material advantages coming to the school in larger appropriations, better school buildings, better equipment and wider interest in all that concerns the school. The relation of the school to child welfare is second only to the home.

It is a wonderful network of schools that has covered our country in the last hundred years. Never has greater attention been given to education than now, yet from the viewpoint of a parent who has
watched and guided four sons and three daughters from kindergarten through college it seems to me that the educational system built with so much care still lacks much to make it fit the needs of children and to fit children for the world's needs.

The system has been planned without reference to the children's natural tastes as to the place in life they must fill. When only nine per cent. of the pupils who enter the lower grades finish a high school course, when it has become necessary to compel children to go to school through enactment of compulsory education laws, the appointment of truant officers, parental schools, and finally the prosecution, fining and imprisonment of parents whose children do not attend school, it is quite time to investigate the reasons which have brought about the conditions.

To those who place the child above the school system the causes are not hard to find.

A school that fits the child need never use compulsion or force to hold the child.

Instead of drawing the lines tighter about the child it is time to see why so small a proportion of children use the schools.

Under a hard and fast system neither teacher nor pupil has the possibility to develop individuality and the influence is deadening to both. In some way the study required of children must be related to the interests of that age, for unless it is, it is forgotten.

The school has the child where kindergartens are part of the system from five to sixteen years. The long hours spent in mental work without the activity and change which every child craves make school life distasteful to many.

While there are thousands of fine, earnest teachers there are neces. sarily many who through youth and inexperience have not grasped the wonderful opportunity that is theirs and who do not see the terrible results of their impatience or incapacity in management of children.

With the numbers of children often given to a teacher it is not easy to take time for the boy or girl who does not keep step with all the rest. Could the teacher know what far-reaching consequences result from reporting children as unmanageable-expulsion resultingthey would never do it except as a very last resort.

It is a confession of weakness on the part of the teacher to admit he is unable to cope with a child. It is worth all the effort it costs to get the child's point of view, to get at the causes of his waywardness.

These same children placed under the trained teacher in special schools respond to the treatment and are not regarded as hard to manage.

The difference lies in the qualification of the teacher and in the fact that manual work is usually a feature of the special school.

Two great principles are demonstrated by this: One is that children do better under some teachers than under others, that some teachers have the faculty of getting the best out of our children. The other is that manual training is a necessity to the active child and should be a part of every school curriculum.

Much has been said in recent years about the importance of moral training in the schools. Their is no question that either moral or immoral training is given in the schools. It is impossible to come in contact with any teacher without feeling an influence that elevates or lowers the moral tone. The lessons in character building are incidental. It is, therefore, equally important that teachers should be chosen for their qualities of character as much as for their understanding of the subjects which they are supposed to teach. The separation of these two qualifications will bring disaster to any school.

It has been my privilege in the last ten years to come in contact with many hundreds of the children who have been truants or expelled from school. In many cases it is not the child's fault. A large proportion of the teachers are young and lack the patience that comes with experience and age. They are also unconscious of the great power they have over the life of the child; they do not realize that to set the mark of their disapproval on a child is like the first kick downward. It is lack of insight as to the methods which will bring out the better qualities of the child which causes this treatment. It has been my fortune to see many of these children doing good work under sympathetic intelligent care.

Until ten years ago truants were sent to reform schools, and a study of the results of this course will show that it has been the means of forcing many children into a career of crime. I wish it were in my power to picture to every teacher the results of impatience and lack of sympathy; I wish it were possible to show the terrible wrong they do to children when they teach merely for the salary that is in it and do not realize they are dealing with human souls and the formation of human character.

It is possible that too much has been expected of the school, but it is not too much to expect that the teachers will have patience and a sympathetic kind attitude toward the children.

Another great weakness in the schools is the lack of teaching responsibility to the children. If self-government were taught in every school; if children were placed on their honor and taught to control themseves from within rather than to expect to be controlled from without a much higher standard of character would be developed, and the teacher's problem would be much easier.

In speaking of these weak points in the school, I do not lose sight of the fact that teachers themselves have a very difficult place; that
they are not free; that they are subject to a system which they are compelled to follow and that the coöperation of parents with them is of vital importance in order to see the effect of the system on the children. The test of the quality of a school finally rests with the quality of pupils which it turns out. It is a great reflection on the schools of our country that so small a proportion of the children are using them. The time has come when a thorough, careful examination of this entire subject should be made. The abolishment of the apprentice system and the laws against child labor have brought about a condition which is seriously affecting the ability of young men and women to earn an honest living. As it is no longer possible for children to learn trades as apprentices, the time has come when the schools must take this into consideration and must cover education which will fit the pupils to be independent and self-supporting.

It is very interesting to learn all that one can of history and art; it is fundamental that every one should learn what will make him capable of being self-supporting. If the other can be given too it is to his advantage to have it, but the more important end must not be sacrificed to the less important one.

The pressure that has been brought by the college entrance requirements on all of the lower schools has been a great injustice to the many children who can never have college advantages. The required courses for college entrance examinations are not the courses that one would choose if it were all of education that one could have.

For the teacher and for the school the parent teacher association will do much to rectify conditions which have developed gradually. The school system as it exists to-day must be greatly changed in order to fit the children to meet the needs of the present time.

The country child must be considered and receive advantages as great as are afforded in the city. The country can live without the city but the city cannot live without the country, and one of the important needs of the present time is to make country life so attractive that men and women will chose it. The attractions of city life and the flocking of boys and girls to the city are important factors in the increased cost of living.

The important work that has been done by the Government in Washington in looking into conditions of country life and in insisting that good roads should be kept between home, school and church show that the Government itself has awakened to the great need that exists in this direction.

The National Congress of Mothers in its Country Life Department has devised a method by which home work may count in the standing of the child, and in St. Louis the teacher in the schools who teaches gardening allows the children to have the gardens in their own yards
and keep them up during the summer when school is not in session, thereby adding to their ability and to the income of the family. Parent teacher associations make it possible to insure coöperation of this kind. Parent teacher associations should not be auxiliary to the school system; they should be representative of the parents and of their thought in the matter. It is only by meeting on a common ground and discussing cause and effect that we shall build up an efficient educational system. To develop the mind alone without physical and spiritual development is to give the child a greater power to do wrong.

The State's responsibility to child welfare has been considered but little in America until within the last ten years; beyond the establishing of the public school system, reformatories for juveniles, institutions for the deaf and blind and feeble-minded, the State has done nothing. Birth registration exists in few states. Children have been treated as adults; confined in prisons for vagrancy and trivial offenses. The care of dependent children has been left entirely to private effort. The last ten years have advanced conditions more than one hundred years before had done. We are, however, but at the beginning of establishing a different method and system for child care.

The Nation has found it important to protect its fisheries, its forests, its agriculture; all these are for the men and women who are to live in our country. To protect their lives, their health, their character, supersedes all other protection in importance. It is a matter of vital concern to the Government to know what is being done for the children, what is not being done for them, whether the things being done are having a good or bad effect.
The system of reform schools was devised as a helpful measure; it has proved to be exactly the opposite. Letters from hundreds of men and women in prison to-day state that the beginning of their life of crime was made by sending them to reform schools. The world is awakening to the fact that Ferding children together because they have committed some offense is the best possible method for having them learn all of the offenses that each has committed. However good the teachers may be, it is impossible to offset this opportunity for education in crime.

It is not from theory I am speaking, but from a deep study of the conditions and their causes. As chairman of a Committee on Causes of Crime in Normal Children, which was appointed by the American Committee for the Brussels Congress, a thorough investigation into the reasons which led men and women into criminal lives was made. Thousands of answers were received from inmates of penitentiaries throughout the United States. No one can read these statements with-
out realizing that society has itself been criminal in its treatment of erring children.

In 1899 the first Juvenile Court was established in Chicago and the first probation system for children was inaugurated. It was my work to inaugurate the movement in Pennsylvania, and Pennsylvania was the second state in the Union that adopted this system. Its laws are the only laws that have been sustained by the Supreme Court, and to-day it is impossible for children to be kept in prison in any county. Every county must provide separate places for children. This system has spread over most of our country and into foreign lands, but its efficiency depends entirely on its administration. If it is put into the hands of those who do not understand child nature, who believe in laws of force rather than in laws of love, who believe that the old methods are the best, that institutions are the places for children, it cannot do for which it was intended. The Juvenile Court does not belong to Criminal Courts. The whole work is educational; it should come under the school system of our country; the school system should say, "We are capable of managing any child under sixteen who comes to us; he may be troublesome, it may be difficult to do, but it is our duty to do it and we will see that it is done." In that way arrests of children could be prevented. Children will steal, children may set fire to buildings, children may do many things that would be criminal for older persons, and yet they are not criminal, they can be helped.

The difficulty is to-day that the parent wishes to throw the responslbility on the school; the school wishes to throw it on the truant offcer or the reform school. Parent and teacher must assume their responsibilities in the care of the children, wayward, erring or deficient, and with patience, never-ending patience, work in the building of character. It takes a long time to accomplish but one never knows when success may crown the effort.

In forming character one cannot omit the spiritual insight and the knowledge of spiritual growth. It is to put into the heart of each child the desire and purpose of doing right instead of doing wrong. That is the only way to change the tone of society. Every child is a danger spot in the community unless it can have that care at the first misstep. It can never be given by courts; it must come through the educational system of our country.
There are no criminal children. There are children who, through environment and bad influences, are difficult to deal with, but there is good in every one of them.

It is an acknowledged fact that children who do not do well in school often in later life are among the most useful citizens. To fit the needs of the child in home, school and state is the great work
which we all have to do. Whatever else we do is of passing value, but what we put into the character and life of a child endures throughout eternity. Work for child welfare is work for world welfare, and it is the greatest work that is being done to-day.

In reply to a request for a copy of his address, Hon. P. P. Claxton sent the following:

Inasmuch as I am hoping to put into more definite form the substance of the address which I gave at Milwaukee, I must ask you to let me withhold it from publication now. It will probably appear as a part of a government bulletin in the near future.

Yours sincerely,

P. P. Claxton.

Note: Copies of the address may be obtained directly from Hon. P. P. Claxton, Washington, D. C.

## THE BOOK AND THE PEOPLE.

Mr. Frank Gunsaulus, Chicago.

Miss President, Fellow Teachers, Ladies and Gentlemen: I suppose that the two words which are most certain to reflect our progress in these times are the words "efficiency" and "democracy". It seems peculiarly fitting that just at this moment when efficiency in all matters, in the application of scientific truths to the solution of practical problems, efficiency in governmental enterprises, just at this time when democracy and efficiency should be associated with the name of an illustrious school teacher, just at this time when Woodrow Wilson has been elected President of the United States, we, who are school teachers, have assembled together and are willing to devote this hour to the idea of efficiency and the idea of democracy as we see them in the book and in the people; but these two things are so disassociated as at once to indicate to your mind and to mine the wasteful incongruity between the book and the people. I doubt if men can look from any place of power, any station of influence, any library of mechanical engineering, any business office, upon this round world, and see anything more wasteful than this distance which lies between the book on the one hand and the people on the other. It is a very grave question. In the very first place, who can doubt that our modern movement in the direction of democracy is a movement which necessarily carries with it the necessity and the demand for a larger, richer, deeper intelligence.

Here in this commonwealth you have set an example, you are setting such an example, that one coming from another commonwealth can speak very freely, not so much of our sins and your righteousness, as the possibilities which confront the American people in bringing the book and the people together. But it is just in this state of Wisconsin that you are trying out with fearlessness and a certain noble and patriotic faith the elements of a modern democratic government. Consider for a moment any sudden uprising according to any new or any old theory of government that would have given the people the opportunity, and I am not arguing against it, to make a change in leadership, and I think you will admit at once that the first thing the school teacher would ask is a larger, richer, deeper intelligence upon the part of the voting population.

There has never been a moment in the history of civilization in which in a crisis created by the acknowledgment of democracy, the book has not had a supreme value. It was the discovery of printing by John Guttenberg, it was the bringing of the book into existence, the placing of the literature, which is life's description of itself, into the hands of the people, it was this new pronouncing of what the human soul had thought in hours of seriousness, in hours of prophecy, it was the gathering of the mind story of itself and presenting it in the form of a book that made modern civilization possible.

We are here to-day in the history of our own country with a new discovery. We believe to-day as we never believed in the safety of democratic government. We look out into the future and we see a government coming closer and closer to the people, and it is mine this morning to congratulate you in this commonwealth where the progress of free government has created a new chapter of mankind in all functions of official life, mine to congratulate you on the grandeur of your position.

The most valuable book is, first of all, a good book. A new hour has come when an explanation or an apology must be made when a book has not found its way into the hands of the man or the woman or the child who needs the book.

I would choose teachers, if I were the Board of Education, with reference to their ability, not only to teach the little folks, but to inspire within the hearts of the older people a desire for information, and to guide them in the use of books. There is no reason in the world why any library should ever be shut against a hungry human mind, and there is no reason why there should not be carried in the personality and guiding power of the teacher, in that community, a love of learning, and a love of that kind of learning that will lengthen life and give value to all the activities of our government. We are getting the government closer to the people, but what is the condi-
tion of the people? We need to know that it is not independence or a declaration of independence which created the American commonwealth. It was that sober, strong, collected, trained Anglo-Saxon sense of obedience to the law. We, who are Americans, need to learn that the history of progress is the history of truth, the history of law, it is the history that is worth keeping in the present in order that we may have any future whatsoever. We talk about America's futuremy friends, there is no future that does not come out of America's past. Our people are ignorant of the past of the United States of America. Think of that book, the Federalist, and the importance of such a book as that at the beginning of our nation's history. I think every boy and girl in the United States, and especially now the girls -boys and girls ought to study the Constitution of the United States and ought to read the Federalist, the book in which Hamilton, Jay and Madison explained and made clear the movements of government.

The greatest thing Abraham Lincoln had was his library, "Aesop's Fables", "The Life of Washington," Bunyan's "Pilgrim's Progress", Shakespeare and the Bible. I undertake to say that those five books of Abraham Lincoln were multiplied in their fruitfulness and their worth by the character and the possibilities God had lodged in that breast, brain and heart, and that multiplication is exactly what I insist on in the case of the teachers in the public school. I want to put no such possible misfortune before our country as the lack of books. Think for a moment of that boy in the Kentucky lowlands under the trees by his mother's grave-why, he carried that second campaign for liberty and law and the constitution and the flag by what he got out of his books. Think of the books which Abraham Lincoln read,-think above all of the Bible-what is Abraham Lincoln without the Bible. With those great words upon his lips, think of him standing there at the crisis of his career, and reaching back to that Bible and saying "A house divided against itself cannot stand" -Mr. Douglas did not know the book from which this was quoted; Mr. Lincoln reminded him of the authority, of that great book of the soul. Now I would rather have, with due respect to President Eliot, I would rather have Abraham Lincoln's five books with Shakespeare and the Bible, than to have five feet of books without Shakespeare and the Bible.

Americans are charged with being ignorant of their own government, but although we are so charged we will conquer because ours is a democracy, our democracy is an instructive democracy, an intelligent democracy, a democracy sure of its past and, therefore, sure of its future. Supremacy must eventually come through education. Therefore, the very first thing we must do in American education is to educate our people to spend money for education.

It would be ridiculous for me to stand here and waste this hour by neglecting to tell you of the value of the night school in the country as well as in the city. I have five hundred young men, some of whom come with tin pails after the labors of the day, to Armour Institute. I do not find that they are too tired in body not to desire to take advantage of that institution and to use the worth of that institution even after the labors of the day. You can take this work up with the farmer and his wife in the country just as we can in the city with the artisan and his wife or the minister and his wife, and you can make the little red or the new white schoolhouse, whichever it may be, the center of the community's intellectual life.

## ADDRESS

BY
J. G. Hooper, of the School for the Blind.

Teachers of Wisconsin: I just come before you for one object and that is to make a plea to bring our institution closer to the people. When I went to Janesville a year ago, I met two great surprises-I learned that the blind boys and girls are just like other boys and girls-there is absolutely no difference-they have the same mind and they have not lost any of it. The other great surprise was that I found that the people of the State of Wisconsin do not know what we have in this institution; I found within five miles of the institution itself a family who did not know that such an institution existed in the State of Wisconsin and they had in their family a blind girl. This fall I have received four or five letters from teachers of the State of Wisconsin asking me how much the tuition was at the school at Janesville. I want to tell you it is a state school and it is absolutely free to everybody who needs it. I want to tell you that it is a school where the full course is given from the kindergarten through the high school-just the same course that you give in your city schools. In addition to that we give manual training and domestic science-our girls live with us. We also teach cane-seating, broom making, mop making, mattress making, hammock making-you see we have a real manual training course. The girls are taught cooking, sewing and knitting and all things that pertain to good housekeeping; besides that, we have a course in music; we teach piano and string instruments, and we teach the boys piano tuning. One thing more, this school is not for the totally blind alone. Some of our people, four or five, can see; about forty per cent of our children can see some. I believe we are doing a greater benefit to some of those who can see
than we are to some of the totally blind. Now, I ask you teachers that you make known to the people of your community the value of our institution, to those who need it, and if any of you know blind boys and girls, if there are any blind children in your community, please let us know and we will bring those handicapped children into the possession of a good education.

## SECTIONAL REPORTS AND ADDRESSES.

Report of College and High School Section.
Meeting called to order at $2: 00 \mathrm{p} . \mathrm{m}$.
Mr. N. S. Naylor, Lawrence College, Chairman.
Mr. J. J. Pettijohn, University of Wisconsin, Secretary.
I. Address, "School . Literary Societies"-By Prof. Rolo Lyman, University of Wisconsin.
II. Music-By the Teachers' Sexette of Milwaukee.

Discussion-Supt. H. C. Buell, Janesville, Wis.
III. Address, "Personality of the Teacher"-By President Edward Dwight Eaton, Beloit College.
Discussion-Pres. Silas Evans, Ripon College.
IV. Address, "Tradition and Reform in the High Schools"-By Dr. Henry Suzzallo, Teachers' College, Columbia University.

BRIEF OF PROFESSOR LYMAN'S ADDRESS.
I. McVeagh:

Right Thinking
II. Essentials:

1. Mentor

Questions
2. Membership
3. Meetings
4. Season
5. Programs
6. Open Meetings
7. Debates
iII. Incentives:

1. Society judgment
2. Credit
3. Spur of open exercises
4. Battle of open debate
5. James-Time Table Illustrations
IV. Training:
6. Reading

Librarian
Hatching Libraries
Pink sporting sheet
2. Investigation

Non-thinking
To have opinions

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    3. Two sides
    Dewey
    Practical
    4. Essentials
    Ramifications
    Non-essentials
    Five minute speech-Suffrage
    Any question
    5. Organization
        Blocks
        Recitations-Topical
        Think on feet
    6. Oral
    1. Self-reliance
    2. Matter to organize
    3. Mechanics
    4. Teachers
    5. Test of thinking
    6. To make others listen
V. Pitiful Attempt:
    Laboratory
    Laugh-Spanish map
    Barrett Wendell
VI. Twenty minute-Other questions
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## Superintendent H. C. Buell's Comments <br> ON <br> PROFESSOR LYMAN'S PAPER.

Mr. Buell endorsed fully the remarks made by Professor Lyman and added that he would like to emphasize the importance of clear expression as well as clear thinking. He added that the language writing was the only English now emphasized, therefore, the importance of having clear expression in the oral work in the high school. He stated that in his judgment the language expression should be brought out in the following work in high school and he designated this work in the order of its importance:
I. Declamations
II. Written Essays
III. Discussions
IV. Prepared Debates

## PERSONALITY IN THE TEACHER.

## Abstract of address by President Edward Dwight Eaton of Beloit College.

The decisive factor in the worth of the teacher is that of personality. It goes without saying that he must have adequate training for nis work in scholarship and method; but it is personality which is the plus or minus which decides his value to the school and his standing in his profession.

The good teacher has a personality capable of responding to a wide environment. In a sense, all have the same environment, but-practically individuals differ widely in their capacity of response that surrounds them. Not only is there a great difference in the actual reach of the senses, but there is a wide divergence in the capabilities of reaction upon the world about us. The inspiring teacher must have vital interests. It is not enough that he be absorbed in his own department; he must be able to enrich this with the results of study in other fields. Where a science teacher also specializes on some poet, Wordsworth or Lowell for instance, his total influence may be greatly increased. If a literature teacher becomes an expert in the study of birds or of trees she can awaken a much keener response in the minds of her pupils. The teacher who knows only his own department, however devoted he may be to it, cannot know that department well, because he views it in isolation from its manifold connections with the world at large. There is nothing that pupils appreciate more than to feel that their teachers are in practical touch with a practical world.

The teacher's personality needs to be capable of human attachments and devotion to human welfare. Thoroughness of work and elaboration of system are dry and disappointing in their results unless vitalized by genuine interest in the pupil, sympathetic comprehension of his limitations and difficulties, and enthusiasm for his best possible development.

The teacher's personality should be one capable of aspirations and ideals. These nourish the higher capacities of the student and give strength and direction to his will. A Chinese newspaper recently raised the question why revolutions in China had not hitherto been productive of good in the same way as revolutions in the western world have often been, and found the answer in the fact that the moral and ideal element had been lacking in the political changes in China. The presence of such elements in the present Chinese revolution are a source of hope in its outcome. What is true of nations is
true of individuals. Life is fed by the higher tests and aims of living.

The true teacher must have a personality capable of developing along with the personality of the student. The great teachers have been those who have grown throughout their years of active service; reacting helpfully upon their students, and in return reacted upon by them; growing stronger, more vital, more humane, wider of outlook, and deeper of enthusiasm as the years have passed.

## ABSTRACT OF PRESIDENT EVANS' REMARKS.

Emerson said, "We teach what we are not voluntarily but involuntarily." The greatest need in our educational system is the vitalizing of instruction in personal terms. We need great teachers infinitely more than better methods. It was a Master teacher who said, "I am the Truth." It would be the height of good pedagogy if our teachers could say, "I am mathematics, I am history, I am literature." In the autobiography of Senator Hoar, he makes a contrast between the strong virile teachers of an earlier day and the present teachers and gives as a reason, the fact that in a former day the teacher was taken from the world outside and had achieved to success and personality. There is much truth in this statement. School faculties have too many beardless and brainless Ph. D.'s. Personality cannot be defined, but lacking it a teacher misses the one thing needful. An attempt at definition, we offer in the following way, "A strong personality is a strong intellect driven by a loving heart to practical ends." The true teacher must have all these ingredients. The intellect over emphasized is mechanical. The old-fashioned gift of loving the pupil is necessary for effective instruction and the intellectual process driven by love and interest must get somewhere and be directed toward a definite end. The student should know something of this practical end.

TRADITION AND REFORM IN THE HIGHER SCHOOLS.

Dr. Henry Suzzallo, Columbia University.

Ladies and Gentlemen:
We are in a transition period in our educational history. In a sense every decade is one of transition, but the pecular confusion of to-day makes the present markedly a transition period. There has probably never been a time before in our American educational history when new educational movements have come upon us as swiftly as they
have recently. And as a profession we have had difficulty in sifting out the good and the bad, in reconciling the old and the new.

The result is that we find ourselves divided into schools of thought, registering our personal temperaments or our class traditions. We are reactionaries or radicals, bitterly fighting the new or the old. There could be no sharp division in our educational camp if we had achieved a sound scientific attitude toward the factors which determine the school and its function. With the idea of discussing a practical situation from a point of view which seems to me essential, I want to-day to examine the influences, rational and reformative, now operative in our public schools and to discuss them in terms of their to-day to examine the influences, rational and reformative, now op-

## THE CONSERVATIVE POSITION.

In the solution of our modern educational problem we have two distinct attitudes: One suggests that the way out of our difficulty is to turn to the school of the past, to its simple and formal curriculum and to its restricted series of teaching methods. In the elementary school it lays its emphasis upon reading, writing, arithmetic, spelling and some treatment of history and geography. Its methods are memoriter. It lays stress upon recitation, drill, examination and review. It lays its emphasis upon thorough acquisition of conventional facts and the mastery of linguistic technique. It looks upon the newer subjects of fine arts, manual training and the like, as secondary factors in education not to be given a place of large importance. Various student activities are regarded, not as educative factors, but as distractions from the vital classroom work of the school.

## THE RADICAL POSITION.

The conservative is opposed by those who lay the stress upon the elements which the conservative makes secondary. The believer in the new education holds the expressive activities of the school to be its most vital resource. Manual work, human sociability, and the subjects which are most intrinsically interesting are made important. The extra activities of school life, such as play athletics, etc., are regarded as new opportunities for vital education. Among these the effort is to attain methods of instruction which are interesting rather than dull and a wide series of teaching devices is brought into play. Everywhere the child's nature is taken into account. Human nature is consulted as an oracle, frequently to the inevitable neglect of the social world which the outer world sets up.

These two groups, the first large and resistant and the second, small but enthusiastic and dynamic, constitute the large mass of public
school teachers. Behind them is a public somewhat similarly divided. In addition to these two groups, there is a very small thoughtful class of professional thinkers who are attempting to reconcile the two views.

## THE PROGRESSIVE POSITION.

This third group recognizes that the best in the old must be conserved and remodeled in terms of new needs. It is not more sensitively receptive to new policies than it is to traditional ones. It subjects both to criticism, in formulating its standards it does not give priority to conventional social demands; nor does it manifest an overreverence for the impulses of childhood. It recognizes that the principles of sound education are based upon both sociological and psychological considerations,-the nature of childhood conditioning workmanship and the structure of social life providing its goal. The progressive in education frankly gives up the hope that we may solve our educational problems by a return to the past, but refuses to break with that past. He frankly avows that all educational instruments must constantly change in anticipation of the future, but holds that the future must be founded on traditional elements. New situations are to be met squarely but they are to be understood in the light of real past experiences rather than by a mere fling of the constructive imagination.

The progressive does not regard the newer activities of modern school life as mere fads and fancies, but as an enthusiastic over-emphasis of the valuable accommodations which practical teachers have attempted to make to changing conditions. He says that the school cannot go back to the 17th Century, but must go forward to the middle of the 20th Century, because the school situation operates under two sets of changed conditions. The first is, that the population that now attend school is quite differently composed from the clientage of the 17th Century school; the second is, that the social, political, and industrial conditions of the larger world in which men must live is not by any means what it once was.

## CHANGE IN THE SCHOOL POPULATION.

In the Seventeenth Century only a few children went to school, the few who had minds to get along with the school as then organized. The instruction was then formal and abstract, and only those who had a special gift for that kind of mental work succeeded. The rest went to work, expressing their own dominant talents in the world-at-large, since the school gave them no opportunity. If the school interested them for a while because of the extrinsic value which schooling al-
ways has, they soon fell. behind and became discouraged. The Seventeenth Century school with its three R's was a highly selective institution. Making no particular adjustment of its instruction to children it selected first (and educated afterwards) those who could endure its demands.

But the Eighteenth and Nineteenth Century soon set up social pressures which overcame the schoolmaster. Because of new social and political conditions, education became a wider opportunity; indeed it became fashionable. This increased the proportion of the total population in attendance at school. Later still education became compulsory. With education first a fashion and then a compulsion, the clientage of the school increased in number, and necessarily in types of mind enrolled. The school which operates under a compulsory attendance law cannot be selective. It must teach all kinds of children. The pupils had to be interested, if discipline, much less instruction was to be possible. So in the course of a century the school subjects and the methods of instruction became enriched so as to give a wide basis of contact with all types of childhood.

Does anyone who knows the temper of our democratic life dare to prophesy that we shall go back on the policy of universal education? How then can we return to the restricted course of study and methods that only fit a narrow range of mental types? We cannot return to the three R's. The way out of our difficulties is to adjust to the school clientage as it is, to the objectively minded and the executively minded, as well as to those who think easily in terms of abstractions and conventional symbols; to the dull as well as the brilliant; to the crippled, the deaf, the blind, and the defective as well as to those more normally inclined.

## CHANGES IN OUR SOCIAL LIFE.

We cannot return to a Seventeenth Century school education because our pupils are not to live in a Seventeenth Century World. They will face the vastly more complicated life of the Twentieth Century which gives to the public functions it never before possessed. Two or three illustrations will suffice to make the changed social demand clear.

## NEW MORAL RESPONSIBILITIES.

The school is now compelled to undertake the work of moral training to an extent that did not exist before. With a homogeneous population, of similar stock and social training, the community morality was well cared for by home, church, neighborhood and the common social life. With the growth of a city population moral dangers have
increased, and the old moral instrumentalities have weakened. The strenuous, "mind-one's-own-business" life of the city has released the control. Economic conditions have decreased the efficiency of the workman's family. The church fails to interest all the population as it once did. The burdens sloughed by old institutions have in part been placed upon the school. If the school must educate the moral personalities of its children for all the situations of life, its course of study must be enlarged so as to touch every side of individual capacity and social situation. This requires a broad education, not a narrow one, a vital and wide method of handling rather than a formal and restricted one.

But morality calls for few applications with every half century. As long as our industrial situation was such that each household prepared food and clothing for its own members and perhaps for a few neighbors there was little temptation toward and every check against the adulteration of foods. Now with a world market supplanting home use and neighborhood barter, adulteration appears as a temptation not easily resisted. We cannot combat it save with a new type of moral training, one which increases the sensitiveness of men to the lives of strangers beyond the pale of kinship, which gives a man the logical power and the imagination to behold his own sin violating the lives of real men, women and children across the hundred transactions which separate producer and consumer. So the school must teach children to reason as well as remember; to imagine as well as perceive; to feel keenly as well as think accurately; to check conduct by principles as well as by immediately sensed effects. The general cultural education has to be modified in terms of new common demands.

## NEW VOCATIONAL RESPONSIBILITIES.

A similar unloading of old and new functions upon the school occurs in the case of training for vocations. The breakdown of the apprenticeship system forces the schools to assume responsibility for that specialized training which is requisite in industrial and commercial success. This issue has been so much discussed of late that it requires no detailed treatment here. It suffices to say that we must add to our scheme of general education, one which provides vocational education, and our traditional administrative system must be modified so as to permit of the articulation. As each unit of general edu-cation,-elementary, secondary and collegiate,-anticipates the vocations which its graduates enter, the curriculum and methods must necessarily be modified to fit their needs. The elementary school cannot be organized exclusively for the professional needs of the collegiate class. It must also interpret social life from the station given
by the ultimate occupations of the larger numbers of elementary school children. Apprenticeship in most modern industrial institutions gives an inadequate technical training and breeds a narrow class consciousness, and these the modern public school must correct. Training in the industrial arts, agriculture and industrial history and civics must have a larger place in the schools.

## EDUCATION FOR LEISURE.

The old time occupations of men were more congenial to the natures of men. A single day's employment on farm or in shop was more versatile than that of a present day factory operative. More of the man's impulses and powers were used and in restful alteration. He was master of his own time, or on friendly relations with his employer. He could rest when need be, or chat with his fellow workmen to relieve any monotony. His day was long, but neither tedious nor nervously irritating. Vastly different is the case of many employers in modern industry. The machine masters the man, utilizing one part of his abilities in unceasing demand and neglecting the remainder. Rest comes at a stated time that by no means corresponds with personal need, and the recreation of intermittent sociability is eliminated. In fact, modern employment for many workers is very strainful. The strainfulness has shortened the labor day and increased the leisure time. The Twentieth Century therefore has a new responsibility, that of taking care of a strained man through a considerable number of leisure hours. That the responsibilities of this case have not been met is attested by the proportion of vice, sin and crime which occurs in the free hours of man's time.

This change in social condition suggests another responsibility of the school, namely: its need to train for the leisure of life. On first glance this sounds like a decorative function of the school. But what can be more essential than training which will prevent immorality, and humanize the men that modern toil dehumanizes. Tired men, men whose natures are starved for rest and self-expression, will play and recreate themselves. If we do not train them to play with the nobilities they will become ignoble and degraded. Play they will; if not with their cultivations, then with their crude natural equipments. Their enjoyments will be sensuous, sensational and melodramatic. The wide existence of licentiousness in all its sensual forms, news-sensationalism, the vaudeville theater, and the moving picture show is symp. tomatic of our failure to train men for the leisure of life. We are here confronted by a new social situation which the school along with other institutions must meet. In the light of such an interpretation the fine arts, music, literature, athletics and school sociability are far from be-
ing fads. They are necessities. To cast them out of the school or to minimize their place is to weaken the power of society to combat the difficulties of the leisure period.

One might offer other illustrations of changes in our social life that modify the business of public schools, but these three new demandsmoral, industrial and recreative-tell us clearly that the school of today must be different from its institutional ancestor because our social life is more complicated than it used to be. We cannot go back to the past, that is to fall a victim to the dead hand of tradition. We cannot leap too eagerly toward new responsibilities to the exclusion of old, that radicalism omits the moral foundations which keep us as safe as we are. We must be progressive, reconciling old and new, reinterpreting tradition in terms of reform because the world we serve and the children we teach have and are changing their composition.

## DOMINANT PROBLEMS IN THE HIGHER SCHOOLS.

The higher schools, more particularly the public high schools, are now in a period of transition. The same controversy and chaos which have characterized elementary education during the past quarter of a century now appear in the high schools. And for the same reasons. The high school and the college are beginning to receive from the lower schools that enlarged population which compulsory attendance has forced through the elementary school. This means that new types of ability must be cared for by the high school and that our middle schools must anticipate a diverse series of occupations into which its membership will finally be distributed. The introduction of vocational subjects, the widened range of cultural subjects and the increased priv.. ilege of selection are indicative of the pressure exerted by the new school population and the new social purposes of higher schools.

It is inevitable under the influence of such new pressure that the narrow cultured purposes of the old-fashioned high school curriculum should prove inadequate. The high school no longer educates a few pupils of highly selected intellectual type, it no longer sends its product merely to the professions, it includes boys and girls whose special demands are not to be found in the abstract symbolic thinking called for by the languages and mathematics. Boys who can think concretely, and executively must find some opportunity for growth in the natural sciences and the practical arts, hence, the importance of the newer activities in the school. The children of the industrial, commercial and agricultural classes are calling for their own. The growing importance of technical education in connection with the cultural courses of the higher schools is symptomatic of the new demands.

The consequences of these changes are to be noted in more than the changed purposes and curricula of schools. They are also to be found in new policies of organization and administration which disturb the limits and the units of secondary education. These tendencies must be noted.

There is a tendency to begin secondary education two years earlier, that is, at the beginning of the seventh school year. The "intermediate schools" of Berkeley and Los Angeles, California, and the "junior high school" of Evansville, Indiana, are pioneer movements 'n this direction. Other institutions have extended downward one year, as in Kansas City and the Horace Mann High School of New York City. A great many elementary schools have introduced the high school subjects of modern language, geometry and algebra in the last two years of the elementary school without renaming the institution. Still others have added the method of departmental teaching, which has been chiefly 'characteristic of high school instruction.

The movement for extending the high school downward has been aided by the very common judgment of those in charge of elementary school education that an elementary school curriculum could be completed in six years, with efficient teaching. Many social workers and many leaders in vocational education feel that the less fortunate economic classes should begin vocational training within the compulsory period, therefore favoring the completion of an elementary education and the beginning of technical training early.

- There is likewise a tendency to extend the high school upward. The average parent is somewhat solicitous in sending his child from the parental roof to the free life of the modern college. He would prefer to delay this freedom a couple of years when the vocational motive of professional study would keep the boy to his tasks and purposes while away from home. Two years more of maturity under the influence of the family and the home town, and a dominant interest in the career are regarded as fair preventatives of the bad results that sometimes come with college life. Hence, the California legislature permits the larger high schools to extend their classes upward two years so as to cover the first two years of college. The junior college idea has also been given recognition elsewhere. The associations of State Universities recognize the end of the sophomore year as a proper point of division between cultural and professional work. The use of a degree of "associate of arts" at the University of Chicago is a similar recognition.

The two tendencies which widen the limits of the high school period, also divide the newer school period into three distinct units: The intermediate school, the high school, and the junior college. This increase in the number of points of articulation between general educa-
tion and vocational training has a distinct advantage. In the first place, it gives four points of articulation where the student may enter vocational training or life work, where before there were only two. The opportunities for choice come more frequently, making a finer adjustment to the student's economic situation. Before the child had to wait eight years for his first choice. Four years later, at the close of high school graduation, he had another opportunity. And again, at the close of the four years of college, he had a third. This was the theory of the case; in practice the arrangement broke down. The new scheme provides more frequent opportunities for choice between further general training and the beginning of vocational education, that is, at the close of periods which are respectfully, six years, three years; three years and two years. Such a scheme not only assists vocational choice, but it likewise assists educational administration. The little village which now supports the elementary school could also support the junior high school, the smaller city could have both junior and senior high schools, while the larger cities could add the junior college, leaving to the large university centers the more extensive provision for profes* sional training.

The American school problem of the next quarter of the century is therefore a higher school problem. It remains for the educators to deal with a situation infinitely more complicated than that which has just been solved in the elementary school. The high school problem will be complicated for them by the demand to operate vocational education and cultural education within one school unit. They will have to widen the general culture to take care of the new social needs of its extended school population. They will have to provide three general cultural schools within one, and finally they must undertake that vocational guidance of the students which will distribute them into the proper cultural and vocational schools at a time appropriate to personal ability and family finance.

## REPORT ON MANNERS AND MORALS IN THE PUBLIC SCHOOLS.

Margaret Lennon, St. Paul.
Miss Lennon begins her lecture by expressing a thought from Tennyson, who says the one who can control himself has reached life's maximum of power and is king among his fellows.

She says self-control has its root in self-respect, without which there can be no hope, therefore no success.

One's virtues are numbered by his measure of self-respect. To rise one must think well of one's self, and thinking well of one's self gives
self-control, self-government. She spoke of two great classes of people who hold wrong views as to the potentiality of the teacher. One class, believing that Nature is sufficient to develop the child, wants the teacher to leave the child entirely alone. The other class claims that the teacher should discipline the pupils by exercising arbitrary command.
, Miss Lennon says the truth lies between the extreme views held by those classes. The teacher may interfere too much. She may guide the pupil so much that he will be dwarfed in habits of self help, or she may give too little supervision.

The teacher is necessary but the child must be chief in all schools. The old-time school doubtless put too much stress on many things but Miss Lennon believes that too many of the modern-day schools have gone to an opposite but more dangerous extreme in giving childrenhuman beings of little judgment-a freedom which spells license, and a liberty that is lawlessness. If adult man deteriorates without restraining influence, why can't educators deduce the fact that in the child's development it is necessary that he feel somewhat of a restraint.

It is a sad reflection that in too many modern-day American schools there is so little discipline that respect for duty seems to be a lost art. In too many schools the teacher is not supposed to exercise guidance or evoke effort of any sort. There is little thought for the general good. Unchecked individualism is the method, forgetful of the fact that while the Declaration of Independence taught equality, it also encouraged us to have a decent respect for the rights of the other members of mankind. Our forefathers gave us the precious legacy of individual sacrifice for all grand work. They gave us ideals of self-denial and self-control necessary to any great achievement. By their sacrifices of ease, pleasure and self-gratification, they brought us to the grandeur of a nation. If this nation is to endure, the children, who will be our future citizens, must be disciplined, must be taught self. control.

The child is the beginning, the citizen the end; and the first start has much to do in determining the destination because early impressions in virtues are almost ineffaceable.

Miss Lennon says the school should be a miniature of the world and if children come up with notions of only individual rights or self-realization, civilization is polluted at its source.

Morals in children are in a rudimentary state and children must be forced or guided to do right until right-doing becomes habitual. Children must be taught that no one can live his life independently-they must learn interdependence, they must learn the meaning of the relationships and grow in sympathy with them.

The tactful teacher will not find it a difficult task to develop those qualities, children being eager to imitate the life they want to understand.

Teachers must develop strength of character, truthfulness, etc., through the conscious will of the children. A child must be gradually given responsibility. It is necessary that the child do through his conscious will, and not always through coercion or inducement.

Since the great purpose of the American public school is training children so that they will be good citizens under a form of self-government, it follows that the correct system of school discipline is the self-government plan.

Imitation being strong in children the teacher should be a good model, exhibiting high standards; but no matter how right the example of the teacher there remains a forcing process to make children gain through their conscious will sufficient experience in right doing. iviss Lennon dwelt for some time on the necessity of giving children wisdom by or through their own desires; it being the teacher's duty to make those desires proper ones without minimizing the self-activities of the children. Miss Lennon then talked upon the lamentable practice of some teachers and mothers who bring up children wholly upon the love or affection plan. A child who does right because of unwillingness to grieve his teacher or mother may never develop right prin. ciples.

The speaker paid a compliment to the old-time schools saying that they turned out men who were superior to their environment whereever found; that they developed women who were ready to deny themselves to serve mankind. She would carry the ideals of the old school forward to the modern day school and add to their good methods requirements for greater thought and willful action on the part of pupils.

Since children should play at living in the future, self-government in school is the aim of every thinking teacher. It was shown that the form of any scheme of government depends upon the teacher. It was proved that self-government is not the most difficult system. In truth it was claimed that self-government is the easiest plan of discipline, since pupils are anxious to play "grown-ups."

Teachers were warned that self-government will lapse after novelty wears off unless the teacher upholds the scheme by creating new interest in different ways.

Miss Lennon said that trouble in establishing self-government was most always caused by an incorrect understanding of the meaning of self-government among children. She pictured schools where they said they had self-government when they had no government at all. The teachers in such schools define self-government-let go. It is not understandable how any adult can believe that children can be left en-
tirely alone and to themselves in a matter so vital as the daily building of their characters.

The best definition of self-government is Frances Willard's advice to teachers, "Let go, but stand by." Following out upon this thought no self-government school will have insolent pupils who show their "spontaneous activity" by talking upon twenty or a greater number of subjects at the same time; who throw articles at each other, indulge in hair pulling, etc.
Miss Lennon believes that it is true that the schools that are in the immigrant quarters are turning out material for the future's best American citizens-that Fritzie Schwartz, Patsy Sullivan and Tony Feinstein will give the country the higher citizenship and not Algernon Smith who goes to school with cuffs on his shirts and cuffs on trousers; Algernon who goes to school for self-gratification and whose mother will permit no repression by the teacher of his spontaneous activities, even if it goes so far as cigarette smoking, shooting craps in the school park, etc.

Getting nearer the theme the speaker explained how the tactful teacher could bring pupils to want to be self-governed. She would institute the scheme by preliminary talks or lessons-all taking part. In those lessons pupils would be led to wish to surrender their personal desires for the common good. When pupils are ready for the establishment of the system they can be given the reins but the teacher must have hold of the same reins just behind-the pupils remaining unconscious of the fact that they are being driven at all.

Teachers were charged not to be so busy making arithmeticians and grammarians, that they forget the most important duty they have, that of making characters-good, noble men and women.

Our elementary schools stand for the future-they spell "danger ahead" if children are not trained in self-government, because early impressions are.almost ineffaceable; they speak for a glorious future if pupils are trained in industry, self-sacrifice and service.

The self-government plan of discipline does not require special aptitude on the part of the teacher. A teacher who is energetic and has faith need have no fears about inaugurating the scheme. Miss Lennon gave devices, relaxations, helps and punishments which she had found efficacious in getting self-government. Relaxations there must beplenty of them-no hour should pass without a joy. Among the helps were Sympathy of the room, particularly of the leaders; Public opinion of the room; keeping pupils busy, keeping them interested, having variety, requiring obedience to authority, approving the room for holding to the right and discriminating praise.

Miss Lennon talked for some length on punishments. She justified herself for advocating them by saying that, "The law that binds the
universe together has a tone of severity in it," and punishment for sin is God's law and Civic law. She said if retribution or punishment does not follow a child for wrong-doing he is getting the wrong notion of life here and hereafter.

Miss Lennon justified wholesome fear; she believes in shame as a corrective, but best of all weapons is good, open, hearty laughter.

Miss Lennon was most particular to impress upon her hearers the fact that she has learned to give nearly all punishments through her supervised judges and juries chosen from among the pupils. She commented upon the fact that pupils give severe penalties to the wrongdioers among them; and she stated the fact of the culprits taking with good grace all penalties inflicted by their own court.

Miss Lennon closed with the hope that Wisconsin teachers may be given power and strength to give the children impulses, desires and aims that will transfigure the future.

## THE PRINCIPLES of SCIENTIFIC MANAGEMENT APPLIED to TEACHING MUSIC in the PUBLIC SCHOOLS.

Prof. C. A. Fullerton, Cedar Falls, Iowa.

A new epoch in the history of the race was inaugurated about thirty years ago when a Mr. Taylor, of Philadelphia, began a series of tests and experiments which resulted in establishing what is known as scientific management. The original purpose of scientific management was to increase the efficiency of laborers, and up to the present time it has concerned itself largely with manufacturing establishments and other commercial enterprises, but the possibilities of this new science when applied to the various human activities are tremendous. The experiments were begun by selecting a good standard workman with a high degree of skill in his special line, paying him extra wage for his time and making an exhaustive study of just how he performed a piece of work. With stop watch in hand the scientific expert reduced all of the workman's movements to "motion units" then eliminated the un; necessary motions and drilled him thoroughly in the remaining motions 'til he reached the highest possible degree of efficiency. For example, in the time honored occupation of laying bricks, although millions of men had, during the history of the world, earned their living by brick laying, it was left for a man in our own generation to first reduce the process to a scientific basis. The discovery, that of the eighteen motions used in laying a brick, all but five could, with the coöperation of a cheap laborer, be eliminated, was astonishing. By leaving out the thirteen extra motions and training the workman thor-
oughly in the remaining five the amount of work done was enormously increased, the quality improved, the employer got better returns for his investment, the laborer was mücil better paid, and was in better physical condition after his day's work.

Similar results have followed in other lines. By careful experiments. it has been determined that a laborer shovelling dirt will do a maximum of work with a minimum of energy if he lifts about twenty-one pounds on his shovel at a time. Men who have submitted themselves to the training of the "efficiency engineers" so that they could work in the most economical way have had their wages increased to such an extent that they have been completely reconciled to the innovation.

But it is not alone in these elementary types of work that the application of scientific management is bringing such surprising results. The more complex operations have furnished an equally good opportunity. A stop watch study of the entire force of workers in a factory, including clerks and stenographers, has often taken a plant that was running at a financial loss and enabled it to declare handsome dividends.

Scientific management is no longer on trial. There are over thirty thousand laborers in the United States who are working under the direction of efficiency engineers.

The principles and ideals of scientific management have also been applied to a considerable extent in stock raising and agriculture. The result is that many blades of grass are growing where one formerly grew and a scientifically prescribed ration for stock is revolutionizing that branch of business.

Now our chief concern with scientific management at the present is this. What has it to offer in the way of increasing our efficiency in teaching music in the public schools? The more we study it the more I believe we shall be convinced that it has a great deal to offer for the improvement of all educational work. It has demonstrated the possibilities of increased human efficiency and done it in a thoroughly scientific way. It has rendered its greatest service in mechanical operations in two distinct lines, in shuffing out false motions and in learning the one best way of doing a thing so thoroughly that the process becomes automatic. If the spirit of scientific management can assist us in eliminating the unnecessary waste in music teaching, and also in developing the "one best way" of providing technical skill in music, we shall profit immensely by it.
Let us suppose that an efficiency engineer, instead of being a skillfu] mechanic and expert overseer, were a thorough musician and an expert educator. He will be handicapped in this respect-he will not have such a definite standard for measuring results. While working with bricks and steel and measuring results in dollars and cents it is easy
to demonstrate his success or failure. The success or failure of a teacher is not always so obvious. The farmer has a comparatively easy problem to solve in determining when he has found the best balanced ration for a hog, for the answer is expressed in pork and finally in dollars. The answer to the teacher problem-how to develop the boys and girls into the highest type of citizens-must be expressed to some extent in motives, ideals, character, but right ideals are a more valuable resource of our country than even pork, and the greater difficulties in applying the principles of scientific management to teaching should not cause us to back away from so important a task. The country is thoroughly justified in bringing all the scientific training, all the persistent determination, and all the enthusiasm that is available to bear on the problem of getting just the right mixture of elements for getting a well balanced ration for feeding stock. We have no quarrel with that proceeding. What we want is that an equal degree of scientific study, of persistence and enthusiasm be given to determining what is the best educational ration for our citizens of the future.

Scientific management as applied to factories has produced its astonishing results mainly in two distinct lines, (1) by the elimination of unnecessary waste, (2) by determining the one best way to do a piece of work and then by skillful and persistent training making the process automatic.

Now for the elimination of waste. The first thing to consider is the quality of the music used. The efficiency expert would discriminate between the good songs and the best songs. The cheap and the indifferent music would find no place in the building of the citizens of the future. If every song learned must prove its right to a place in the child's life by possessing enough musical and poetical beauty to give it lasting value, what will the scientific expert say of the countless exercises written by the yard to serve as a means for teaching children to read music. He is a scientist, therefore unprejudiced. The exercise and the song will be given an impartial trial-a test as searching as that used by the pure food expert. A negative test which merely proves the absence of poison is not sufficient. There must be positive value there. A farmer might feed his stock on a mixture of meal and saw-dust, but there is no argument in favor of using the saw-dust.

If our consideration of this subject takes us no further than merely to eliminate worthless music it is well worthy of our time. One of America's greatest needs is to recognize the power of art in raising the right standards of life. Our people in the main have been too busy to give much attention to art. A large class of our citizens apparently see no relation between artistic beauty and righteousness. In fact, some act as though they thought doing violence to art would be counted to them for righteousness. This is overlooked in the Salvation

Army on account of their good works in other lines, but how about the songs sung in nine-tenths of our Sunday Schools? How many of them would get past an efficiency expert, who was, in addition to being a scientist, a musician, an educator and intelligent and sincere Christian?. Would he not recognize the need in society of a better appreciation of the art of music, and would he not see to it that none but the best songs be given a place in the schools? If he needed anything further to convince him that our people are in need of higher ideals in music let him attend the nickel theaters and inspect the ragtime in the homes.

The present indications are that school music must bear the burden of the responsibility in improving the public taste. Considering then the enormous responsibility resting on school music and the very limited time given to it on the daily program the wastefulness of spending time on even mediocre music is almost criminal. The teachers, who use a set of merely mechanical exercises for training pupils for sight singing, must convince the efficiency expert that those exercises are more valuable for that purpose than real songs are, otherwise they will be ruled out. The music teacher who composes the songs for his school to sing will be treated precisely as the teacher of literature who composes the poetry for his classes to study. His ethical right to do so depends on his ability to compose something at least as good as what already exists.

There are other phases of waste to be reckoned with. The time spent in teaching the rudiments of music in the lower grades has little to do with the musical development of the children unless it is clearly associated with their singing. Their knowledge of theory should be kept at a minimum and their singing experience emphasized.

In developing the ability to read music the efficiency expert would be coming to his own for it was largely through his success in developing technical skill that he first made himself known. His experience with the brick layers would stand him in good stead here. First he would determine just what is involved in the process of sight singing; then by eliminating all unnecessary waste, reduce the process to "the one best way" and then practice on each phase of it till it is automatic.

Some conservatives will claim that the principles of scientific management cannot be applied here because music as an art is spiritual and must be spiritually discerned. Our answer is that our efficiency expert must be an artist and thoroughly capable of spiritual discernment.

One of the reasons why we should make a more scientific study of music teaching is because music is an art and it is only when it is treated and studied as an art that its true value is approached. By definition our expert would be untrammeled by inherited traditions
about how music should be taught. If he found the mass of teachers teaching the major scale to children as a means for learning to read music just as their ancestors used to teach the alphabet to children as a means of learning to read it would be necessary to show him why it should be done.

Exhaustive experiments would be conducted to determine how best to enrich the lives of the pupils musically, and how to have their tech, nical skill develop symmetrically with their increasing musícal appreciation.

Efficiency is the watchword of the times. We have efficient machines. Human efficiency is the great need. The greatest problem before the American people is to develop the right quality of citizens. Scientific management is going to be a valuable contributor to the good work. It is breaking into the schools and churches. May the day be hastened when unnecessary waste shall be as completely eliminated from the educational process as from the commercial establishments.

## STATE GRADED and RURAL SCHOOLS.

## Miss Caroline Krause.

It has long been the impression of teachers in the state Graded Schools that their work is to prepare pupils for the high school. In fact they usually have a particular high school in mind and urge pupils to attend that school.

At the present time the cry is "Back to the Farm." Educational speakers, articles in leading magazines, newspaper editorials, all join in the cry, "Back to the Farm." The time has come for the teacher to help.
how shall we point the state graded school countryward?
First through the work in Agriculture. Teach the pupils how to select, judge and cure seed corn.
I took my seventh and eighth grade pupils to the cornfield and taught them to select the best ears from the best stalks in the field, or to select the best ears from the best row in a field, each row of which had been planted with seed corn from a single ear. We then used the score card,-each ear was examined and compared with the points for a perfect ear, and in this way we scored every ear of corn.

We cured the corn in the schoolroom. The boys made a corn tree and corn racks, and we found in the spring when we tested corn that every ear that was fire-dried, germinated.

We made a corn tester out of an old grocery box and tested corn for the farmers, and saved them a good many dollars, as we found that corn the farmers had dried out-of-doors did not germinate.

The pupils brought samples of milk to school, tested it and kept records and found the value of their cows. They found that some were not paying for the feed consumed.

The industrial work helps to turn the graded school countryward. It has been the general idea that this is strictly a city work. It can be introduced into the country in a mild way. This work is planned to be practical. Teach the boys to make fish line winders, sleds, plate racks, necktie racks, while the girls may be taught to make a garment to wear or clothes for dolly, also how to mend and darn.

The city affords the five cent shows and other questionable amusements. The country must offer something to take the place of these amusements. Here the teacher has a good opportunity to have something in place of these. The school should be the social center for the people in the community. The teacher may organize spelling clubs, sewing clubs, reading clubs, manual training clubs and invite the parents as these create an interest in the school on the part of the patrons. The girls may serve lunch at teachers' meetings if they are held in graded schools as they usually are.

It is useless for a teacher to try to turn a school countryward unless she has a love for the country. The teacher must be interested.

Happy is the teacher who does not have to create this interest.

## THE COUNTRY SCHOOL AS A CIVIC AND SOCIAL CENTER.

Ernest Burnham, Kalamazoo, Mich.

The importance of rural education is getting a recognition in the United States to-day, which has splendid promise of progress in it. A Division of Rural Education has been established in the National Bureau of Education; the federal civil service held recently an examination to select a specialist in rural education to be employed at an annual salary of $\$ 3000$; a school of country life, as a memorial to the late Seaman Knapp, has been endowed and will be developed as a part of the great Peabody Teachers' College now building in Nashville, Tennessee; universities in multiplied instances are giving graduate and undergraduate courses in the economic, social, educational and religious phases of country life; state agricultural colleges are instituting departments of education; state normal schools are establishing departments or courses for the specific preparation of teachers of rural schools; county training classes for country teachers multiply; and

6-T. A.
courses in agricultural education and rural sociology are heard of in a far flung variety of schools.

This governmental and institutional recognition accorded to rural education is bearing its natural fruit in the arousing of many of the best young men and women coming into educational service to-day, to especially fit themselves for the high grade of leadership demanded by rural education for the constructive program which mature educational leaders are laboriously working out. A cause is half won when it begins to produce great leaders. Rural education is to-day winning the full consecration of many great hearts.
Causes of the rapidly changing attitude in rural education are not far to seek. A more scientific study of education has re-affirmed the faith of the fathers-happily only forgotten and not lost-that there is essential solidarity in the education of a people; that a top-heavy superstructure is unsafe, and that a universally effective elementary education in country and city alike is the only foundation for a conserving public intelligence. Economic sensitiveness quickened by multiplied means of communication, the increase in population and the high cost of living, has pointed the index finger of public welfare toward the soil and a social attitude which gets its best expression in a square deal -a square deal, if you please, with the old Yankee flavor which demands justice for ourselves as well as for others-all of these causes and others have united to rejuvenate rural education.

This rejuvenation has cleared the air of the fog of petty discussion in rural education and has left in broad daylight outstanding questions of real importance, such as: How may the organization for rural schools be corrected to insure a just distribution of the financial burdens and more intelligent and loyal official administration? How may these schools be best organized for purposes of teaching? How may better prepared teachers be secured and retained in rural schools? What is an adequate curriculum for rural schools? What is the irreducible minimum of necessary attendance by pupils? And, how may rural children best get a high school education?

The still larger questions-What is the true place of the rural school in the family of rural community institutions? and what are the maximum possibilities of the school within itself and in articulation with its sister institutions for developing social participation and initiative in the rising generation and thus supplementing rural education where it lacks the most-these are the questions which are our particular interest in this discussion.
As stated in the topic these questions take this general form-"The Country School as a Civic and Social Center." Analysis suggests, first, the query-What is a civic center? and again-What is a social center? then, lastly-How may the country school typify to children and adults the definitions derived?

A civic center is a place where thought makes real and vivid the fundamental rights and duties of free government; e. g., the right of religious freedom and the moral duty of obedience, the right of free speech and the correlative obligation to do service, and the right to vote with its inseparable duty of paying taxes.
A social center is a place where study and discussion make minds sensitive to the existing status of the institutional life, the social habits of community welfare; and develop a militant attitude for the betterment of these habits.

The country school becomes a civic center by patiently and energetically fulfilling, in an orderly and satisfaction-producing way, the purposes of instruction, discipline and inspiration for which it is established. It thus becomes a center of pride and the conscious achievement of right purposes-the rich soil in which to cultivate appreciation of and whole hearted response to civic life.

The country school becomes a social center when, by the example of its own unquestioned success and its sensitive coöperative attitude toward all the other members of the community family of institutions, it brings about a consciousness of community solidarity. By this means the vision of a whole social life is kept before the minds of the rising generation as a goal which is as yet only more or less well realized in the local community. That social development is as fundamental to all around adult life as is individual qualification-this is the most needed lesson in country life. Here lies the social opportunity of the schools.

## WISCONSIN RURAL SCHOOL PROBLEMS.

County Superintendent Brockert, Grant county, Wis., in his address on the "Country School Problem," illustrated by slides, states that the greatest retarding factor in the rural school situation, is the small school,-the remedy, consolidation.

By consolidation of schools is meant the uniting of two, three, or more small, weak schools into one that shall be large enough in point of enrollment to be interesting, and strong enough in the way of money to afford a comfortable building, two or more teachers, and reasonable facilities for work.

Consolidated country schools do not mean annihilated country schools with the children hauled away to the nearest city to be taught on the wholesale plan. The thing that should come out of this is a real country school for country children, and whether it is located in a small village, at a crossing of the roads, or in some picturesque piece of woodland, it must breathe the atmosphere of country life; it must in-
still a love for country things, and it must teach in terms of a life that the country child understands.
Mr. Brockert showed a number of buildings, poorly constructed, poorly equipped, and poorly taught. In contrast he showed a oneroom school, well built; equipped with single seats properly placed, a heating and ventilating plant, and other necessary apparatus; under the care of a Normal trained teacher, hired at $\$ 30$ per month, raised to $\$ 35$ the second year, and to $\$ 40$ the third year.

During the three years, the attendance was almost $100 \%$. The first year only one child missed any time, and he was but six. The second year, not a day was missed by any child, and the thfrd year was almost as good. The fourth year, a poorly prepared teacher was engaged, and the attendance was poor, because teaching was poor.

Examples of actual teaching were shown-work that it was almost impossible to believe; wasted time, yet with a crowded program. No practical work in agriculture, arithmetic, or sewing and manual training; no connection with the homes, or the happenings of the world; not even good housekeeping by precept or practice. However, Mr. Brockert thinks such illustrations tend to move us in the direction of consolidated schools faster than any other factor.

Mr. Brockert showed by tables the reduced cost and improvement from consolidation, as shown below.

|  | ef | ore Co | solidation. |  |  | Consolidatio |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Di | istrict | two teache |  |  |  |  |
| Year. |  | trict. | Teachers' salaries. | Total expense. | Year. | salaries. | expense. |
|  |  |  | \$220 | \$252 | 1909..... ... | \$310 | 8546a |
| $1906 \ldots . .$.$1907 \ldots . .$. |  |  | 236 | 267 |  |  |  |
|  | , |  | 220 | 238 | 1910......... | 320 | 497 |
| 1908....... |  | 6 16 | 255 | 287 | 1911......... | 332 | 391 |
| Totals for three years |  |  | \$1,383 | \$1,562 |  | \$962 | \$1,434b |

a Includes $\$ 100$ for heating plant.
b Cost of new building is not incladed.
I wish to call attention to the difference in the total amount paid in teachers' salaries for 1906, 1907, and 1908, and the total amount paid out during that same period. Compare this difference, which is $\$ 179$, with the difference between $\$ 962$ paid out for teachers' salaries and $\$ 1,434$, the total amount paid out in the three years 1909, 1910, and 1911. We have: 179; 472; no equipment; good equipment.

Another illustration of consolidation was shown in the township of Beetown.


FIGLJE 7. EPLER SCHOOL, BEETOWN (ABANDONED)


FIGERE \& LOWVR SCHOOI, BEETOWN (ABANDONED)


FIGURE 9. UPIPER AND LOWER SCHOOLS, BEETOWN, CONSOLIDATED By uniting 'two, adjoining districts a $\$ 5,000$ bullding was erected, providing for the health of the children and effectiveness of the teaching.

Some of the following objections are raised when consolidation is suggested:

1. It will cost too much.

Where tried the report is "much less", "the same" or "it costs more but the schools are better."
2. The roads are not suitable.

Bad roads, though not unsurmountable, are yet great obstacles to its best operation. In this is also involved all other traffic as well, particularly rural delivery of mails, and the delivery of farm produce. Roads will improve and to say that children cannot be hauled is to throw upon them a burden we are not willing to put upon horses.
3. The roads and weather are often unfit to take out a team.

When this objection is given one simply raises the question, "Shall the children or the horses wade through the snow and mud?"
4. It is better for children to walk.

This assertion is more applicable to children living in cities and villages. Children in rural communities as a rule, get plenty of physical exercise without walking to school.
5. There is a sentiment against "removing the old schoolhouse."

With facts vs. sentiment it is wisdom to accept facts.
6. It will throw many teachers out of employment.

Admitted. This brings us face to face with one of nature's greatest laws, "The survival of the fittest."

WISCONSIN SCHOOL ARTS AND HOME ECONOMICS SECTION.

## PRINCIPLES OF CONSTRUCTIVE DESIGN.

## Maurice Irwin Flagg, Minneapolis.

Two specimens of antique lace which I possess represent diverse methods of achieving an art expression. One, a piece of Brussels of the 17th Century, illustrates specialized industry. The craft was subsidized. A piece of lace was first planned by expert designers. The work was then subdivided, one craftsman making the flowers, another the leaves, a third the mesh, while finally the parts were assembled by a fourth. The result was an expression of almost perfect technique, but lacking individuality and personal expression. The methods pursued in making the Brussels Lace are analogous to much of our present day method of designing. At the present time, designs are made on paper with varying regard to the function they are to perform. Take the case of carving: The design is submitted to the modeler, then the model to the workman who, in turn, executes the
same in a mechanical way. The final result of this division of labor is usually a loss of originality of conception and personal expression of the designer. This condition has been brought about by modern specialized methods of manufacturing.

The other piece of lace is Milanese of the same century, and was made by one craftsman. While it may lack the perfection of technique which the Brussels has, yet it partakes of that quality which is so desirable in any art expression, that is, individuality and creative force embodied in the result as a whole.

It was the underlying motive of the recent Handicraft Movement to revive and maintain, as far as possible, this immediate relation between designer and workman, as well as to encourage creative work as concrete expression based upon the principles of constructive design. Underlying these two diverse methods of achieving an art expression, there must be a substantial knowledge of these principles of constructive design. There is a varied opinion amongst educators as to the value of design as a part of our educational curriculum, yet all agree that one of the important phases of education is to foster, encourage, and shape, as far as possible, the individuality and creative force of the student. Toward this end, our programs must be consistent, they must embody some such expression as the piece of Milanese lace. They must stimulate and develop ideas which are not vague and mysterious. On the contrary, these ideas must have a relation to definite things. For this reason, design, as a stimulus must be shaped along constructive lines.

Constructive Design does not limit itself merely to the building of a piece of "Arts and Crafts" furniture. This, alone, might require only technique, and yet lack the quality we all desire, namely the fine and nice adjustment of the constructive elements of the furniture toward an expression of beauty.

Constructive design, as practiced in manual training, often limits itself to the mere copying of furniture design. This, in itself, has value in acquiring manual dexterity, but as a medium of expression toward the end which education seems to be striving, that of encouraging and developing creative force, it has not the value of a crude idea, provided it represents original thought by the student, even though expressed by inferior technique. Technique can be developed by persistency, but let us not forget that design has a mental application quite as much as physical.

Constructive Design is a building-up process, according to a logical sequence of reasoning, so that ideas may take concrete form and assume beauty of expression. This is a somewhat general definition, since design has a widespread application. In this sense, design finds relation, not only to such forms known as "Art Expression", but to
music, literature, the manual arts, trades, in fact, the subject is farreaching, and touches every phase of life.
For some reason, Design has been considered apart, not definitely related to our curriculum. Not an uncommon impression exists that the designer is endowed with some such mysterious power as the magician who apparently creates things from nothing; other ideas are that design applies to the making of pretty wall paper, jewelry, punched brass, etc., and that it is more or less of a fad. Also, design has been considered as belonging to the minor arts, while the architect, sculptor, and painter have for some unknown reason been divorced from the designer. As a matter of fact, the successful painter must be a man with a thorough knowledge of design. In quite the same way, the composer of a symphony understands the constructive principles of Design. It is only necessary to study the work of the medieval ages to realize that workmen were designers and designers were, in turn, workmen. The result has been such expression in concrete form as we are willing to recognize to-day as works of art, because cathedrals were constructed and pictures painted which manifested an intimate knowledge of constructive principles in definite form, partaking of individuality and personal expression.

What are the principles of Constructive Design? Let us consider a definite problem leading to the concrete expression of an idea, an idea that shall assume some art expression embodying elements of beauty. Two phases must be considered: first, that which deals with the practical, and second, that which deals with the beautiful.

The practical means that the object must be useful. It must fulfill some purpose. Under this phase, there will necessarily be considered the materials, the tools, and the methods of construction. The beautiful means the adjustment of the above imposed conditions in such a way that the object will be useful, and, at the same time, produce a pleasing sense impression. It may need refinement of proportion, texture, color, finish, etc. These two phases, the practical and beautiful, combine and cannot or should not be separated in the solution of an idea directed toward art expression.

Let us consider a simple problem, the making of a chair. First, the chair must be useful. It is a chair, presumably to sit in. Some chairs are not. In this respect, the function of the chair will determine the height of seat and back, and the material from which it will be constructed. The chair is to be moved occasionally, therefore iron or stone are not suited to the purpose. Wood suggests itself as a serviceable material, but even wood can be made wholly unserviceable. That was the trouble with the early Craft Furniture. The material could have been used for timber construction of a house. The designers forgot to ask themselves what the chair was for, namely to
use, but not a chair for a giant. The material will dictate certain tools and the elements of construction naturally develop from this sequence of reasoning which is nothing more than common sense. But the solution of an idea in practical form is not always beautiful. This was the fate of early Mission Furniture. It lacked refinement and good proportion. The designer had not combined the practical and beautiful.

To develop the chair along lines which may produce beauty, we must necessarily refine the parts and combine them for the sake of harmony and good proportion. If we wish to carve the chair, the carving must be a part of the chair, and not appear "glued on". It must be built into the construction, and this cannot be too severely emphasized. Carving, in most cases, becomes added ornament, and often interferes wtih the usefulness of the chair.

Then we come to finish, texture, and color. The purpose of the chair will dictate these elements: Where the chair is to be used, whether we desire a leather back or seat, and the color of the same. If the leather needs enrichment, it, in turn, must become subservient to the purpose of the object.

What are these principles that combine for the sake of the aesthetic or the beauty on which the chair is dependent. They are no others than the principles which combine to produce the beauty we all know and enjoy in nature: the principles of balance, harmony, and rhythm, combining for the sake of order, and possibly beauty. These are required in the concrete expression of an idea, if we hope for beauty.

Some such constructive building-up principles will lead to a better understanding between designer and workman, and designs which are made on paper will have more practical value than many achieve at the present time. Also, since present conditions have somewhat divorced the possibilities that make for individual expression such as we find in our Milanese Lace, we will at least have better design with a chance for individuality of expression.

These principles are far-reaching and underlie orderly creative force, whether it be directed toward the building of a chair, the furnishing of a home, the arrangement of a "city beautiful", or the composition of a symphony. They have been observed and practiced, consciously or unconsciously, since the beginning of mankind to the present day. The art expression of the past has epitomized the entire conditions surrounding the life of different peoples, and the periods which have given us the best art are those which have developed the best understanding of these principles as applied to their literature, music, architecture, sculpture, and painting. Such periods are characterized by the fostering and encouragement of creative force in concrete expression. I have only to contrast the art expression of ancient Egypt
with that of the Renaissance. Egypt developed a remarkable technique, but was so bound by tradition that its creative force or individuality as a race was stifled. The Renaissance, with its enthusiasm, its desire for learning and mental development, its freedom of expression, produced not only technicians but artists and artisans who have given us an Art full of individuality of expression. It was a period of intimate relation between designer and workman; in fact, they were one, as many of the records and productions testify.

An understanding of principles which make for the beauty of nature is necessary to the designer in any field if he hopes for an orderly individual expression which partakes of beauty. It is not the problem to literally copy nature toward this end; rather it is to know and apply the constructive principles upon which nature is builded.

To study the growth of a tree is to realize that it is a balanced consistent whole, that it embodies a wealth of variety in trunk, limbs, twigs, and leaves, each part and detail different, yet all contributing toward one end, namely the unity of the tree. There are principles of balance, which the eye constantly demands; harmony in the parts, since each shape bears some relation to the other, even the veining in the leaf echoes the structure of the tree; there is rhythm from large to small, not only from base to top, but from parent stem to the very tip of the outer branches, also rhythm from the large general mass and shape at the base to the very apex of the pyramid, such as many trees in the general massing produce. In fact, everything is pulling together, each part is nicely adjusted, one to the other, and all contribute toward an orderly arrangement for the sake of beauty. Nature does this constantly. Indeed, these same principles combine and make for the order and beauty of the earth.

These, then, are elementary principles which designers must observe and realize, and also combine with practical requirements for the sake of beauty in the expression of a concrete idea.

In teaching constructive design and demonstrating such principles, many theories have been tried that the student may develop and express ideas along constructive lines, that he may appreciate and understand this intimate relation between the practical and the aesthetic. It is not enough to trust to luck in the problem of arrangement for the sake of beauty. On the contrary, constructive design, as has been defined, is a logical building-up process, both mentally and physically.

Design, as we deal with it in art expression, naturally falls into a problem of space filling, and, in this case, let us approach the subject from a constructive point of view. As an example, let us consider an elementary problem, namely filling of a square, that the space may partake of order and possibly beauty. The constructive elements
of a square are the boundaries, the vertical and horizontal axes, and the diagonals. These alone are the constructive elements. They are the practical requirements necessary for the building-up process. To enrich the square, that it may assume some expression of beauty, it is necessary to adhere and follow closely these constructive lines. In other words, whatever happens to the square, in the way of decoration, must be built into and have some relation to these lines. It is a problem of adjustment and refinement of parts, that they may contribute to the unity of the square and at the same time produce a pleasing sense impression. Since constructive design deals with space filling, let us approach all spaces with some such point of view, and, since most expressions in concrete form are combinations of various spaces, it is best to consider the problem as the carpenter does the flow plan of a house. It must be well adjusted to meet the requirements of the house, otherwise it is not stable, and it is constructively impossible.
Design deals constantly with planning, planning along definite lines. It is not guess-work, nor is the adjustment of parts for the sake of beauty, the last thought. On the contrary, these two phases, the practical and aesthetic, should be constantly kept in mind, and our early sketches, whether they be for a piece of Craftsman Furniture or a Cathedral, should in their constructive ground plan show a nice and fine adjustment of space relation along definite construction lines, if we hope for an orderly and beautiful result.

The inherent desire for individual expression which we all have demands encouragement along constructive lines. And, since this desire seeks orderly expression, let us combine these principles, which make for beauty, with our educational curriculum, that ideas may find concrete expression with some degree of beauty.

## THE SOCIOLOGICAL BEARING OF INDUSTRIAL TRAINING.

John E. Gillen, U. W. Madison.

Someone has said that until industrial training was introduced into our schools, no boy could get a training for the task of earning a living at public expense without committing a crime and going to the reform school or the penitentiary. The tremendous significance of that statement lay in the fact that it was true. Happily, since industrial training has become a part of our educational system, such a charge can no longer be made against one of our great social institutions. However, that charge still remains true for a large proportion of our public schools. The debate is still on
with large numbers of school boards as to whether they can afford the additional expense which industrial training involves. One of the chief objections to industrial training is its cost. There is no doubt that it is expensive. It has added very much to the school taxes wherever it has been introduced. However, the board which decides that it cannot put in industrial training because of the expense seldom asks how much will be saved to the taxpayers by its introduction.

In the first place, industrial training will return a part of what is expended for it in the increased efficiency of the workers of the next generation. That means that there will be more people to tax and that they will be more worth taxing. Second, some of the cost will be returned in the lessened expenditure required for the relief of poverty, the care of the sick and the punishment of crime. A recent report of the United States Secret Service Bureau shows that in good times such as we are experiencing just now there is a very great falling off in the amount of counterfeiting of our money. That incident indicates a fact which we often overlook, namely, that crime against property decreases with the possibility of making an honest living. Here is where industrial training has a bearing upon the prevention of crime. Every child taught to make a living or to make one more efficiently than it could otherwise, is thereby prevented from becoming a criminal.

The statistics of our almshouses show us that most of the people who are there, aside from the aged and infirm, are those who never had any chance to make a decent living. Unemployment is the great excuse given by those seeking relief in our large cities. Now, industrial training will not entirely cure unemployment. It will, however, tend to make us a nation of skilled workers rather than of unskilled, and by so much will lessen the tendency to gravitate toward the poverty margin.

Again, it has a direct relation to sickness. The lack of a skilled trade is the cause of much poverty, as I have already said. It is in the poverty-stricken home where sickness finds no obstacles, therefore, industrial training touches the problem of disease, which is of such enormous economic and social significance in our nation, as pointed out so forcibly to us by Professor Irving Fisher of Yale University. Every dollar, therefore, expended by school boards in introducing trades into the schools, both prevents at least three of our social ills, and in addition gives a very great impetus to the economic independence of our workers. Upon the economic independence of our laboring classes depends much in the way of social development.

In addition to these aspects of the question, there is another. As Professor Seager, of Columbia University has pointed out, the most hopeful method of raising the laboring classes from one social class to a higher social class is by means of increasing their wages. Increase of wages, in turn, is dependent, economically, upon increased efficiency. Efficiency depends upon training so far as it can be effected by our social arrangements thus far devised. Anything which prepares the worker for a position where he can produce more and increase his wages, will effect the social advantages which he can provide for his children. It seems, moreover, to have a direct bearing upon the size of his family. The increased income develops wants, and as we well know, civilization goes hand in hand with the increase in the number and variety of our wants. An increased income makes it possible for the home to be better, for the child to be kept in school longer, and thus for the next generation to be better prepared for the work of life.

Again, after all is said about the aims of education, should it not be conceded that the first aim of education should be to fit men to make a living? Culture, of course, is necessary, but what will mere culture be worth without the ability to secure bread and butter? Educational adjustment of the child to a proper social life is one of the requirements that may be legitimately made of the school, but the very first adjustment which must be made is both the willingness and the ability to earn a living for oneself and his family. This industrial training provides.

Finally, the sociological significance of industrial training is to be seen in its relation to the interest of the child himself. It is well known to educators that but a small part of the children who enter our public schools ever complete them. It has been charged that one of the reasons for this is because from the kindergarten to the last year of high school, the whole curriculum has been arranged for the purpose of preparing the child to enter college. Not only does industrial training supplement this, by preparing them also to enter life, but it appeals to the child especially in the adolescent years more strongly than some of the so-called cultural studies, and thus creates an interest in school work which otherwise would not exist in very many cases. Anything which will keep the child in the school when the school is preparing him for life certainly has a great social advantage.

All of these considerations indicate how important it is that the institutions which deal with the youth should be more thoughtfully considered than they are at the present time. They raise the question whether our socializing institutions such as the church, the school, the home, and the street, are presenting to our youths ideals
that will ennoble them or, on the other hand, present to them examples and conduct which will inevitably degrade them. Now, if ever, the crux of every one of these institutions is the personality of the leader of each one. Let the leader of the church be one who understands the adolescent, knows what devices meet the adolescent's need, and the religious and moral development of that youth will be properly cared for so far as the church can manage the matter. On the other hand, let the minister or priest or Sunday School teacher $b_{\ominus}$ one, however high his ideals and noble his character, who does not understand the adolescent, and the boy or girl is quite likely to go wrong. So with the teacher. In spite of the fact that much will depend upon good equipment and proper facilities, nevertheless the important factor in the school is the teacher. The teacher must not only understand psychology and pedagogy; she must also understand the value and significance of institutions which bear upon the child's life; she must know what devices meet his need, and develop him in the right direction; she must know how to coöperate with the home, the church, and the street, in the development of a social being.

## BOARD OF EDUCATION SECTION.

## Walker's Hall, Auditorium.

The meeting of this section was called to order at 2 P. M. by President Wm. L. Pieplow, who read an introductory paper on School Administration.

Next Mr. S. S. Connell, President of the Board of Education of Milwaukee, welcomed the departments in the name of the Milwaukee School Board.

William H. Allen, Director of the Bureau of Municipal Research, New York City, next spoke on "Testing the Efficiency of Members of Boards of Education."

This was discussed by Prof. Victor Lenher, member of the School Board, Madison, Wis.

Mr. August S. Lindeman, member of the Board of School Directors, Milwaukee, next read a paper on School Administration: State, Local, and Professional.

Walter M. Burke, President Board of Education, Kenosha, led in the discussion on this paper advocating greater state coöperation with local units, more class supervision by school board members, and the teaching of more citizenship.

The last speaker on the program was John S. Donald, State Senator, Mount Horeb, Wis. Mr. Donald spoke on the Duties of a Country School Director and How Best Performed.

His paper was discussed by C. E. Patzer, Milwaukee Normal School, Milwaukee. Mr. Patzer scored the school directors on the basis that many laws and duties have become obsolete. He advocated county boards of education with county superintendents of greater power and certain minimum requirements.

After a brief discussion the meeting adjourned.
Frank M. Bruce, Secretary.

## ADDRESS.

William L. Pieplow, Milwaukee.
The Wisconsin Teachers' Association is an outgrowth of common school interests, representing from the kindergarten to the university, the many divisions and subdivisions of the science of pedagogy. Several years ago there was constituted within this organization, on a widely different basis and having a different scope and plan of action, the department designated as the Board of Education Section.

The value to education cannot be over-estimated, when the representative teachers from every important phase of educational work come together in annual meetings to exchange ideas pertaining to their work; neither is it possible to over-estimate the value to the administration of the Public School System, when members of Boards of Education, from widely separated cities and towns of the state, gather for the consideration and discussion of problems they meet with, and thus disseminate correct thinking` and reach the proper solution of the same.

The American Public School continues to be the great center of citizenship building for the nation. In the main, we must depend upon it for men and women of strong, earnest character and high ideals. It is important therefore, that the government of the school system be of a standard that will make for better citizenship, for serious study, for careful thought, for well-trained minds and sound hearts.

The administration of the Public School System has become a very complex affair. It consists of so many important and far-reaching factors that it requires, if we would have genuine educational progress, that Members of Boards of Education think aright and act according to sound policy; hence, the great value of such a meeting as this.

The addresses to be delivered this afternoon, and the discussions upon them, I am sure will prove of much profit, for they are certain to shed considerable light upon the envolved problems that Members of Boards of Education face.

## TESTING EFFICIENCY OF BOARDS OF EDUCATION.

## William H. Allen, New York.

School trustees will "trustee" up to public expectation of them. They will also "trustee" down to public expectation of them. And for the same reason, there is no position less comfortable than to be a school trustee who is generally considered below par in efficiency.

It is uncomfortable enough to be inefficient when the trustee knows that other people do not know how inefficient he is. It is unbearable to be sure that other people are sure one is not doing his official duty toward his school. If, therefore, in any part of Wisconsin, boards of education are not efficient, the primary fault will be found rather with the public expectation of school boards than with what those boards themselves do.
Heretofore the American public has expected too little of school trustees. For example, I have never known a community to expect its board of education to know whether an individual teacher's classroom work was efficient, whether she was sufficiently helped by her principal or by the city or county or state superintendents. While many school districts are grateful to this or that trustee for personal interest in the appearance of school grounds, in the out-of-school welfare of school teachers, in the general reputation of schools, such interest when found is generally accepted as above rather than within reasonable expectation. We are grateful if we get it. Too often we are not disappointed or displeased if we do not get it. For a state superintendent to grade school boards according to their efficiency would probably do more to stimulate public interest in schools than to grade teachers and superintendents according to efficiency.

The remedy for uninterested boards of education is to inform and to interest our present boards and not merely to get new ones of the same old kind. We need to list the things that a school board ought to know and particularly to list a few things that a school board ought to do. As a rule school boards will $d o$ the right things if they know the right things. School boards can never and should never try to do the things which they hire teachers to do. They can and should be expected to know whether teachers do the things for which they are hired. The time is coming when every school board will be ex-
pected to prepare for its own district, no matter how small, a clear statement of what has been left undone and what has been accom-

- plished during the year. Such a statement, if frank and specific, will greatly increase the efficiency of boards of education while at the same time helping their schools.
Boards of education cannot be in schools all the time or a large part of the time but they can learn to use indexes of what is going on in the schools. They cannot learn all that the teachers and the pupils know but they can learn what they, themselves, know about the schools. By comparing this with the list of what they ought to know about the schools they can see what next steps should be taken. For example, schoolrooms should have clean air, cool air, moist air, moving air, all the time. Just a look at the majority of schoolrooms will show that buildings have not been so constructed that air can be either clean or moving. An hourly record of temperature kept as a matter of routine practice by a different pupil each day and certified by the teacher will show whether air is cool enough, too cool or too hot. By requiring such a record, by reading it and acting in accordance with it boards of education can do more to influence the ventilation of schools and other public business factories in Wisconsin, than could a ten year crusade without the coöperation of school trustees. Studying schools systematically will take less time and do infinitely more good than studying schools aimlessly.

In rural districts where a spirit of neighborliness prevails and in small towns and cities between which a spirit of rivalry prevails why would it not be possible to start the practice of exchange visits by school trustees like the exchange of pulpits by ministers or the practice of inter-district conventions of trustees to be held not always in the county seat but first in one town and then another. The 20,000 school trustees of Wisconsin make a pretty large school all by themselves, and, as Superintendent Cary has found, an exceedingly responsive school.

I doubt if there is a better way that $\$ 20,000$ of state taxes could be spent than on reaching these trustees over ten to twenty times with letters, suggestions, instructions, and "experience", which would enable them to investigate this in their own schools and to see that school obstacles are problems to be solved and are not excuses for evading problems.
What the trustee does is vastly more important than who he is. Board members should be selected as we select a governor, or a newspaper writer, or a business manager, or school superintendent, or teacher, with respect primarily, not to sex, not to looks, not to reputation for social excellencies, but with respect to the amount and quality of the specific services required. In educational matters his
specific services required have very little to do with sex, but a great deal to do with the amount of time men or women are able to give, wilh the promptness and decisiveness with which they will act, with the facts they will seek, and with the use they will make of facts.

May I add that in Wisconsin, as elsewhere, the quickest way and the only sound way to get women on school boards is to present particular women who, in addition to being women, have specific qualifications which promise greater constructiveness and greater efficiency than can be expected from men candidates. Might I be pardoned for going so far as to say that any woman who thinks that being a woman of itself especially qualifies her to serve on a board of education is, by virtue of that conviction, disqualified from being efficient enough to serve.

The following questions should be answered before appointing or voting for a school trustee:

1. Does he really care about the success of the public schools?
2. Does he know reasonably well the local needs which the public school is supposed to meet?
3. Is he in the habit of basing judgment upon facts?
4. Is he in the habit of work from first hand information instead of hearsay?
5. Is he capable of managing any other business which spends as much money, that has as many patrons and as many subordinates as the public school system of his district?
6. Will he visit the schools?
7. Will he prefer to hold board meetings at the schools rather thali in a drug store or law office?
8. Will he use effectively the following sources of information which are available to Wisconsin school trustees?
(a) Personal observations.
(b) Statements made directly to him by principals, teachers, parents, $\epsilon$ tc.
(c) A monthly statement of work done and needs not yet met by superintendent or principal or teacher.
(d) The annual report of his local school.
(e) The reports and bulletins of the state superintendent of education.
(f) Reports and bulletins of the United States bureau of education.
(g) General discussion of school topics by newspapers, school journals, popular magazines, etc.
(h) The report on a study of the Wisconsin school system.
(i) The report published and to be published of inquiries into the school situation in Wisconsin by and for the state board of public affairs.

What school trustees will see depends largely, of course, upon what they are expected to see, which in turn depends on what they are expected to report to those who elect or appoint them.

Among points which local school board members in Manhattan, (New York City) write that they note when visiting the schools are the following:


The best next step for boards of education in Wisconsin seems to me to be:

* 1. To take the report on conditions and needs of rural schools in Wisconsin made by the New York Training School for Public Service to your state board of public affairs.

2. To go over it page by page and fact for fact.
3. To ask themselves "Does this picture fit the school or schools for which we are responsible?"

While it is true that the investigators were several school men and an experienced accountant it is also true that there is hardly a single fact reported in the 692 page pamphlet which any board of education or school trustees should not be able to find out for themselves.

There is absolutely nothing about the balance between money taken in and money spent which any trustee is not intelligent enough to keep straight if he feels that it is expected of him.
Even the educational tests in this report are well within the responsibility of trustees. Any adult can tell whether a teacher is bored or enjoys her teaching; whether children like or dislike to be in school; whether children are reading the story of the three bears mentioned on page 62, without knowing what the story is about; whether the county superintendent comes once, twice, four times a year or never; whether a truancy law is enforced in his county.

Nor is there anything about ventilating or heating or lighting or getting rid of school dust or cleaning school grounds or providing plenty of play space which any trustee is not able to see, describe and help improve after once the school mind and the public mind of Wisconsin expect such action from trustees.

## ADDRESS.

Victor Lenier, Madison.

- The school boards of this country are composed of men and women in all the various walks of life; and the methods of selection of these boards are as widely differing as the conditions of American politics will permit. That the laborer and the capitalist, the poor and the rich, the professional man and his client, the highly trained mind and the uneducated, the family man and the bachelor, the mother and the unmarried woman, should be found on the school board is very fortunate; indeed the more viewpoints possible on the schools, the more wholesome is the effect on the greatest organ of democracy in our democratic country, the public school.

While it is a fact that all walks of life find a place of value on the school board, for the duties of the member of the board are as varied as local conditions will necessitate, it is by no means necessary that any one class of men should necessarily always be represented. While a lawyer is one of the most valued members of a board on account of the enormous quantity of laws which provide for the welfare of the schools, as a matter of fact the superintendent is usually as well trained in school law as the average lawyer. And while the lawyer is one of the most valuable of men in the drawing of a contract, the average business man from his daily experience is perfectly capable of taking due precaution in the making of contracts such as arise in the purchase of supplies, the construction of buildings, and the hiring of teachers. While the doctor may be of the greatest value in furthering medical inspection of the children, his own views may be inadequate or may be so biased by his general practice that he may not be nearly so well qualified to meet the local school needs as the layman board member who is anxious to see the broad principles of medical inspection carried out, and who is willing to give the time and thought to the school and community side of medical work rather than to the technique of carrying out this valuable corollary to school efficiency. And so we might go on indefinitely and we would find that no one type of vocation is absolutely necessary, but what at first sight may seem the ideal type may in the individual work out into an inefficient man.

The judgment of the efficiency of school work and indeed of efficiency in general is a matter on which few would ever agree. Since the time of Pestalozzi, the so-called science of education has been a continuous series of experiments and changes. The fundamental three $R$ 's have long been recognized as the one beaten path from
which there should be no divergence, -of all the many lines of study which have been proposed in the schools, these three have stood the test of centuries as the backbone of education, yet we hear to-day commonly said that the average person needs to know no more figuring than the minimum amount required to keep account of his wage and to make change when paying for the necessities and luxuries of life. Again, the universal use of the typewriter has obviated the necessity of the business man, the professional man, the clergyman and even the society woman from the need of much more knowledge of writing than that of being able to sign one's name. Indeed any one subject in the broad field of our conventional list of studies, particularly in the upper grades has not much greater real scholastic worth than any other.
We do test the efficiency of our schools and of education and we apply a very severe test. Can the child think and can he use his studies as tools in thinking? If a child cannot be taught to think in any one line we say that subject is not properly taught. If, on the other hand, he can be trained to think clearly ou any one line, that subject at once interests the child, the result is he does well in that subject and the training to think in that one subject lays the foundation for an educated, thoughtful and valuable life. This thoughtful consideration of the subject which the child does wels in because he is interested in thinking for himself, is the foundation of the election system of our modern high school, and which I am glad to say is being gradually introduced into the upper grades.

The test of the school system is, does it turn out minds properly trained to think. The test of the superintendent is, does he mould his teachers, the studies, and the children into a system that is not only capable of producing but actually does produce thoughtful children. This is success, and if it is attained in only a formative degree, that school system is worth while.

The test of efficiency of a member of a Board of Education is, does he appreciate what the school should do for the future citizen and is he willing to help to the grand good purpose of furthering this work by thoughtful inquiry into and mature judgment on the many practical problems incident to carrying out these ideals.

STATE, LOCAL AND PROFESSIONAL SCHOOL ADMINISTRATION.

Hon. August S. Lindeman.

Are our schools efficient? That the schools are lacking in efficiency, that courses of study and systems of instruction are not satisfactory, is the criticism made again and again in leading periodicals by writers, eminent men and women of fine public spirit who show keen analysis and careful study in their investigations. The public school is next to the church in the hearts and sentiments of the American people and unfriendly agitation would arouse extreme resentment. Problems of education and schoolwork being so complex and intricate by their very nature, must be solved with intelligent conservatism, and revolutionary innovations are fraught with the gravest dangers to the youth. Again we must bear in mind the axiom that education in all ages and under varying conditions has ever been a question of adjustment and therefore forms an ever changing problem. The issues of inefficiency of our schools are usually made against the school as a whole, against unsatisfactory results of education and rarely raised as a question of incompetent work of teachers, principals or superintendents. The teacher's professional preparation is constantly improving and the proportion of professional teachers, the real "guardians of youth" is increasing rapidly, surely indicating progress for the future. The complaints are lodged apparently and principally against methods of instruction and progress of study or rather against the prevailing general educational systems and plans.

But let us face the liberal minded critics fairly and frankly. In cen: sure of educational matters history has many times repeated itself. Roger Ascham the tutor of Queen Elizabeth in his classic Essay, complains of the wrongs of mediaeval school life and complaints have continued and increased as educational interests have widened their scope. By honest and fearless discussion we may hope to move in the direction of a higher ideal in education.

The school is for the child; this proposition is paramount, and the school must be thoroughly efficient in doing its best for the progress and future welfare of the child. It is the claim of our present day critics that the instruction and training in the school does not successfully educate the child, or in other words, the instruction and training in our schools is not properly adjusted to efficiently prepare the child for its future place in life.

No discussion of these claims is bere attempted. Incidentally, however, some main issues presented against the present system of educa-
tion will be referred to in order to illustrate how a thoroughly comprehensive plan of school administration will operate to bring about a better adjustment of instruction to the educational needs of the child. Looking into the historical development of our public school system, it is not difficult to prove that school administration has not gone through the necessary evolution to take care of the enormous growth of our school interests.

In the first place, it shall here be proven that education is a function of the state based without exception on a long chain of legal decisions in various states in this country.

Next, this being the foundation in law for school administration, it would appear to be necessary to most carefully and thoroughly coördinate the power of the state, and the power of the local school authorities, and further that the educators of the state department in coöperation w:th the local principals and superintendents be given more initiative and more power in dealing with methods and questions of instruction.

The plea is for coördinate school government and not concentration of school government; thorough coöperation of the state authorities with the local authorities and with the professional staffs of the state and community.

Dr. Webster in his monograph on School Administration treats quite fully the basic decisions making up the law of school government in the United States. Unvaringly, state control is sustained by the decisions of the courts. The following citation from the case of the State vs. Haworth is typical of the law as settled by such decision: "Essentially and intrinsically the schools in which are educated and trained the children who are to become the rulers of the commonwealth are matters of.state and not of local jurisdiction. In such matters the state is the unit."

In the Pennsylvania case of Ford vs. Kensell Borough School District the court made the following decision: "We may assert positively and without hesitation that school districts are but the agents of the commonwealth, for the sole purpose of the administration of the commonwealth's system of public education."

The state levies the school taxes on property valuation and distributes it according to the school population. In the distribution according to the number of school age, it collects the tax from the wealthy counties and districts and distributes it independently of such collection, giving the poorer counties the largest tax allowance. It evidently collects and distributes school taxes for the benefit of the state and not the local community. In some forms state supervision and control is quite apparent, such as prohibition of sectarian instruction, compulsory education, certification of teachers, state inspection of high schools and the like.

Now, as a matter of common sense logic, it must be plain that the citizens of the state of Illinois, living outside of Chicago, have a right to demand that the large alien element, which floods that city be properly trained to American citizenship through the efforts of the public school. The people also have the right to demand that in rural districts where the proverbial parsimonious school committeeman often dominates, the country boy receives sufficient education to make him an intelligent and efficient American citizen. Taxpayers of the commonwealth contribute to that end and they have a right to demand that the state so assist in the administration of the schools and the school funds as to produce the result demanded.

## CENTRALIZATION NOT DESIRABLE.

Coördinate school administration does not necessitate a monopoly of education on the part of the state, such as was claimed by the Napoleonic despotism. Such a monopoly would be plainly repugnant to the spirit of Anglo-Saxon individualism, and it is interesting to note that attempts to reassert it have in recent times been repudiated in republican France. Nevertheless, the recognition of this primary duty of the state plainly implies a state system of at least elementary education. ${ }^{1}$

Neither in the Declaration of Independence nor in the Constitution of the United States is there any mention of education. The founders of the nation were by no means indifferent to education, but they shared the common view of their time, which was that the real responsibility for the maintenance of schools and the expense of maintaining them should fall upon the several local communities. The relation of government to education was not then a subject of ordinary consideration or discussion.

The first constitutional enactment placing education definitely under the authority of the state is in the famous Ordinance for the Government of the Territory of the United States Northwest of the River Ohio, passed 1787, representing the states of Ohio, Indiana, Illinois, Michigan, Wisconsin and part of Minnesota, which reads: "Religion, morality, and knowledge being necessary to good government and the happiness of mankind, schools and the means of education shall forever be encouraged."

It is interesting to note Matthew Arnold's statement reporting on German Educational Administration to the British Schools Inquiry Commission in 1866, that the German states have found it not practicable to pass a comprehensive education law, owing to the religious and

[^12]political difficulties with which any general legislative assertion of principle is attended in Germany as in England. The consequence is that the Prussian system in particular is the result of a long and complicated series of special law, decrees and administrative regulations. Though we in the United States are not hampered with the difficulties referred to, the lack of proper organization of the school government in the state has caused some unsatisfactory conditions which we are centinually trying to overcome by endless special legislation. Following the thought of Arnold, a unified school government in the state would greatly simplify the administration and materially strengthen the system of schools.

Another leading English authority described American experience: "The inhabitants of the several local communities, however indisposed they may have been to relinquish absolute control of their own schools, have been compelled to yield to the authority of the state goyernment wherever it has been asserted, for except under such authority no civil division-county, city, township, or school district-possesses the power to levy taxes for school purposes. Moreover since the exercise of state authority has uniformly improved the quality of the schools, it has usually been welcomed, not resisted."

## Why should school administration be reorganized?

The term school administration is accepted in its most narrow sense. Even in the dictionaries "school boards" and "school committees" are defined as legal bodies having control of public schools; and this is the popular understanding. Indeed, the public schools were so governed in their beginning and even for long periods thereafter. To-day state constitutional provisions and the decisions of the various state courts define Administration of Public School, as a state function. This does not, however, mean an overlordship on part of the state in educational policy. The fact is that much confusion prevails in various American states as to harmonious working together of the various branches of the State School System. ${ }^{1}$ Much of the recent controversy about inefficient schoolwork probably arises from this fundamental defect in school government within the state, in that the state department and the different schools, university, normal, high and grammar schools are not set to work by law to coöperate thoroughly together. While it is true that especially the states of New York, Massachusetts, and Wisconsin have advanced far ahead in this line, yet these commonwealths have not to-day well balanced systems of instruction which best conserve the school interests of the youths.

[^13]

1. Henry Suzzallo
2. Chas. R. Van Hise
3. Ernest Burnham
4. Maurice Irvin Flagg
5. Margaret Lennon

There are not sufficient safeguards on the school time of the boy and girl through proper adjustment and efficient instruction. What more important conservation can we work for in our generation than superior efficiency in the schools? Yet in Wisconsin, we have through the new system of Industrial Education, the most comprehensive plan of school administration covering that particular field. This plan draws together all the related educational agencies of the state; the state department and the university and these coöperate with the State Industrial Board and the system of Local Industrial Boards to connect with the shop and the school. We marshal all essential educational forces of the state and comunity to build, with the public school as a foundation, a continuation school and an industrial educational system to reach every youth in the state after he leaves the city or country school. In its scope this is the most complete piece of school legislation in the history of the schools in the United States. It takes the boy and girl leaving the grade school in the city or district school in the country and offers them further education and information directly applicable to their future position in life.

The common school system however, does not embody this policy. On the contrary, it is built up with the end in view to graduate its pupils into the High Schools. We know that only $7 \%$ of the children in the elementary school go to high school. Yet the grade schools insist on fulfilling the demands of the high schools in order that they may appear on the accredited list. In this same manner, the high school works to graduate its pupils into the colleges where less than $5 \%$ of its students go. The college control of high school studies is notorious. Secondary school programs and studies as now followed have been censured by leading educators of Great Britian and America. What do we offer to the student whose parents make sacrifices that he may attend high school for a two-year term, in the way of preparing him to face his future career? The verdict has been generally against the schools.

Why does this most unsatisfactory situation continue in spite of the strong agitation? President James explains: ${ }^{1}$ "Educational institutions, whether private or state are by nature conservative. The more completely they are removed from the necessity of appeal to the life of their own generation for support; the more set do they become in their conservatism, the more bulwarked in their opposition to all progress. They not only may do so, but in nearly every instance in history they have done so. The history of every European country demonstrates that these bodies, the universities and colleges have had to be reformed by law. Oxford and Cambridge fought bitterly all at-

[^14]tempts to force them into line with modern progress. Even in our own country our colleges and universities have the same opposition to education and progress to record." Do you believe that anything less than a reorganization of our school government can break up the control of the colleges over the high schools and indirectly the elementary schools? The local boards and superintendents are powerless. The state department of instruction under the law does not so coöperate with the university. Clearly it is possible to have the state department; university, normal schools, city and county superintendents so coöperate that high school instruction for instance may be remodeled for the best interests of all the students.

How can we hope to improve the neglected rural schools unless we supplant the misfit district system and change the small district management into county control? This, experience has shown, will only be successfully done with state coöperation along the lines set forth.

Professor Patzer's report shows that many of the rural school teachers in this state, receive one dollar and some even as little as fifty cents for their day's work.

This scandalous underpayment is due to the small district system and the almost absolute control of the committeemen. In the larger communities, better salaries prevail and the teacher in the elementary school usually has permanent tenure of office. Principals and superintendents are not so protected and are often hired and fired through personal politics of a clique of school board members. How can we expect strong, fearless leadership in elementary school life as long as the principal and superintendent are, as is often the case, treated as mere retainers of the school committee. Shocking frequencies of the dismissals and the notorious short tenure of office of these schoolmen have undoubtedly had a deep and dangerous influence on the elementary schools, by constantly driving many of the ablest out of the profession and out of school life. The history of American schools is overloaded with the unfair treatment of schoolmen of character and ability. Nowhere in school government is it possible to work such barbarous recalls as we find daily occurring with us. Many conscientious and able principals and superintendents are forced to beat time in their professional work through the unreasonable and illogical interference of laymen in the conduct of schools.

The absolute right of appointment and dismissal of teachers and principals does not logically belong to a body of school commissioners. The principle that the internal management of the school, like the professional questions in general belong to the superintendents and principals and that the external management of the school such as financial and business affairs belong to the school commissioners, is well established in the best modern system of school administration both abroad and in the United States,

Similarly the questions of systems of instruction and programs of study are worked out by the state department of instruction in conjunction with superintendents and directors of the various schools. This is State, Local, and Professional School Administration coördinated.

This proposal is not a radical innovation opposed to the principles of government. The Fathers of the Republic in the constitution coördinated legislative, executive and judiciary branches to form a government with wisely distributed authority yet strong in executive force. The experience of Educational History shows likewise that the coördination of state, local and professional authority build up the strongest and most effective school systems.

In conclusion, gentlemen, let me call for your earnest consideration of this subject. Thought and investigation on plans for coördination, will, I believe, direct your attention to a great many needs and changes of vital and immediate importance. Wise adjustment will mean no dangerous interference, it will probably result in good to local school systems.

There is to-day a great awakening and re-adjustment in school administration. School boards are exercising more carefully than ever before their legislative and judicial functions. Serious thought from a broader point of view will necessarily direct attention to the waste of time and effort, especially through experimentation with new in. novations or through the introduction of the supposedly new in the isolated school system.

## THE DUTIES of a COUNTRY SCHOOL DIRECTOR and HOW BEST PERFORMED.

Senator John S. Donald, Mount Horeb, Wis.

The duties of the rural school director naturally fall into two classes, the legal duties and the moral duties. Of the two, the latter is by far the more important.

The legal duties may be briefly stated as follows: to be elected by ballot, to hold office for three years, to hire teachers, to furnish the necessary school supplies, to sign all orders legally drawn and refuse to sign all others, to appear for and on behalf of the district in all actions by or against it, and to bring action on the treasurer's bond in case of breach thereof.

The perfunctory performance of these duties is rendered by the average official at the proper time; but the real value of the school director
or other officer lies in the care with which he performs these duties and the extent to which his interests and activities reach beyond the bare legal requirements of him.
In this paper the subject is treated broadly and includes duties of the clerk, treasurer and director as the duties of one are complimental with those of the other two.

The greater interest that is now being directed toward the country school is to be appreciated and it can only be regretted that this interest is not as much manifested within as it is without the country schools themselves.

Long since has education been considered so absolutely essential to the welfare of the state that the government no longer leaves it to be provided by the parent, but taxes all property of all our citizens therefor. These taxes are not levied primarily to benefit the children but for the welfare and benefit of the state; not alone to impart knowledge but to make citizens. Educated citizens are absolutely necessary to make a prosperous and powerful state. While we are fond of saying that agriculture is the basis of all our prosperity, yet below and underlying it all fundamentally, is an educated citizenship, educated for life's work and its purposes.

The success of the school depends very largely upon the kind of men who are elected as the school board or directors. They stand near the people and have an immediate interest in the welfare of the school.
Organization is one of the strong factors in modern progress. Team work, perhaps, is a seasonable expression. It is the lack of organization that retards the country school, and the director is the coach, upon whom the outcome rests.

Attempts have been made to gain knowledge of the true conditions of the rural schools of Wisconsin. Twelve questions were asked of 1200 farmers by the State Superintendent, and the findings are not only interesting but I believe germane and valuable in this discussion; and I give you the result of this inquiry, which was sent out late in 1911. There were approximately 450 replies. The first question reads:

1. In general, are the country schools as they now are, satisfactory to you?.

To this question 150 answered, "Yes;" 34 answered, "Yes" but made suggestions and remarks. Approximately 250 answered "No," the schools were not satisfactory.
2. What, in your opinion, is the principal weakness of the country schools?

To which the following replies were made:
a. Poor teachers. Inexperienced, untrained, immature, lacking in power of discipline, impractical, uncoöperative, pushing children too fast and about 200 replies along this line.
b. Lack of interest and coöperation on the part of parents; carelessness, negligence, ignorance, and about 100 replies along this line.
c. School officers incompetent, negligent and lacking in powers of management. About 50 replying in this strain. 36 said schools were too small; 50 complained of poor and irregular attendance, 25 contended that there were too many classes for one teacher, 13 that there were too many studies, 13 criticized the lack of thoroughness in the fundamentals, 16 complained of the lack of equipment and many miscellaneous criticisms as; the distance to school too great, parochial schools breaking up the work, textbooks not adapted for country school work, lack of uniformity of textbooks, system of granting diplomas wrong, children quitting school at too early an age, teachers drawing children away from the farm, lack of moral and religious training, lack of agricultural teaching, do not carry children far enough in their studies, children disrespectful, etc., etc.
4. What remedies would you suggest for the weaknesses mentioned in answer to questions 2 and 3 ?

The following are some of the replies: Fifty suggested training the teachers, raising the standard for teachers, etc.; 42 advocated the consolidation of the schools, 23 suggested the enforcement of the compulsory attendance law; 28 suggested paying better wages to good teachers, 25 advocated stirring up interest by means of meetings, institutes, literary societies, parents' meetings, etc. You will be surprised to note that only eleven suggested better supervision. Among the miscellaneous suggestions we find, have fewer studies, do less crowding, have a high school in every town, more thoroughness in practical work, educate the school boards, prevent teachers from getting married, and several others.
5. Asked concerning the consolidation of schools, to which 174 were favorable and 76 against.
6. Do you think there is need of better teachers, more men teachers; if better teachers are needed, how can they be had? 225 asked for better teachers, 28 were satisfied. More men were advocated by 209 replies, while 205 answered in the negative. As to how better teachers might be had, the majority suggested to pay better wages, while a few placed the blame upon the county superintendent and more rigid entrance and graduation requirements for training schools.
7. Do the schools need a different course of study; what changes would you suggest? The replies were equally divided, 100 being satisfied with the present course and 100 for a change, suggesting that the course be made more practical, eliminate nonessentials, have more agriculture, more thoroughness in common branches, make civil government more practical, and more attention paid to morals and to manners.
8. Can the schools be made more useful in the community life? 165 answered "yes" and 13 "no." The suggestions offered are as follows: parents should visit school, teachers should visit parents, schoolhouses should be used for parents' meetings, debates, literary societies, farmers' clubs and in general as a social center. The work should be made more practical, beautiful school surroundings, etc.
9. Do community troubles (feuds, quarrels, etc.) interfere seriously with the welfare and the progress of the schools? To which 140 replied "yes" and 100 "no." As remedies it was suggested to elect capable officers, educate the people, hire strong teachers, consolidate, have social gatherings.
10. Do the people generally have an intelligent opinion as to what the school should do for the children and the community; if not, what is the remedy? To this question 56 replied in the affirmative, and 165 in the negative.
11. Is taxation for school purposes on a satisfactory basis? 154 answered "yes" and 47 "no."
12. Have you found any helpful forces at work for the improvement of country schools? 151 answered in the affirmative, and 25 replied in the negative. Of the helpful forces mentioned, are school board conventions, the training of teachers, county training schools, meetings of various kinds in the rural districts, compulsory attendance law, special state aid for rural schools; excellent work by the county superintendent, rural mail delivery, rural telephone, corn contests, etc.

The gist of these replies indicates that there is thought concerning the betterment of the rural school, and the rural school director who is alive to the needs of his school and community will make it a point to digest and put into execution the suggestions for improved conditions.

A further inquiry into the different rural schools of this state has been made through the public affairs board, report of which will soon be in the hands of school authorities. In this report it is shown that some of the schools are of a high character, some are far below what might be considered good average and the general average is not good.

It will be pointed out that the inefficiency of teachers and the inefficiency of supervision of teachers are two of the greatest weaknesses in the education of the state, as it relates to rural schools. It is shown that persons who have gone as far as the eighth grade even apply for certificates to teach in the country schools; they are poorly trained in fundamental and basic points of good teaching and when they get in to the work make it hard for those who are better fitted and really qualified to teach. In this regard we all agree.

In hiring the teacher for the school, the board has no easy task if the best interests of the school are at heart. True, there are usually many
candidates from which to choose, but it is also true that there are not so many suitable for the position they seek. The county superintendent certifies to the educational qualifications of the various candidates in certain enumerated branches, but he can give no assurance of their general knowledge, ability to manage, influence, or instruct children, or to inspire them to higher ideals. Nor can he certify to the ability or any teacher to meet and utilize to the greatest good to your particular people, the conditions prevalent in your district. The duty or finding and choosing the teacher possessing these qualities in the greatest degree falls upon the members of the rural school board. With the limited means and opportunity at their disposal they should exercise the greatest care to secure the best teacher available, all things considered, for the children of their district.

As soon as this duty is properly performed the next one is at hand. Now the attention should be directed toward making the teacher's work as far reaching and effective as possible. In many instances she comes almost direct from the city high school unacquainted with country life and conditions. She must now make her home among strangers. Often she has great difficulty in securing a suitable boarding place, and here is the first opportunity for the officers to lend a helping hand. The people of any district have no right to expect a teacher to labor among them unless they are willing to provide her with a suitable home, which will contribute not only to the bare necessities but in some degree, to her comfort as well, and the proper exercise of the influence of the school officers can do much in this line.

In seven cases out of ten the young teacher is no sooner provided with accommodations than there begins to settle around her that peculiar dislike for the world known as homesickness. If the school director is to do the best for the school he will see to it that the teacher enters upon her work in the best of spirits and when a teacher has been secured who is capable and is getting favorable results, no pains should be spared or liberal salary withheld in order to retain her services.

Coöperation in social matters, with the schoolhouse as the comroon center, should be encouraged, and all community uplift should be stimulated. An "appreciation day" might profitably be inaugurated. This idea I get from reading of the Washington Irving High School of New York City, a girls' high school, which celebrates each year what is known as "appreciation day" when the students express their thanks to teachers, school officers, parents and friends by inviting them to a festival. This seems to me to be a capital idea, but like Thanksgiving it should be more than an annual event and the real test is in purpose and accomplishment after school days are over. The lack of interest on the part of parents and school officials in some quarters is due to the misunderstanding of education, for the question is not infrequently
asked, "Does it pay to educate?" and is suggested by the use of the education that is afforded to some who do not make proper use of their advantages. It is certainly the directors' opportunty, if not duty, to make plain to pupils the obligation which is implied to a school district and to the country for the privilege of an education.

The members of the Committee of 15 , who have been studying the rural school problem in connection with the state superintendent's department, are quite agreed that the lot of the county superintendent is a hard one and that lack of proper or sufficient supervision is one of the drawbacks to progress in rural education. Recommendations have been made; it should be the duty of the country school director to study such investigations and reports as are made concerning rural school progress and lend his aid to bringing about the changes for betterment in supervision, sanitation, better equipment, more comfort for jupil and teacher, more attractive grounds, and all that will contribute to improved country life conditions.

## HISTORY CONFERENCE.

## THE TEACHING OF HISTORY BY TYPE STUDIES.

Howard C. Hill, Milwaukee, Wis.
Among the chief delights of history are its inexhaustibility, its wide scope, its variety of material, its multiplicity of events, personages, problems, interpretations. The misuse of these very charms has too often defeated what, to my mind, should be one of the main aims in the teaching of history, viz., the acquisition by our boys and girls of a genuine love for history so that when school days are over and the textbooks all closed they will return again and again with ever increasing delight to its pages. Instead of finding history such an inexhaustible source of satisfaction, however, many of our pupils, unfortunately, conceive an actual distaste for the subject. This distaste, I believe, is largely due to the presentation of history by text and teacher as a summary, as a mere list of men, events, dates, etc., the memorization of which is too often emphasized as the chief end in life. Naturally history has, in consequence, seemed unrelated to this present day, its men and women mere automata without movement or interest, and the whole subject as dry as dust-and a bore. This lamentable result has come, in my opinion, from the attempt of text and teacher to cover too many topics in too short a time.

Now by the type method advocated, it is proposed to cut the Gordian knot by teaching fewer events, treating fewer topics, presenting fewer problems in the time at our disposal and thereby secure sufficient time to present the events, topics, problems selected in a fuller, more interesting, more life-like manner than is possible under the usual method. Only in that way, so far as I can see, will we be able to show our students what history really is, and with the knowledge of what it really is there will come, I hope and believe, a genuine, life-long affection for it.

By this method, it is proposed to cover the periods recommended by the Committee of Seven, but to reduce the important subjects treated to a minimum, to select in each period that which is typical, to choose from it type studies, and to treat them so fully as to give life and meaning and interest to what otherwise would be dry bones. To carry out this method two things are necessary: first, the presentation of a type in as realistic a manner as if one had lived through the experience; second, the expansion of the type by comparisons.

As an illustration of the type method, Dr. McMurray, in an admirable little study of the Virginia plantation,-after presenting in rich concrete detail a typical plantation, with its tobacco fields, forest lands, great house, and numerous adjacent buildings; with the various groups of slaves, overseers, and white families belonging to it; with its patriarchal life, its lavish hospitality, its monopoly of political influence, its primitive state of agriculture, (thereby presenting the type in a vivid, realistic way) goes on to the much more important matter of expanding the type by pointing out how the plantation system determined the social, economic, and political organizations of the South, its dependence upon slavery, and, by way of contrast with the North, its absence of cities, its lack of free schools, its dearth of manufacturers, its great landowner type of statesman, its "poor white" class, etc. As a result of such a study, the effects of the Navigation Laws on the South are clarified; the influence of Whitney's cottin-gin is seen; an appreciation of the southern aristocracy in its good and its bad features is made possible; a proper idea of slavery is obtained; an understanding of the causes that led to the Civil War is conceived; the way for a correct appreciation of the perplexing problems of Reconstruc-tion-that most difficult period-is prepared; and much light is thrown on the political and industrial conditions in the New South of to-day.

In like manner, the New England town can be used as a type study, and when its salient characteristics are worked out in rich detailits town meeting, its democracy, its religious hierarchy, its small farms, its commerce, its free schools, its manufacturers, its cities-and the whole compared with the plantation of the South, the essential differences between North and South that have played so large a part
in our history as a nation will be understood so clearly as never to be forgotten. And around these dominant ideas-plantation in the South and town in the North-will be gathered great masses of detailed facts in their proper places of subordination.

Surely such a study is worth while, and certainly few things are more interesting to young and old than these comparisons which vivify history and which make it possible to understand one period or one institution by its similarity or difference to another.

The chief thing then in the type method is to select a few important appropriate topics having interpretative value, to treat such types in great fullness and richness of detail so that clear, definite, life-like, interesting images are presented, and then-the most important part of the method-to expand these types by comparison so as to give meaning and organization to the whole field of study, and thereby awaken affection, stimulate effort, and suggest thought. By such a method, I believe, a genuine love for history will be created or stimulated, and the subject itself will come to have, for all who study it, a vital interest and a permanent value.

There followed a brief discussion by Principal Ira C. Painter, Wausau, Wis.

## USE OF THE LANTERN IN HISTORY CLASSES.

Gertrude Hull, West Division High School, Milwaukee.
This is to be a simple talk about what has actually been done under rather adverse circumstances, with the lantern in the history classes of the West Division High School. But I cannot forbear to say a word about my ideal of a history laboratory for a high school. I believe a high school should be equipped with such a room, just as they are with science laboratories. I should have the pupils spend a school period a day there studying their history lessons. In this room should be history reference books on open shelves, wall maps and atlases, dictionaries, gazetteers and encyclopedias, pictures and busts and quantities of pictures, models and historical relics in accessible places, and a lantern for slides, and a reflectoscope for flat projections. And this room should be used for nothing but history study.

Two years ago you heard Mr. Parlin talk very interestingly and instructively on the use of lantern slides in history. I wish you might hear that all over again. The point I wish to bring you to-day is a little different from that, it is the use of the reflectoscope. Lantern slides cost money and a good deal of it if you have any wide range of pictures. With the reflectoscope the cost is practically over when you
get your lantern set up. A reflectoscope may be bought for from $\$ 10.00$ up to $\$ 75.00$, some of the cheaper ones giving yery good results. Or a reflectoscope attachment may be added to a stereopticon. The pictures cost next to nothing, and you have a wide range of subjects. The search for pictures becomes an interesting pursuit, friends and pupils will be drawn into it and will make valuable contributions. I keep one drawer in my desk as a depository for pictures. Into it go all sorts and kinds that bear on history. Then occasionally there comes a pasting bee, when the pictures are carefully trimmed and neatly mounted with their labels on pieces of gray cardboard. The chief source of supply has been postcards, Perry pictures, university prints, magazine illustrations, book illustrations, photographs. These are sorted into periods and subjects. When a class has completed a period, it is taken to the room where the lantern is and the whole period is used in showing and talking about the pictures. It is made as entertaining as possible as well as instructive. The pictures should be a great help in arousing interest. Woodrow Wilson once said that "the human mind is admirably equipped to resist the entrance of knowledge." Pictures may be one means of getting a little knowledge past the defenses into the mind.

I would rather a pupil would finish a course in history with an interest in it and a real liking for it,-a desire to learn more of it,-with an appreciation of the spirit of the different times and nations,-even if his knowledge of detailed facts was not so great as we might wish, than to have him finish with a large body of facts, but a distaste for the subject.

Pictures and good historical fiction will aid high school pupils, yes and older ones too, to visualize their facts. It seems to me that those who say they do not like history, are lacking in historic imagination. It seems impossible for one not to like the story of humanity, if they have any correct idea of what that story is. In order to make it live and real they must have an imagination which will use the facts they learn to build up a picture of the past. Pictures will help them do this.

I am not above showing them occasionally imaginary pictures of historic incidents that have been painted by artists for the true artist has a better imagination and a better conception of the setting, than the high school pupil. But I am careful to distinguish between an authentic picture of an actual object or portrait, and the imaginary one and most of the pictures should be authentic historic reproductions.

The scope of the pictures should cover various sides of the human story, music, architecture, sculpture, painting, literature, science, invention, as well as kings, battles, statesmen. Whenever possible use
what will illustrate the life of the people-such as the old methods of spinning, weaving, agriculture, etc., and compare with the present.

Some of the subjects that should be illustrated with pictures are the following: Egyptian, Greek, and Roman architecture and sculpture, Medieval castles, cathedrals, art, exterior of houses and streets in Medieval cities.

Scenes connected with the life of Luther, Cromwell, Napoleon, etc.
In U. S. history, colonial and revolutionary, and civil war scenes, portraits, literary shrines, authors and their homes, old means of transportation as compared with the present, etc.

Following the talk, the reflectoscope was used to show the use of various kinds of picture material.

Miss Katherine Skelton, West Division High School, Milwaukee, followed with an account of how she secured the coöperation of students in adding to her collection of pictures for illustrative purposes.

## AGRICULTURAL SECTION.

The chairman opened the meeting by giving the history of the section.
"The Rural High School" was presented by Prof. Ernest Burnham, Kalamazoo, Mich. He said that the high school demands instructive criticism. The rural high school is growing in enrollment. When we get a high school that fills the need of its patrons it will grow still more rapidly. The rural high school must prepare teachers. It should have a course of instruction suitable to the locality. Lines of agriculture are eminently fitted for rural high schools. Such schools await prepared teachers, and are in danger of unprepared teachers. The course of study need not be much divided. The high school should be large enough to have some specialized teaching. It should be in driving distance of its patrons.

These schools should offer much general education. The rural life should be studied in its various social relations.
"Community Service in Agricultural Teaching" was presented from three viewpoints.

Theodore Sexaner, Prof. of Agriculture, Albert Lea, Minn. presented the subject from the standpoint of the high school. The first year in his high school, farm crops were studied. The pupils tested the farmers' seed corn and corn testing associations were formed. The second year animal husbandry was studied, the third year, farm mechanics, and the fourth, soils and horticulture.

He said that it is cheaper to put the agriculture in a regular high school naving three units of culture and one of agriculture each year than in a special school.

## THE COUNTY AGRICULTURAL SCHOOL.

J. F. Wojta, Principal, County School of Agriculture, Menominee, Mich.

There never was a time in the history of our country when the desire on the part of the public for technical and practical agricultural education was greater than it is to-day. The public has grown more selective in their tastes. They want better things to eat and to wear. Things must be put up better to-day than they were ever before. They cannot wait to send a few chosen sons and daughters off to college to study for a number of years. They must get results quickly. In many cases farmers haven't the means to send their boys to study for several years in college.

The County Agricultural School is therefore established to meet these needs more immediately in a community. That is, the county agricultural school should stand in the same relation to the county that the agricultural college stands to the state, the county being the unit in the one case and the state the unit in the other. The agricultural school and the agricultural college should at all times work in harmony with each other, one to assist the other in all things promotive of good among its farmers.

The county agricultural school is a special school, and it should be a school whose work should be representative of the kind of work most needed by the farmers of that county. The work of the curriculum should be particularly adapted to the needs of the county. If the county is raising or is fitted to grow fruits and roots, then these two phases of farming should command the attention of the school. If dairying is important then it should receive due attention. In short the school should attempt to bring about the solution of problems that confront the farmers of that county and community.

The purpose of the school should be to furnish its young men and women a thorough practical and scientific course in the work that pertains to their farms and farm homes. The school furnishes opportunities to men and women who could not attend a college for a long number of years, either because of limited means or the want of entrance qualifications to the agricultural college. The school of agriculture should primarily educate the boys and girls for the farm; create a love and an interest for farming and for further advancement in agricultural work.

The curriculum should be carefully planned with a balance ration in studies and the right proportions of each to be given should be carefully studied. The work of the county agricultural school should not be catirely measured by the number of students that are in attendance. But rather measured by the kind of work done and the good that
radiates from it to the farmers of the county through its extension work.

## COMMUNITY SERVICE FROM THE VIEWPOINT OF THE GOUNTY AGRICULTURAL REPRESENTATIVE.

E. L. Luther, County Representative for Oneida County.

In speaking upon the subject "Community Service in Agricultural Teaching from the Viewpoint of the Agricultural Representative" it has been thought best to set forth what has actually been accomplished in nine months of work and then let those gathered here determine the success of the plan.

The speaker arrived in Rhinelander, Oneida county, on February 7, 1912. Since that time active work has been carried on.
An office has been established in the court house which has become the centre of the work. The office has been equipped with necessary furniture, books, farm papers, bulletins and other means of information.

Work began in the County Training School on February 12. A class of fourteen seniors received one period of agricultural instruction daily until the time that school closed in June. A Short Course for farmers' boys was arranged and continued for seven weeks. Fifteen boys took advantage of this work. Five more or less irregular students also took work. Several high school boys took work on Saturdays. One period a day during the time of the Short Course was set aside for regular farmers to call and receive help. Quite a number availed themselves of this opportunity. A Farmers' Course of three days was conducted in March. This was said to be one of the most successful things ever done in Oneida county.

Trial plats were run on the grounds of the County Fair Assoctation as follows: 8 for alfalfa, 4 for liming on clover seeding, 4 for soy beans, 2 for Wisconsin No. 8 corn, 1 for quack grass eradication and 1 for potatoes. All of these were successful except the clover seeding which burnt out in dry weather. Most of the work was done by the speaker. A very successful meeting was held at these plats in August and from time to time they have furnished observational lessons.

Trial plats are in operation on farms about the county as follows: 35 to alfalfa, 60 to liming on clover seeding, 1 to Wisconsin pedigree rye, 1 to Wisconsin pedigree wheat. 2 plats were run to soy beans and 12 to Wisconsin pedigree No. 8 corn. These plats for the most part are very satisfactory.

25 meetings have been addressed at various points in the county at which there was an attendance of about 1200 .

125 farm visits have been made, a good many of them by request, and the cropping system of one farm was projected. The results of the season on this farm were very successful.

It is planned to make Oneida county a dairy county. Consequently the development of this work is put uppermost. The Wisconsin Live Stock Special was secured for the county and about 600 people met the train. The Oneida Guernsey Club has been organized. A community breeders' association has been organized at Monico and a pure bred Guernsey sire secured for the association. Twice during the summer trips have been made to Waukesha county to get stock. Farmers have been induced to use milk scales and milk sheets to determine productiveness of cows. The use of the Babcock test has been extensively taught in the county. Four silos were built in this new county this summer and this was due in large measure to interest aroused by the representative.

All summer the county fair required assistance from the representative.

The recent successful meeting of the Wisconsin Potato Special train depended in no small measure upon the work of the representative.

All summer there have been almost daily conferences with farmers in the field and at the office, at times several a day.

The correspondence is large as a result of calls for help by farmers and requests for information by outside parties.

As seen by the speaker this plan seems to be most effective for the following reasons:

1. It is least expensive of any method of doing community work in agriculture. It calls for the salary of one man. The other expense for this first year will hardly exceed $\$ 500$ and much of that is inventory.
2. No great buildings or extensive equipment have to be acquired before work can begin.
3. The school goes to the people. They do not have to go to school. Instruction touches all of the people vitally and meets immediate requirements. It solves problems.
4. It offers the services of a man to be applied where necessary and at once.
5. It furnishes an ever present source of inspiration to farmers.
6. It furnishes a point for coöperative enterprise.
7. It furnishes some one to study the immediate farm problems,
8. It connects the farmer with the College of Agriculture,

## PHYSICS AND CHEMISTRY SECTION.

The Science Section of the W. S. T. A. held its meeting at 2:15 Friday, Nov. 8th, in the Science Room of the North Division High School, Superintendent George F. Loomis of Waukesha acting as chairman and Superintendent T. J. Jones of West Allis as secretary. The program was exceptionally strong and ably presented by some of the best known Science men in the state. The attendance was comprised of about eighty men and women interested in the teaching of Science in the Secondary Schools of Wisconsin.

## BOYS' WORK IN CHEMISTRY.

Supt. Fred Thompson, Menomonie, Wis.
Chemistry was one of the later sciences to find a place in our high school courses. It appeared at a time when the languages and mathematics were the dominant studies. Taught in poorly equipped laboratories by unprepared teachers, it has had to struggle for years to prove its right to a place in our curriculums. However, when we remember that some of the world's most famous laboratories have been practically destitute of apparatus, we decide that we must look elsewhere for an explanation of the figures recently sent out by the U. S. Commissioner of Education to the effect that the per cent of high school students pursuing courses in Chemistry has decreased in the past twenty years. How can we explain this decrease when we are continually reminded of the daily increase of the applications of science to industry? In the majority of our high schools Chemistry is an elective study. From this it is evident that our high school students have considered a knowledge of Chemistry of less importance than a knowledge of the other sciences. I believe that the judgment of our pupils is correct; that Chemistry courses in the past have not given them usable material in return for their efforts.

Boys and girls have pursued the same course regardless of the fact that they will follow entirely different lines of work after completing school. It has taken us years to come to an appreciation of the value of segregation in the sciences. I believe that the time will come when there will be complete class segregation in all lines of class work from the sixth grade through the high school. But even in those schools, where for convenience or experiment's sake segregation has taken place, we find the majority following practically the same outline for
both sexes. Last year I visited a class in Chemistry in one of the most costly and best equipped high schools in the United States. The instructors told me that conditions in every respect were ideal, and yet I found that they were not deviating a single experiment from the work of the prescribed text; a text which is used in a large percentage of Wisconsin schools.
Although the socalled practical or applied courses in science have been advocated for years, we find few evidences of their introduction. Schools are naturally conservative. This is due, in a large measure, to the teachers. Chemistry courses are largely in the hands of men teachers. The young man fresh from college, going into a strange community, unfamiliar with local conditions, supervised many times by a superintendent who has specialized in history, English or mathematics, will resort to the only plan available, and teach, without question, the adopted textbook. If he is an especially strong man, his stay will be limited in the average school to one or possibly two years. Larger schools with larger salaries tempt him to leave his work. Few indeed are the schools that are able to hold a science man long enough to enable him to put into operation what he really believes to be a practical course. Science teaching has never been a profession. It has been a stepping stone for the college graduate to the high school principalship, city superintendency, dentistry, medicine, or some line of business. Science teachers are better paid than teachers in any other line and yet they are the most difficult to obtain and the most difficult to hold. In our high school we have had four men in five years to handle the science work. We are paying what we think is a good salary, but not so good as our neighbors pay. If there is any place where state aid is needed in school work, it is state aid to hold our science men. If not state aid, I feel like suggesting that other cure-all for all evil-a commission to investigate. I believe, however, that the majority of our schools feel the need of a change in their science work; that it ought to be made more practical; that it ought to deal with problems in which the pupil is daily concerned.

On the other hand, the discussion in regard to education for efficiency has led many to believe that all high school subjects can be vocationalized; that many high schools are giving courses in applied science that enables their students to enter the lines of industry closed to the ordinary high school graduate. Many have the impression that in some high school courses the chemistry of iron and steel manufacturing is treated in such a manner that the student would be welcomed with open arms by the magnates of Gary or Pittsburg. Nothing is farther from the truth. High school work cannot be vocationalized. It must always remain essentially elementary. It adds to the equipment of the student for life, but it is in no sense a preparation
for life. The boy who has had a strong high school course in electricity will make a far better apprentice in an electric light plant than the one who has never studied the subject, but he will not be able to run the plant. Not until our high schools are completely reorganized; not until the trade school supplants the high school, if such a thing ever happens, will it be possible for us to administer courses in applied science that will materially affect the wage earning power of our graduates.

Opinions vary widely as to the amount of time to be given to laying the foundation for the applied chemistry. Some schools are devoting one semester to the study of the elements, acids, bases and salts, etc. and the second semester to the so-called applied chemistry, while others are taking up the applied work early in the year. The latter plan is, I believe, much more successful when tried with a class of girls than with a class of boys. In other words, the nature of the experiments in applied chemistry for boys requires a broader knowledge of chemical terms, more skill in the manipulation of the apparatus than do the experiments in applied chemistry for girls. I believe, therefore, that a few weeks in a course for boys should be devoted to laying the foundation for the applied work. Some things are fundamental. The pupil must learn the most elementary formulas. He must learn to think in chemical terms.

After such foundation has been laid, the wise teacher will consult local conditions. No course can be written in any branch of science that will meet the requirements of all schools. Every community has its industries, every community has its problems. For example, in Southwestern Wisconsin it might be advisable to devote considerable time to the study of lead. But I believe that any good textbook on chemistry more than furnishes ample work in that subject for the average high school. If I were teaching at Grand Rapids, Neenah, or other paper manufacturing centers, I would emphasize the chemistry of paper making. All manufacturing centers have industries which are peculiarly adapted to that section of the state. At Menomonie brick-making is one of the important lines of work. The study of the clay and the making of a sample brick are perhaps one of our most interesting experiments. However, in a part of the state removed from all clay working lines, I would by no means spend time on that experiment. There are, however, certain lines of work either common to all sections or their products are in every day use by us all. By a study of these, the student becomes familiar with the world about him. He becomes interested in the study of chemistry. The nine or ten topics selected will require at least one semester's work. The topics I would mention for special emphasis in all high schools are as follows: water, milk, soap, sugar,
paints, soil, iron, coal and cement. In the study of these topics we should not forget that the high school is no place for chemical analysis.

No topic should receive closer attention during the entire course than the soil. Found everywhere, all people dependent upon it, directly or indircctly, its fertility easily exhausted and many times restored wih difficulty, it behooves us, in all lines of work, to conserve it in every possible way.

Cement is so new in industrial lines that its study has scarcely found a place in our texts. However, when we take note of its ever widening use in all lines of construction work, and observe daily the examples of defective work, due in a large measure to imperfect knowledge of the material, we can readily see that it reserves no minor place in our course.

What more interesting or valuable experiment can be made than to test out in the laboratory the amount of carbon in the different kinds of coal? The parent of ncarly every pupil we have will debate in his own mind this very question during the next few months. Why not have our laboratories answer it to a certain extent for them? Similar questions may be answered in regard to illuminating gas. Speaking generally, the courses in chemistry should aim, above all things, to answer the puzzling questions that arise in everyday life. I might mention two or three that I have heard in the past few days to illustrate what I mean. "Why will plants not live in a house where gas is used for lighting purposes?" "What is the value of oil in paint?" "Why are new cement walks sometimes covered to prevent evaporation?" Hundreds of such questions will arise during the year. The answers cannot all be found in textbooks. The proof cannot always be worked out in the laboratory.

While the greater part of all work in chemistry must necessarily be done in the laboratory, I believe in the past we have been slaves to the test tube. We work out the experiment but fail to take the class out into the world to see its application to industry. The chemistry instructor is many times fearful that he will trespass upon the ground of the physics, botany or agriculture instructor. I sometimes feel as if I would like to see all divisions of high school science into separate branches abolished and have in place of it four years of general science, or better yet, plain nature work. Let the boy see that the laboratory is a place to answer the everyday puzzles instead of proving Boyle's Law and producing sulphuric acid, and the next twenty years will not show a smaller per cent in our chemistry classes or so few high schools offering courses in that subject. More than $30 \%$ of our high school pupils who have the privilege of election, choose chemistry in preference to other subjects. During the present school
year we have 277 enrolled in our high school. Of this number 65 are taking the chemistry course. This large number electing the chemistry work, a course in which we have a larger number of fallures than in almost any other subject, seems to me to be directly due to the fact that in the past few years chemistry has dealt more with problems that were vital to the pupil.

## A GIRL'S COURSE IN PHYSICS.

Isabel Johnson, Milwaukee Downer.
The feeling of dissatisfaction with the course in physics for girls seems to be quite general among teachers. A subject which should logically be interesting and even fascinating at times is difficult and too often uninteresting. Twenty years ago the fact that a subject was merely hard or uninteresting would have given us no concern. We have been developing a conscience with our experience and today no teacher argues that a subject which doès not meet the needs and the serious desire of the student is profitable. There is then a just cause for concern and inquiry into the reason of our failure.

Many reasons have been given to explain our apparent failure in teaching physics to girls. Some say that we have loaded our studies down with mathematics and our students get so entangled in the mathematical processes of the problem that they fail to see the principles; others, that physics is too difficult for girls,-their minds are not capable of understanding it,-others, that physics lies outside of a girl's experience and she can have no real interest in it and cannot get any real benefit from its study; and still others that tie study of physics is all right-we have simply overloaded our course with material and if we will but use care in selecting our material it can be made all that we desirè.
Last year when I began to teach physics in Milwaukee-Downer Seminary I did not feel that I had either the data or the wisdom to select the real reason for difficulty nor to plan a course to meet difficulties if I should find them. I determined thereiore to make the work of the year an experiment for the purpose of discovering two things:
(1) What subjects were too difficult and
(2) What were uninteresting.

I selected Millikan and Gale's textbook and laboratory Manual and gave as nearly as I was able, a standard course in physics. We devoted four hours a week to recitations and four to laboratory
work. When long experiments were to be performed we used both periods for laboratory work and the following day used two periods for recitation. I purposely made the course as informal as possible so that I might be sure to get the viewpoint of the girls on the work. We worked together as a family might on a set of puzzles where each was allowed to make suggestions and comments at any time. I tried to make the girls feel it their duty as well as their privilege to ask questions at any time even if it meant stopping the recitation in the midst of an explanation which was not clear. The girls worked conscientiously and I believe did their best to help me in my experiment.

At the beginning of the year I made out a time schedule alloting to each subject the amount of time I thought necessary considering its length and importance. This I laid away and began my work with the determination to teach whatever I taught thoroughly.

It was not long before I discovered on referring to my schedule that I was using just about twice as much time for a subject as I had allowed. I then went through my text and cut out whatever I thought possible without materially changing the course. I still used too much time but after considering the matter thoroughly I decided to rush the work through without doing any more pruning; to teach as thoroughly as possible, but to leave the subject after a reasonable time had been spent and depend on outside work and the girls' own efforts to clear up as many of the doubts as possible.

Time and time again after the time had been used I heard such compliments as these:
"Miss Johnson, I do not yet understand."
"I cannot work the problems. Please do not give us any in examination."
"I cannot see any sense in this principle. Why must we learn it?"
"I hate this subject: I hope we will soon be through with it."
Why did they "not understand?" Why could they "not work the problems?" and why did they "hate?" My answers to these questions explain why the girls found the work too difficult and why they found it uninteresting.

First, because the course included too much material. The truth of this statement is perfectly obvious from what I have already said in regard to the course. It was absolutely impossible to give the course and give it thoroughly in one year's time.

Miss Latimer, a teacher in the Woman's College in Baltimore, says on the subject of Science in Secondary Schools that the courses have been overloaded by people with over enthusiasm to see justice done to their subject, until so far as the girls of our schools are concerned the courses are entirely unsuitable. To quote her own words: "Our pres-
ent trouble has arisen from the fact that the execution of those principles has been carried out by the followers in the crusade for science, who are invariably as far from the right understanding of the cause which they support as was the unreasoning multitude led forth by Peter the Hermit."

Miss Latimer takes an extreme position with regard to science. She sees in every girl a potential wife and mother, and believes that her training in science should be confined to the sciences of life. She is a biology teacher and sees most that is good in her own subject. I cannot entirely agree with her. There is a great deal in physics that may be of great value to a girl in her home.

Second: The course demanded a better mathematical foundation than the girls possessed.

I found the girls unable to solve a simple algebraic equation; decimals seemed to have been entirely forgotten and although geometry was better, there seemed to be a great deal of uncertainty about some of the most elementary parts. Please do not misunderstand me here. I am not criticising teachers of mathematics. These very girls had once, no doubt, been carefully taught their mathematics but I fear that that peculiar interest which is necessary in order that any student may completely master his subject and make it his own, was sadly lacking when most of my girls did their mathematics. The same experience has been repeated this year and I begin to suspect that girls are generally poorly founded in mathematics.

I am not arguing, however, that the mathematics should be left out. Prof. Kester of the university of Kansas writes in a book on high school education edited by Prof. Johnson of the same university that mathematics has an important place. In his own words"The further claim that the use of algebra and geometry to express the quantitative relations handled in the classroom or in the laboratory, serves only to confuse the progress of the pupils, and that they use their mathematics merely as a tool for the obtaining of certain results which would be reached better by reasoning, is one frequently advanced. There is indeed some ground for the fear that pupils will accept a mere symbol with which to work rather than the definite physical concept for which it stands; but the function of a physics teacher is to see that proper physical concepts shall be formed. With this accomplished, the distance which the pupil can go in the science in a given time and with a given amount of energy with the aid of his algebra and geometry is far beyond his reach without this aid. The instructor should keep in mind always the fact that the mathematical part of physics is a device for the economy of energy rather than an end in its self."

Prof. Kester is assuming that the mathematical elements are at his student's command. Because they are not in fact, makes it necessary to teach them as one is teaching physics. To teach both all these elements and the physics required, is impossible in one year. I have only my own meager experience to bear me out in this statement. To test it for yourselves I suggest that at the beginning of the year you send your girls to the blackboard and give them simple problems like the following:
(1) Find the force acting on the bottom of a box two meters long, three meters wide and four meters deep filled with water. I predict that you will find several dividing by 1000 to reduce grams to kilograms.
(8) One kilogratm of alcohol is poured into a cylindrical vessel and fills it to a depth of 8 cm . Find the diameter of the cylinder. How many do you suppose will be able to extract the square root correctly?

Continuing the subject, Prof. Kester says:
"No better fleld than physics can be found for the concrete application of the simple processes of high school algebra and geometry. The trouble under discussion does exist-I have met the results of ten enough-but the solution lies in strengthening the course by the use of better textbooks and by better training of our teachers rather than in the future dilution of the content."

Of course, there is always room for improvement in the teacher; but it is in regard to the textbook that I want you to find my third reason for difficulty.

Third: Many of the lessons dealt with machines the girls knew nothing about and presupposed a knowledge of mechanics which they did not have.

As you gentlemen think over the work in physics, you will probably find it hard to think of even one that is essential which girls will not know. I have a list of machines which I think will be found in all textbooks but which girls usually have never heard of until they take up physics.
(1) Inclined plane (2) Fly Wheel (3) Hydraulic Press (4) Pulley (5) Jack Screw (6) Capstan (7) Pile Driver (8) Turbine (9) Ammeter (10) Volt Meter (11) Electric Battery (12) Dynamo (13) Motor (14) Transformer.

Many of the problems are troublesome because they are based on machines which are very well known to boys, but about which girls know nothing. To explain this I will illustrate with some of the problems in our text.

On a certain page, following the discussion of density is a set of very practical problems and apparently very harmless ones. I did not see anything difficult about them as I looked them over in ad-
vance and assigned them with a clear conscience. I was very much surprised to find the next day that only one girl had done any intelligent work on them. I will give you the first five of the set.
(1) The hull of a modern battleship is made entirely of steel, its walls being steel plates from six to eighteen inches thick. Explain how it can float.
(2) If a barge 30 ft . by 15 ft . sank 4 in . when an elephant was taken aboard what was the elephant's weight?
(3) Will the water line of a boat rise or fall as it passes from fresh water to salt water?
(4) If the density of ice is .917 and that of sea water 1.026 , what is the total height of a mass of ice of uniform cross-section which rises 100 ft . above water?
(5) If each boat of a pontoon bridge is 100 ft . long and 75 ft . wide at the water line, how much will it sink when a locomotive weighing 100 lbs. passes over it?

The reason for the failure as given by the girls themselves was somewhat on this order. "We do not know anything about battleships; we never saw a barge nor an iceberg and never heard of pontoon bridges." Thinking that this was only an excuse to get out of some mental labor, I tried the effect of a little accusing. "If they did not know, why had they not been finding out? What were the afctionaries and encyclopedias for if not to find out such things."

I found that they had looked up what they did not know and two of them could draw diagrams of barges on the blackboard. "No barge that they could find was anything like this one; icebergs were not uniform in cross-section and pontoon bridges were never of such dimensions as these problems stated and what in the world to do when there were not enough dimensions given to enable one to work a problem, they did not know."

It seems strange that these girls did not use their imaginations and their common sense to interpret the conditions well enough to work the problems. It was not because they were dull, however, for these same girls worked the problems on falling bodies without any trouble and made no complaint about the laws as being difficult. The reason was, I believe, that I taught the laws of falling bodies thoroughly and the text gave the work carefully and clearly while on density we took for granted a certain amount of general knowledge which was lacking.

This apparent inconsistency is cleared up when we compare the general knowledge of a girl with that of a boy. I never go down town on an afternoon after school hours that I do not see a crowd of little boys standing open-eyed and open-mouthed before a stons crusher, building crane or other construction machine, trying to un-
derstand how "the thing goes." One never sees a crowd of girls in such an occupation. Her lack of opportunity to learn these things gives a girl a handicap when she comes to the study of physics. A girl's interest in mechanics is the same as that of a boy once it is aroused and the opportunity to satisfy it is given. It is not natural, however, for her to have it unless something has been done to awaken it. I never bring a model of a hydraulic press or an engine to my table that the girls do not cluster around and try to make it work. Our problems and the applications we make are boys' subjects. Our textbooks are written by men with a boy's general knowledge in mind. Some of the most troublesome sets of problems besides those mentioned are on hydraulic pressure, levers, pulleys, power, and mechanical equivalent of heat.
The principles founded on simple machines are also very troublesome. I have made a list of some of those that were not thoroughly understood after a reasonable amount of time had been spent upon them. (1) simple machines (2) specific heat (3) efficiency (4) steam power (5) electric power (6) water power (7) momentum (8) expansion due to heat (9) hydraulic pressure (10) loss of power due to friction (11) electric resistance (12) electric capacity (13) electric transformers (14) ammeters (15) volt meters (16) dynamos (17) arc lights.

To contrast with these, I have a list of principles which the girls found easy and enjoyable (1) barometers (2) molecular motions and forces (3) evaporation (4) precipitation (5) thermometers (6) conduction and radiation (7) convection and ventilation (8) magnetism (9) electrification (10) sound (11) light in all its phases.

One of the girls told me that she "just loved sound and light" and she wished that we might have studied them the whole year and left out "those awful machines." It seems perfectly natural when we remember that these subjects lie nearer a girl's experience.

The fourth fault with my course was that it was not practical. It would have been practical enough for boys. Modern business is closely related to industry and industry is related to mechanics, and boys find many uses for a good general knowledge of mechanics. Please do not understand me to be claiming that I am capable of giving a course in mechanics which would be practical for boys. My course was one which would have been practical for boys if it had been taught by a capable man. For girls it was entirely unsuitable. Girls have very little to do with machines, excepting those they will use in their own homes. For that reason if they are given work in mechanics at all, it should be with the mechanics which they must know. It would be both unnatural and unsuitable for girls to be interested in mechanics about which only men need to know, unless of course
women are to be trained to go on encroaching upon the sphere oi men's work to the neglect of their own. It is a waste of time to spend so much time on machines of industry when there are so many labor saving devices in the home now which are founded on the same principles as those outside.

Now, as to how I plan to correct my course for this year to meet the faults. I have pointed out.

Before cutting down my material, I felt that I must have a purpose for my course to which I might fit every subject I taught. I have decided to put the cultural side of the subject first in importance and after that the practical. In our desire to be practical in these days we often over-emphasize what is strictly practical, forgetting that all knowledge which broadens one's viewpoint, gives him a sense of proportionate values and casts out superstition, is really practical. I would leave out none of the laws and none of the physical principles we are now teaching. The details we teach may be forgotten but the general laws will be remembered and applied over and over again with benefit if they have once been learned.

I shall leave out all unnecessary machines such as the locomotive, the turbine, the dynamo, the capstan, the condenser, the X-ray apparatus, the telegraph apparatus, etc.

The whole subject of mechanics will be passed over easily and what I teach of it will be along the line of such machines as the furnace, the gas stove, the electric iron, the electric meter, the gas meter, the electric washer, the vacuum cleaner, etc. I shall leave out all problems dealing with unfamiliar objects and shall substitute new problems wherever possible. I have not been able to find a set I think suitable and I presume I shall have to make my own.

Drill in elementary mathematics is being given this year in connection with problems which I think unsuitable to assign for outside work. After the conditions have been carefully explained for such problems the students are sent to the board and required to work out the results individually. While working the weaknesses in their mathematics come up and I have found it a saving of time to take these opportunities for strengthening the mathematics.

It has been claimed that problems are necessary as introductions to the subject of physics. There is a better introduction to be found in history. Most girls are naturally fond of history. It is characteristic for a high school girl to be a hero-worshiper. Stories of early scientists who have worked on the problems we find formulated into laws with perhaps the story of the original experiment, seem to zive the subject interest, a human touch and a connection with knowledge they already possess. These stories I have gleaned from Buckley's Short History of Science, from Popular Science Monthly and other mag-
azines. Newton, Galileo, Torricelli, Pascal, Boyle, and Archimedes are some that have been studied this year.

Always before this year, I have had trouble in getting the work started. This year we began with a review of the tables of English measurement, the difficulties arising from it were easily brought out, and the difficulties that might arise if a foot of different lengths were used in trade between neighboring countries. The subject of the metric system followed naturally, and while that was being learned I kept up the interest by giving a short history of science from the Greeks and Arabs through the Renaissance.

The subject of density was started without that feeling the girls so often have of being a "stranger in a strange land" with regard to the beginning chapters.

I am not yet sure how to carry out my course. I am having a diffculty in being forced to consider the college entrance examinations as some of my girls wish to offer physics for credit to the eastern colleges. Just how I am to compromise between what I consider the ideal or proper course and the required, I am as yet unable to say definitely. I shall coöperate with the Domestic Science department as far as pos. sible. Exhaustive studies will be made in heat and ventilation, combustion, etc. Mr. Walter Whitman of the Normal School at Saiem, Mass. has worked out a course in laboratory for girls which carries out this plan very fully. Doubtless some of you know of his work. Studies on efficiency in his course deal with the gas stove, the kerosene stove, the alcohol stove and the electric stove. Most of the experiments are qualitative but a few quantitative experiments require the relative costs of using the different kinds of fuel in the household. Refrigerators, fireless cookers, flat irons are tested for efficiency and studied carefully in construction.

Some teachers criticize the note book as being a burden and as requiring time which could be better spent in study. There is a danger in requiring too elaborate drawings of apparatus or in requiring very full descriptions of the work done but I see no harm and infinite benefit in requiring a book of simple diagrams and careful explanations of all the experiments performed and the laws they prove. In my course where so much new work is being given, I feel that a note book is absolutely necessary. I do not see why if the proper spirit is encouraged by the teacher, the note book should be irksome or encourage the dishonest work so often charged to it.

I do not know how profitable my experiment may be to you in dealing with mixed classes. You will probably find about the same state of affairs as I have described if you study your girls. Perhaps by giving class work of a general type and segregating for laboratory work
some arrangement may be made to meet the needs of the boys and still make the course practical for girls.

I have tried to give you the girls' viewpoint as I see it with the belief that a better understanding of girls and their difficulties may help you in suiting your work to the needs of your pupils.
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AN EXPERIMENT IN SEGREGATION.

L. W. Fulton, Waukesha.

In almost all high schools the question of segregation or coeducation has long since settled itself automatically in favor of the latter. In only a few of the larger cities have the patrons seen fit to establish separate schools for boys and girls. The report of the Commissioner of Education for 1906 showed only 40 such for boys and 29 for girls. These seem to have taken the aspect of trade schools for boys, while those for girls emphasize to a smaller extent the side of household science. With the increase of interest in the manual arts in the smaller high schools with household science for girls and manual training for boys, has come a renewal of the question, would it not be a good plan to have segregated classes in some other branches? Quite naturally the science work, as most nearly related to the manual arts, would appear to be the best place for such a change to come. In spite of the evident importance of this question, few superintendents are willing to have a varying body of teachers make experiments that would set aside the usual order of things, and produce results at once doubtful and dangerous. In many places the size of the classes would not permit segregated sections.

During the past two years, and more especially during the present year a very interesting trial is being made of segregation in the classes in physics in the high school at Waukesha. It is my purpose to give briefly some of the results as I see them. Two years ago it seemed most convenient to divide the physics classes into segregated sections. An effort was also made to provide a textbook suitable to each. This arrangement was followed for two years. This year the classes were divided into three groups, boys, girls, and mixed. A uniform textbook was adopted for all sections and an opportunity has been given to observe under exactly similar conditions, the three groups at work. All work has been attempted on the assumption that the subject matter is to be adapted to the pupils' sphere of experience, present and future. A girl who has never seen a travelling crane or an auto engine cannot suddenly discuss the principles that govern it.

And since they are likely never to use it, girls will not be benefited by a discussion of the uses of a two or four cycle gas engine any more han boys are likely to be benefited by a discussion of the different types of meat grinders. The knowledge might be interesting, but not essential.

First then, the boys' section. The subject was mechanics. The normal boy has seen and played with machines from his first toy up, and by the time he reaches the high school stage is intensely interested in finding the principles that govern these machines. The thing of special interest in this section has been the very large number of applications the boys have been able to make of the five simple machines. The natural curiosity of a boy to know, "what makes it go?" has led them to broaden out into almost every branch of mechanics, always in a general way. Local interest in stone quarries, factories, and farm machinery has furnished abundant material for discussion. Only such quantitative work has been done as would answer the questions naturally arising in connection with a machine. For instance a discussion of a wrecking crane would bring forth the question, how much can it lift, and consequently lead to a solution. An effort has been made to introduce only problems suggested by the boys themselves. To this end assignments have been made for both the origination and solution of problems, and a very large majority have shown a capacity for intelligent original work. No effort was made to use or explain any machine with which the boys were not familiar, for indeed the boys have furnished an abundance of material.

The class of girls studying mechanics has maintained a marked interest along an entirely different line. Particularly have they chosen applications of a simpler kind. They have seen the lever in the trip scale where the boys have seen it in the walking beam. They have seen the wheel and axle in the door knob and coffee mill, where the boys have seen it in the derrick windlass. They have shown more originality in making these applications than have the boys. They have maintained throughout a keener interest in applying the principles and have been able to do more quantitative work. It would seem that since their sphere of mechanical experience has been more limited, they are willing to carry it to a closer detail. The interest of the girls has been maintained, however, only so long as machines with which they were familiar were used as illustrations. But they have always been ready to furnish abundant material from their own knowledge. And this will bear out a general conclusion that one year is too short a time to acquire much new knowledge after that which a pupil already has has been classified and used.

It is the universal experience, I think, of science teachers that in physics, as now offered in high school, girls are able to maintain a
higher standing than boys, and this largely because the girls "take to" quantitative work better. The average high school course contains much of this, and yet an ability to work physics problems does not necessarily mean a working knowledge of physics. It is doubtful whether either boys or girls obtain any permanent benefit from much of this, aside from the questionable one of mental discipline. We believe that more good will come to girls from a course containing more of the practical work with familiar phenomena. The interest will be just as keen, and the standings may be just as high. But what of the boys? A well taken criticism of the entire school system goes to show that it is altogether better adapted to girls than to boys. The boys may work as industriously as the girls in all subjects, and still they will be surpassed by their sisters. This is true of physics no less than of other subjects. In our desire to simplify and systematize the subject we have perhaps rendered it more effeminate. A boy likes to have things to ponder over, where a girl likes to have things settled. So it would seem intensely important in the rejuvenation, rather the "Juvenation" of Physics, that first attention be paid to arranging a course of practical and permanent value to boys, perhaps a modification of such courses as are now offered in our technical high schools.

These facts have been well borne out by the results in the mixed class. In it there was an almost equal number of boys and girls. In spite of the earnest work of the pupils it has been utterly impossible for this section to keep abreast with the other two, for the apparent reason that the diversity of interests of the two sexes has made it impossible to appeal to both thoroughly in the same time that it could be done in either of the other classes. The boys would naturally fidget while a girl would explain something about a coffee mill, and conversely the girls would be either bored or over-awed while a boy would attempt to show how a rock crusher works. The principles of each may have been the same, but the applications have been widely separated. This has forced one of two alternatives; to keep on common ground, or to try to appeal to both interests. The first necessarily limited the work more than was best for satisfactory results, while the latter has resulted in the loss of much time and interest in classwork. As would be expected, the girls have maintained a better average than the boys in this class.

The effects of this segregation have been most plainly noticeable in the laboratory work. In this we have asked each pupil to write in his note book, first of all a practical question which could only be answered by the results of the experiment. This they were to answer from the principles proven in the course of the experiment. In one simple exercise, the determination of pi, an average question from the girls class was, how many inches of lace would be necessary to reach
around an eight inch doily? From the boys' class it would be more like, how much belting would be necessary to cover an 18 inch pulley? While from the mixed class the questions were more of a general nature, for instance, what is the circumference of an eight inch piece of wood, or even what is the relation of the circumference of a circle to its diameter? Two from the girls' section, determining the density of steel, decided that before they could ask an intelligent question they must know more of the uses of steel. This resulted in the addition of considerable interesting and useful knowledge. Two boys on the subject of cooling by evaporation inspected two refrigeration plants, procured diagrams of the machinery, and have taken pains to include these in their note books, with careful explanation. All this has keen without suggestion or direct help from the instructor. In recitation the mixed class has shown very much less of enthusiasm and original work. In the laboratory they have done their work just as carefully, but the applications have been far more limited in scope. They have confined themselves a great deal more to textbook illustrations, and have not been able to realize the full scope of the field as applied to their own experience. And this it would seem more because the classwork has necessarily been more limited in extent, for the pupils have been a well drawn average.

These results are here presented, not as being conclusive evidence in favor of segregated classes for there is a possibility that conditions might be changed by the close of the year's work, when a longer time had been given. But they are presented as indicating at least that there is a strong possibility of better results in segregated classes. By results we would mean the ability of the pupil to interpret the natural phenomena of his surroundings on the basis of physical laws. Not so much, does he know the laws, as can he use them? Since boys have an entirely different sphere of experience than girls, and also because they see things from a different viewpoint than girls, each will be able to understand better and to cover more ground, in segregated sections. There is also a possibility of greater practical good being received by pupils in courses more fully designed to meet the needs of boys especially, or of girls especially than have yet been worked out for either. There are physical laws which are and always will be fundamental, but it is in the application of these laws that the wide separation should come. There is surely abundant material within the experience of each to warrant such a course. In this trial we have for the sake of comparison kept all three classes on the same subjects. This would not necessarily be the case in courses designed for only one sex. For example girls might spend relatively less time on mechanics and more on heat and sound, or boys be carried farther into the intricacies of electricity. Variations might also be made of
the laboratory work, rendering the exercises more practical to both. If the manual arts will stimulate the pupil, surely we can expect no less from physics. But while a girl might become enthusiastic over woodworking, or a boy over cookery, naturally the best results will come when each is in his own sphere. And just as there are two separate spheres of daily experience, so there must be two separate spheres for physics.

## DISCIPLINARY VALUE OF CHEMISTRY.

E. G. Smith, Beloit College.

The central idea of what I have to present is this: That the place of Chemistry in any curriculum below that of the special technical school is primarily not for the purposes of information but for the development in the student of latent powers of thought.

A course in chemistry properly presented with a course of experiments well illustrated by the instructor where laboratory facilities fail or better yet when such facilities are available, a good laboratory course in which the student himself takes part, is sure to arouse his interest and send him far along the road to self-direction in his chosen life activity.

Chemistry is a much misunderstood and over-or under-valued element in the educational processes; it is a great science comprehensive in its scope reaching out into many of the practical things of life and therefore liable to be misinterpreted by those not familiar with its aims and methods. Its theories are obscure and difficult to understand and require much patient attention on the part of the student to comprehend and an equal patience on the part of the teacher to develop clearly. The student, young or old, easily plunges in overhead and is soon completely lost in the mazes of its propositions unless skilfully directed by the wise teacher.

First among such privileges would be that the student here comes face to face with the methods of an INDUCTIVE SYSTEM OF THOUGHT. Language and literature, mathematics and descriptive sciences are invaluable each in its own fashion; but in chemistry the student comes up against another method of thinking. The old Greek philosophies reasoned about nature but left nature out; they made a world which did not exist; set earth and air, water and fire as tangible elements each distinct and mutually convertible. Fire was changed into air because it went up into the air; air was changed to water because it came down out of the air; water changed to air or was converted into an earth; earth was converted into fire be-


1. William H. Allen
2. C. F. Hodge
3. P. P. Claxton
4. Frank Gunsaulus
5. Chas. H. Judd
cause they burned up before their eyes and thus the cycle was complete. Aristotle recognizing that there were white and black earths, red and yellow, heavy and light, reasoned that this difference was due to an inexpressible something the quinta essentia which permeated all nature and determined all difference. And Greek philosophy rested there and dominated the world for twenty centuries until men opened their eyes to the beautiful world around them and sought to unravel its mysteries. Gradually through the nineteenth century this mystery was unravelled and the scientific method of thinking became established. Into this method of thought it is the preëminent privilege of the teacher of chemistry to lead his students. A method where he shall be taught to see and feel and measure and weigh for himself and from such observations to draw his own conclusions logically. I fear that we do not always recognize the opportunity thus afforded; it is a great thing for any teacher to rouse up in a young flexible mind the idea of intelligent self-direction, to teach it to think for itself; to be its own master; to inculcate the idea of independent action; to magnify the power of independent logical procedure. All these attributes are the product of an inductive philosophy and that science which can develop that power certainly has a strong claim among courses of study selected for development of men and women. The inductive pfilosophy bases itself upon observed facts and these the student is taught to observe.
"Experiment," says Leonardo da Vinci, "is the interpreter of Nature. Experiment never deceives. It is our judgment which sometimes deceives itself because it expects results which experiment refuses. We must consult experiment, varying the circumstances, until we have deduced general rules, for experiment alone can furnish reliable rules."

To such a vantage ground do we lead the young mind; here must we leave it; we go along the road by its side; but it is for the mind to find out for itself the truths which lie at hand.

A second power of chemistry is in arousing skill in observation and experiment.

The absorption of statements and opinions of others makes the student lean upon the judgment and authority of others; but this bringing face to face with fact is of inestimable advantage. Habits of self-reliance are formed, resourcefulness is developed; the power of initiative is acquired. But such observation alone does not develop the scientific mind; the savage in the forest has acquired through the years a keenness of observation which far exceeds that of the civilized man. Left to experiment alone a student would
rapidly degenerate into an organism possessed of an extraordinary power of manipulation.

A third power developed by the study of chemistry comes from the development of the ability to think clearly and in a logical systematic manner. The student is taught to reflect upon the available data bearing on the problem in hand and to explain a phenomenon by drawing legitimate inferences from approved evidence. Habits of reflection and thought are to be formed; the thinking faculty developed through the results of one's own individual efforts. Just as exercise increases the efficiency of the physical body so exercising the thinking faculties enhances the power of thought. There can be no clear thinking without clear seeing.

A fourth power developed by the method of chemistry is that of the cultivation of the imagination.
K. Pearson has said:-"Disciplined imagination has been at the bottom of all great scientific discoveries."

There can be no greater fallacy than to suppose that science has no need of the imagination. Our greatest theories and laws are the direct result of the imagination. The foundation of modern Theoretical Chemistry rests on the assumption of Avagadro cuncerning the equal space occupied by all molecules in the state of a gas; a statement which from its very nature cannot by any possibility be directly proved. If that imaginative proposition should be shown to be false to-morrow all our theories would fall; but we go on our way confidently pursuing our investigations and basing our calculations on its truthfulness and the great world of commerce with equal confidence invests its capital with certainty that the processes based upon it will be successful. It is something to have this power of imagination developed and strengthened by the study of such great generalizations as this science affords.

Again the study of chemistry tends to development of a critical and impartial judgment.

There may be the play of the imagination but there is a sharp line of demarcation between the play of the imagination and deductions to be made from evidence. The mind must be kept open and free; there must be no pre-judgment of data or the formation of opinions other than as borne out by observation. The student comes to such an independent method of thinking; there must be no shirking of fact, no exaggeration, no distortion of the naked truth. By his own observations he forms his judgments and draws his conclusions.

And finally I think the study of Chemistry fosters in men the idea of honesty. At the outset the young student is brought into the presence of law dominating everything. It is inexorable law to which he
is subject and from which there is no escape. It is his business to demonstrate that law through its many manifestations. In order to do this he must learn to see clearly and well; to reason correctly; to establish the conditions of the law and the principles upon which it acts; to follow it through all of its manifestations; to be absolutely honest in all his observations. The temptation to get results, to make the balance read as he wishes, "to work backward" is greater than he who has never attempted such work suspects but to yield to such temptation is to fail. To accomplish success one must first of all learn to hold himself absolutely true; he must follow his observations wherever they may lead. This is the essence of the scientific spirit and fortunate is he who early learns to train himself in its methods.

Possibly some of you may think $I$ am idealistic in my point of view regarding the place of chemistry in the school curriculum; that such training is not possible in secondary schools. I can only say that while I have been reflecting on the place of this science in the curriculum I have not for an instant allowed the place of the science in the technical and special school to enter my mind; nor on the other hand do I think the science adapted for children of the eighth grade or under. It is a study admirably adapted to the curriculum of the high school and college where we attempt to develop what we are so afraid to speak of viz: culture and mental power in men and women. From my point of view the only justification for its presence in these schools is its training power; the informational value is subordinate. Every teacher in the college and university knows that probably here and there among those before him in general chemistry are those who later will become specialists in the science or in allied scientific work; with such chosen men later he will be more closely identified. But the course I am talking about is not for them alone; it is calculated to develop in men right and strong powers of thinking; the materials will soon in all probability be lost in exactly the same manner as the materials of any other line of study. That is a matter of minor importance; the real question at issue is: what is the bearing of the study on the preparation of the young mind for the work of life? What added power does the student possess because he has come in contact with its methods and processes?

I value the study because it can contribute to the development of those powers of which the energetic man and woman stand in such sore need; I value the study of chemistry because it contributes so markedly to making young men and women self-directing efficient agencies which after all, is all our systems of education aim to develop. For this reason I have endeavored to set before you the posi-
tive claims of the science upon us as teachers in the hope that wherever the study has been introduced in the curriculum it may be better provided for through the equipment afforded; it may be better taught, and may in every way contribute to that larger life in which our students are to share.

## LATIN CONFERENCE.

## THE TEACHING OF CAESAR.

Beulah C. Post, Fond du Lac, Wisconsin.

I never have and I don't ever expect to teach two Caesar classes alike. Individual tastes and dispositions are so infinite in variety that pedagogical rules have become to me suggestions that I carry out if possible, but if a seemingly better plan comes to mind I use it. The personality of the teacher is such a big factor that I don't think one person can tell another how to teach. So my topic is not how to teach Caesar but teaching Caesar.

My aim is steady development of clear thinking and to inculcate a pride in smooth and direct oral translation. My working principle is to lead the pupil through the fundamental problems of syntax into the spirit of the story. After a little review of forms and work in simple, connected discourse, as the Fabulae Faciles, we plunge into Caesar's Commentaries with Caesar and with him we explore early Europe. That is the reason why I like to begin with bk. 1, and go along with the story. Hard passages such as chp. 14 can be translated, but there is no use in careful analysis at first. For forty-five minutes a day we live in the fifties before Christ. Now and then we take a few minutes off to come down through the ages noticing the results of Caesar's work or the similarity of his time with our own. I find that the thoughts of the sophomore of to-day are so occupied with automobile mechanism or the characters in the latest novels that biography is either new to him or at least he has not yet had his fill of it. Napoleon, Washington and Grant are heroes to him but not very familiar ones. So it is an easy matter to get him interested in Caesar from the hero-worship point of view.

I have them look up a life of Caesar, a meagre account, and get in their minds the bare outline of the events of his life. Even a vague idea of his life is enough to start upon. Then I lead them to see in his writings the many sides to his personality and as chance gives me I tell them anecdotes of him or other men that bring out the point
under discussion. The faces of my pupils as they sit before me are the indicators that I observe and gauge my recitation accordingly. I dislike to have one pupil looking disinterested. If I find listlessuess in the classroom I never begrudge the time it takes to drop the work and say, "I wonder if Caesar thought this or that." "Do you suppose Caesar had this or that in mind?" "Why do you suppose Caesar did this?" and the most listless one in the class is the first to raise his hand with speculations. Then the lesson goes on again so much faster that the "time-off" was of use. I thoroughly believe in planning work far ahead of time and I have daily lesson plans but my conscience never bothers me if I do not carry them out. I have seen other teachers carry out the ideal Latin recitation with its five set parts and sometimes I do it myself, but not often. I would consider it a sacrilege to bring in a sentence of prose or one extra mention of construction during the battle with the Nervii. We are too busy fighting and helping Caesar maneuver for anything else.

My idea is to have the chapter or two of reviaw well translated and there I take no excuse for poor or slow translation. Then most of the hour is given to translating the assigned lesson, getting the most out of it and going on with to-morrow's lesson at sight. I try to call out their pride in giving good idiomatic translations. If a child translates a passage well there is no use of asking him any constructions in it. I dislike short sentence-by-sentence recitations. I would rather a child translates a full paragraph two or three times a week than one sentence each day. And I feel that this should be done not only with review but with the new lesson as well. I know most teachers argue that short recitations coming hot and fast in a classroom keeps every one on the alert, but that is holding attention by the compulsion of fear, not of interest. Every sophomore loves to show up. If he gets one sentence only and stumbles through it he imagines the teacher has marked him down (actually or mentally). If with that sentence poorly done he has four or five sentences well done added to it, it does not leave him with a sense of failure or discouragement. If all were poorly done he has failed so completely that he can't make peace with his conscience by the excuse, "I was called upon for the only sentence I couldn't get."
When a good stopping place in the story occurs we gather up the loose ends we hurried by, read and discuss sections in the introduction to our Caesar, read from Holmes or Fowler, transfer indirect discourse to direct, write out translations of passages that seem worth while from the English point of view, trace campaigns on the McKinley maps or the many other things that tend toward thoroughness.

And at this time I bring in prose composition, not because to-day is prose-day of the week like Monday is wash-day, but because drill in
prose sentences helps us to gain power and facility in translation, which is what we are after and here is a good place to look squarely in the face those grammatical points we noticed as we read our last part of the story. When I have prose work I want it at least two days in succession to be sure the points studied one day are clinched by the next. Sometimes I take a whole week to prose. There is the formal preparation of set sentences modeled upon the translation just had and rapid sight work. For this I send all to the board at once and give them very short sentences illustrating the points taken up. If the spirit of the class is right they will write the sentence very fast.

I am a champion of short sentences with the most familiar words all through the second year. I have seen a mere adverb, as confestim, so overshadow the rest of the sentence that the main construction was lost sight of, or at least left hazy in the pupil's mind.

I do not believe in a teacher getting her own prose lesson too well before she comes to class. If we formulate in our mind just how we think that sentence ought to be translated into Latin are we not liable, in our haste to cover ground, by a look or tone of voice, to make the pupil think his work all wrong, especially if he has a tendency toward self-depreciation? If the sentence can possibly stand the way the child has written it, I think it ought to. We can ask the class in what other ways that thought could be expressed and emphasize how Caesar wrote it." But let the child feel his own individuality and that he has a right to express himself in his own way as long as it is grammatically correct.

That same point comes up in translation. Every now and then you notice a child who will ferret out some other thought from the sentence than the rest of the class. I have a great amount of sympathy for that type of pupil and I use the words might and could a great deal in showing him how one might get that idea but probably Caesar meant another. And I take time then and there to show why. And the pupil will argue his point and some may think it's a waste of time not to cut him short. It may be. It depends upon the pupil and the day's lesson.

To summarize then, my scheme is to translate a good-sized section of the story as I have said, followed by composition and extra drill. Then I assign the chapters of that section to the different pupils and we have the whole thing translated perfectly and as smoothly as though they were reading English.

All agree that at the beginning of the year we must go slowly and not expect the class to completely master such difficult chapters as fourteen of book one. Later we can come back to those passages when the ordinary passages have become easy for them. Potter's new method is to give short Latin sentences based upon the day's transla-
tion before taking up the Caesar passage. We found it more helpful to let them work out the Caesar passage first. On coming to class they find the sentences on the board. Running them through rapidly they seem easy and it helps them in grouping words.

At the end of the year I have every one read Plutarch's Life of Caesar. They have had Shakespeare's play in their English class and so much of the life has come up in the year's discussion that most of them enjoy Plutarch. Then we spend a little time on a systematic study of the Roman military system and tactics. They have graqually absorbed so much during the year that the details have fallen into place in their minds unconsciously and the subject as a whole is grasped with apparently little study.

Now for the test or examinations. I do not think them the black beast of every child's school life, William Hawley Smith to the contrary. The teachers I know do not make their examinations a matter of memory testing. I pass the pupil who has the power of translating an ordinary passage of Caesar understandingly. He is then ready for Cicero whether or not he can formulate the rules of Grammar according to Bennett's wording. I never give catch questions in a test. : had just as soon a pupil had a lexicon at his side in a test as not. Each child however does not have one and if he did it takes time to look up words. So in the passages I give for translation I make sure there are only the words familiar to the class. With a Caesar class especially I am willing to tell the child the meaning of a word and so far no one has taken advantage of me. What I am testing him for is the power to convert the thought of the writer in one language into his own language. The trouble with examinations is the large element of fear in them. If I can make my pupils trust me to give them on examinations, questions that involve only the application of knowledge and power they already have, they ought to enter upon the writing of their paper with a feeling of security in showing me or seeing for themselves what they can do. You may pick out a passage of sight for the examination. The minute the sophomore sees that it is something new that dreadful fear of failure comes to him. He is taken latere aperto and he surrenders at once and unconditionally through his own fear. So when I am in a hurry and I can't put my finger upon a passage of sight that doesn't bear the ear-marks of being brand new, I take a passage of continued discourse from a key to a Latin prose book which we do not use. That I know is good Latin and involves the same constructions, idioms and line of thought of what they have been studying and the pupil has no fear of it. The child with the good memory and the one without have an equal chance.

A test, I think, should be all-round. A passage of translation that they have had, moderately easy-not some hard passage that I drilled
and drilled upon. I made sure of that passage in the drilling. A passage of sight, prose composition, a question or two involving grammatical knowledge and one involving general information. When the test paper has been written I want the child to finish with a sense of satisfaction instead of relief. I don't need to correct that paper to see if the child is ready to pass. I have found that out in his daily work. But I think the justification of written examinations is to let the child feel that he has a fair chance and time to see what he can do.

I correct the papers carefully and write the corrections with a blue pencil. And the corrections are not x's. Then in class I go over the test with their papers before them. Sometimes I read answers that different ones have given. Then they can size themselves up with their classmates. Especially do I do this in the case of one who has not done well before the eyes of the class. If he answers a question well and I read it to the class it helps him to get back any Latin selfrespect he might have lost.

## WHAT TO READ IN SECOND YEAR LATIN.

Harriet Kuhns, Marinette, Wis.
There are four distinct aims in teaching second year Latin, and the textbook must aid in carrying out these aims. I name them in no special order.

The student must be trained in reading Latin, and the training received this year must be such as will aid him in reading Cicero and Virgil. He must have constant practice in translating the common Latin constructions and in using a universal vocabulary. He must also feel a constantly increasing ability to translate the Latin. Caesar furnishes a vocabulary which is universally used and has but few technical terms. His syntax has almost no peculiarities. The student makes a very appreciable gain in the ease with which he translates as the year's work advances.

There must be training in mental discipline. I refer here to the ability to read a sentence in such a way as to get a complete understanding of its context-an ability which is needed in every profession. To give training in this line, the text must not be too easy; it must tax the mental faculties of the student to get the complete meaning. Caesar fulfills this well.

The student's English must be strengthened-a phase of the Latin work-which is being so widely emphasized. This involves many processes: the careful distinction in word-meaning for the accurate
translation of the Latin word; the changing of idiomatic Latin phrases into idiomatic English ones; the rendering of a complex Latin sentence into a good idiomatic English sentence or perhaps into two or three sentences. The simple narrative style of Caesar's Commentaries is particularly adaptable for reproducing into strong, simple English sentences.

The text should act as a spur to the imaginative faculties of the student. He must read of great men and great events and feel a quickening of the pulse as he reads them. Caesar's Commentaries were written by one of the greatest men of the world-a story of his own great campaigns. They may be made live interesting stories of great events and heroic deeds, whose interest is that of a story continued from day to day.

The difficulty of Caesar and the break between first and second year Latin-the greatest criticism against Caesar's Commentariesmay be obviated by the first year book. I would advocate a beginning book which prepares the student for Caesar-steeps nim in all the ways of Caesars-and he will come to his second year of Latin with a real interest in Caesar and a surprising ability for translating.

Whatever text a teacher may use, if she be enthusiastic over it, and well posted upon it, the results must be good.

## MANUAL TRAINING.

## INDUSTRIAL EDUCATION IN WISCONSIN.

H. E. Miles, Racine.

The one principle the people of America most need to appreciate and act upon at this moment, is the principle of solidarity of interests and of common control of public functions. Individualism and special control have gone mad in this country. We are just getting back to the saner, and sometimes honester, appreciation of the common interest and the necessity that it shall dominate. As this new appreciation grows, manufacturers will be less insistent upon writing the Tariff all by themselvés; food purveyors of writing the food laws; bankers of writing the currency laws; taxpayers alone of writing the tax laws; or the lawyers of defending, or neglecting to improve our system of judicial procedure, which President Taft with his special knowledge pronounces the one conspicuous failure of American civilization.

The state of Wisconsin is conspicuous and everywhere envied for its appreciation of the necessity of the dominance in legislation and administration of this principle of truly representative control, and in its refusal to give any particular class of interest control in its own particular field.

It is in accordance with this principle, and with the practice or nations farther advanced and more experienced than we in this regard, that the Wisconsin Legislature, in the recent session ever memorable for its great accomplishments, established a system of Industrial Education, reaching down into the vital life of the people in every direction, bringing manufacturer, father, mother, educator and child into somewhat new relations-relations that in the olden time might have been objected to and probably would have been, bitterly, by a considerable part of the people. Following the passage of the law there were rumors of disaffection and opposition in various directions, but even those rumors were not easily traced, nor well founded.

Manufacturers are obliged by this law to release boys from service five hours per week of the working day, and to submit to considerable inconvenience in arranging to this end. They are induced to pay their good money to these children for the hours that the children are in school. Fathers and mothers, whose children have passed the former age limit of fourteen years for school attendance, are obliged to send these children until sixteen years of age to the Industriai School these five hours per week. Not even the little girl who is "at home with mother" can stay there; she too must attend school for these five hours with the prospect of becoming a better housekeeper and better citizen than mother alone can make her.

Cities of over five thousand population are obliged to see to it by various new processes that every last child in the community (graduates of the common schools excepted) has the full benefit of this schooling, and that it is equally open to those of all ages over sixteen, day and evening a few hours a week, or, as many hours a day as those temporarily out of employment and otherwise, choose to devote to it.

Lastly, the direction and administration of the new schools was not left with one of the noblest classes of our citizenship, the educators, but two-thirds of the state board of control, and four-fifths of the local boards, are equally divided between employers and employees, representative, not of their special interests, but of the public at large, and of their special interests, only as giving them presumably a better insight into the problems in hand, and a greater capacity for this service. And be it known that this apportionment in the boards
was upon the suggestion and insistence of the educators of Wisconsin themselves to whom was entrusted the comprehensive initial investigation, and the framing of the laws.

As a layman I beg to testify my extreme gratitude and highest appreciation of the educators of Wisconsin and the teachers who accord with them for that largeness of mind and heart that so nobly brought them to this enlarged service under these new provisions.

The intelligence of every community values the expert as highly as he can fairly wish; in putting the majority of control in the hands of laymen the expert still has from many viewpoints a preponderant influence. One expert can always hold his own against many laymen, and the right sort of an expert in a democracy and in matters of public concern will wish to justify his position before laymen; will see the necessity and advantage of so doing.

The union of educator, employer and employees in the advancement of Industrial Education is nothing less than a sort of tripartite or holy alliance in the interest of social and economic advancement of the three forces most concerned and most capable as respects this education.

I recently visited a school in an important industrial center. The superintendent is one of the best in the state. He was for a long time opposed to the separate board of control. He felt that teaching should be left to teachers; the work of the specialist left to specialists. He showed me a class of forty 'little boys, who would otherwise be of the hopeless sort, little employees of a toy factory, with blanched faces, care-worn look, clad in the cheapest shop clothes. They were learning arithmetic and mechanical drawing in connection with bench-work, learning the science and art of the trade at which they had been working for some time in a dull, unknowing and uninterested way; working for pennies, not for a happy and ever-widening advancement; working with their hands, not with their hearts and minds.

The employer had come to give happily the time of these boys to the school. They were all that he had in his establishment between the required limits of fourteen and sixteen years. I said to the superintenden $\bar{t}$, "I think possibly these boys are a little below the average of intelligence of the children who are continuing in the day school, and whose parents are better off." "Somewhat so possibly," replied the superintendent, and then after a moment: "But some of them are brighter, and all of them so much more appreciative and absorbed in their work that I believe they will average better."
It was unnecessary to ask how great was the interest and the
new hope in the bosoms of these boys and of their parents. The social leaven was working everywhere and here was the evidence.

I was not, however, prepared for this word from the superintendent. Said he, "Mr. Miles, you can hardly imagine the effect of this work upon me and upon my teachers: It is making us over. It is giving us a new conception of education, its potency, and its proper direction: This is going to have the greatest sort of influence upon the whole school system: it is giving me a new hold upon the community, opening new avenues of approach, and association with, the employing and the working classes. It also puts them under obligation to give us any sort of assistance that we can reasonably ask, and we find them hearty and eager to give this assistance."

Education now will make most of the operations of life in our communities more direct and effective. It will not account for itself only in remote effect. It will be both immediate and remote in its economic and social influence. To me this is the chief consideration.

The whole number of schools are in operation to which the state offers aid, being thirty. The total levies for these thirty schools for the present year are in round figures, $\$ 200,000$. The levy is sure greatly to increase each year. This kind of schooling is the cheapest possible, and the greatest in its returns. There is no doubt but the people will support and develop it with increasing interest and enthusiasm.

The instruction is at once cultural and extremely practical. There has been apparently no lack of instructors in very many cases there being discovered in the respective communities men from the shops who are at once extremely practical and great in their capacity as teachers. This might have been expected, as in truth, a shop foreman is primarily a teacher, though not always by any means superior in so-called "theory and practice." In our state, however, which is the eighth greatest in the union in manufactories, there are doubtless more instructors to be found than are just now required.

Some of the large department stores are coöperating splendidly as respects their young women employees, and we may soon hope to see the question of the minimum wage cared for to some extent at least through the growing efficiency of these young people through the schools, and increase in wage following increased efficiency.

It is greatly to be hoped that public sentiment will be actively interested in this, as in other parts of the work, and that the women of the state in their clubs and otherwise, will lend their hearty and active support.

## CULTURE.

In many quarters where Industrial Education is known only by hearsay, there is complaint that it will rob education of its cultural values. What abominable misunderstanding! How we cling to primitive and outworn conceptions! Let me give some definitions of culture-
The Century Dictionary:
Systematic improvement and refinement of the mind.
Pursuit of any art or science with a view to its improvement.
The Standard Dictionary:
Training, development or strengthening of the powers, either mental or physical.
Improvement of the mind, morals or taste.
Webster's Dictionary:
The characteristic attainment of a people or social order.
Training or discipline.
We will soon come to wonder that we ever thought that the working people could acquire culture except in connection with their occupations; that they could spend their time and strength, at work and get culture perchance when asleep. The Industrial School is developing the very best of the moral, mental and physical powers, love of work; concentration; ${ }^{\text {•accuracy; contentment; hope; ambi- }}$ tion; respect; sense of duty and of rights and obligations; an appreciation of ordered processes, of the dignity and honor of labor, of the way to right advancement.

We are all sharing in this culture, in this new appreciation, educators as well as employers, parents as well as children. It is likely to be the greatest social force, and in all this the teachers of Wisconsin have a foremost part, and an opportunity to advance infinitely the cause in other states and communities by their example and accomplishment. All this will be lost, however, unless the teachers continue, as they surely will, to appreciate the absolute necessity of making the work practical, of taking life as they find it, of reaching down into the industries and the occupations, and, starting from them, with the children as they are, building up, ever mindful of actual conditions, occupational practices and necessities, and never in the least devitalizing the work by scholasticism, creed or prejudice. It must ever be as living and vital as the young lives it is to mould.

## MANUAL TRAINING.

It is exceedingly to be desired that manual training in some measure be influenced by the industrial school, that it have a tendency to the same practical accomplishments, and that so far as it influences
the child, it influences him, however young, to the living appreciations that should be his in later years. It has been said by an educator, particularly well informed, that manual training in three-fourths of our schools is mawkish, unrelated, and almost worthless, and that in two-thirds of the schools the tools are not fit for use; that it is not unusual to see a child saw a board held in a vise so far below the cutting point that the board vibrates, the saw buckles, and the child winces under the teacher's complaint that he does not saw to the line. Instructors who are capable of teaching in the industriai schools may often be found of great assistance in making suggestions for manual training in their communities.

A few other states have introduced systems comparable to ours, but none as wide-spread and effective. Some twenty states are now preparing laws for passage in their legislatures this coming winter. The system here in Wisconsin is full of promise: it is fast becoming as well-considered and as close to the affections of the people as ever was the old common school system.

In some other states the educators and teachers are showing an equal largeness of mind, and in some, notably Ohio, there are schools which may well serve as models for us. In still other states the laws are about to be written. The educators are clinging like the lamas of Thibet to their old-time prerogatives, and insisting that anything done for Industrial Education shall be in the nature of a concession from them, shall rest upon the practices and the abstractions to which these teachers still cling. There is the old-time fight between a petty assumed prerogative and the needs of the great pulsating advancing life of the day. It is proposed by these ancient and antique educators that Industrial Education shall rest virtually upon the present school system, and from there shall reach down and barely touch with dainty finger tips the real industrial life of the nation instead of resting primarily upon this industrial life, taking life as it is, and from that standpoint with all its grime and care, its hopes and its necessities, interpreted and exalted. It is up to the teachers of Wisconsin and the other forces with which they are linked, to show the way to bring out of the darkness of prejudice and misconception their brothers of other states, and for a near-by example I may properly say, their brothers of Illinois. No crime of class will ever be greater than that which will be committed in any great Industrial state that handles Industrial Education and the lives of that $50 \%$ of our children that will be given to the industries, in the slightest respect in a remote and impractical way. Wisconsin will never do this, nor will any other state that starts on that basis long be permitted by its own people so to do, this partly because of the example
which Wisconsin has already set, and will only make the plainer as the days go by.

## DRAWING SECTION.

## PUBLIC SCHOOL DRAWING-A FACTOR IN CHARACTER DEVELOPMENT.

Judith M. Wadleigh, Wausau.
What really is character development, and in what way is drawing a subject through which this development of character may be speeded toward perfection? May we not say that character particularly means all that we wish our boys and girls to become a part from what we may wish them to know as mere facts and what we might wish them to be able to do as mere skill in fine and mechanical arts? A wicked man may be highly skilled in the doing of things and may possess a wide knowledge of facts-and such a man may do more damage in the world as his knowledge of facts and skill in doing increases. Were it not better that such a man had acquired less knowledge of facts and a taste for a different kind of life? School life is apt to influence children in their habits, desires and ideals much less than do neighborhoods, streets and backyards. The reason for this is plainly that the school does not hold the interest of pupils as do outside influences. The activities of childhood which directly mould character are those activities which interest children so vitally that they engage in them in a state of intense concentration. Play interests children in this way and whatever activities are exercised in play are sure to stamp their influences indelibly upon the nature of the children on account of the intense concentration at the time of activity. In drawing les sons, it is easy to interest children in the same way as they are in their play because drawing is "play" to children. Children, themselves, without ever being taught to draw will represent with drawings the things and experiences in which they are interested. In drawing, we can represent all the experiences of childhood and those things in which children are by nature interested. Children will become so interested in picturing their experiences, real or imaginary, that the enjoymeni of so doing reaches very nearly (if not fully as much in some cases) the enjoyment of really doing the things which they picture. It is this deep interest and enjoyment in pictures and the making of pictures that makes drawing a wonderful opportunity for influencing character. Experiences, desires, ambitions, ideals, are all disclosed in the drawing lessons if the children are given (at least in part of their lessons)
all the freedom that they wish and are allowed exercise of their own will and choice. Where interest in the work is as keen as is the interest children have in play, children with proper help and guidance will actually teach themselves. This means much more than one is apt to know unless he has thought hard and long on the idea of what teaching one's self means. A real teacher is one who guides and inspires his pupil so that that pupil will teach himself. The things which we can teach a pupil in school are limited in number because our time to do so is limited, but if we teach him to attack in efficient manner any problem that comes his way, he will be indeed fitted for life; for are not most of life's problems those which seldom find their way into the schoolroom-each so different in its own way, and the circumstances governing it, that it not often is repeated. The acting, comparing, judging, selecting, deducting, and generalizing indulged in while a pupil is teaching himself things necessary to know regarding a problem in which he is intensely interested-these activites of the mind become stamped upon his subconscious self to such an extent that, oft repeated, they become habits and guide his efforts in every other line of activity-in fact they become part of him and influence him in all other phases of life. Activities indulged in in which little natural interest is felt do not to much extent influence habits, hence the need of interest, and in how many countless ways is drawing natur. ally interesting to children! Hard work influences the life of the worker we all know, but hard work in which there is also joy moulds character quickly and wonderfully. And the joy of "play" which is so easily felt by children in connection with work in drawing classes makes possible in drawing courses rich fields for the growth of character. That is to say drawing work may be useful in such a way-it affords the opportunity-and it is for us to use this opportunity rightly.

Public school drawing is not yet highly systematized-this is an added reason why it may be so useful in securing interest and the opportunitites that securing deep interest affords. We are still exploring in this subject as a school subject, and what is more alluring to human nature, more inviting, enticing than exploring new fields? Children love to delve into those paths that as yet are neither plainly marked nor well known.

Children cannot help learning when interest is paramount. During the time that a human being is making keen efforts towards doing a certain thing, nature directs those changes which take place in the growth of the mind and spirit just as nature takes charge of the changes in the body when a muscle is exercised. It is the business of the teacher to assist in these activities that change mind and spirit by administering aid and help that the child needs in order to accomplish the aim of his desires.

How can children learn to know and enjoy pleasures which are real ones, which are the highest, those which, when indulged in, deprive no one else and bring no evil results to themselves? How do people learn to enjoy things? Mostly by seeing others enjoy them. People look for enjoyment in everything from which they see others derive enjoyment. Then is it not quite plain that we teachers should enjoy beautnful things with our pupils? We should bring into our work beautiful objects, beautiful pictures, beautiful deeds and beautiful thoughts and give plenty of opportunity for enjoyment of these with our pupils, that they may feel the pleasure these things can give and desire to find their pleasure in them.

In drawing work, we have boundless opportunity to discover ideals, tastes, habits, ideas of right and wrong, of the children we work with -these things will come out in the free expression of ideas; for if they express anything at all with any freedom it will be themselves. Delight in exercising individual choice and pursuing desires of their own secures wonderful interest and gives opportunity for criticism and guidance. Drawing gives a wonderful opportunity for people to help each other and to learn to help each other and to find pleasure in so doing-to want to do so. Giving of help awakens in the child who gives it a sense of his usefulness because human beings find joy in helping others. In drawing work this joy that comes from giving help may in some cases be understood for the first time, and a desire aroused for finding it many times by repeating the giving of help to others. Drawing may also mean the producing of those things which delight and please others. How children love to please others! But sometimes they need to be led to feel that joy and desire to feel it again and to repeat the doing of things that pleases others and thus bring this joy to themselves. Teaching children to enjoy the right things of life is what will keep them from doing the bad things (which really means keep them from trying to enjoy the bad things) for to seek joy is the greatest law governing the actions of human beings. If real pleasures cannot be indulged in on account of ignorance of how to enjoy them or because of environment, people will accept in their place activities which are really but shadowy substitutes for real pleasure and which bring pain and unhappiness (which make them really miseries.) Feasting beyond bodily needs and appetite, riches, extravagance, carousing, to some seem to be pleasure, yet they bring illhealth and pain to the one who indulges and poverty and worry to thousands.

The qualities of character are exercised and developed in any human being under the condition arising where hard work is being accomplished under intense interest-this combination-hard work and deep interest can be brought about very easily in drawing classes, on
account of the opportunity in drawing of becoming very interesting to children and of its wide application and representation of varied activities, combined with the fact that much about picture making, designing, etc., is in itself full of difficult and perplexing problems. These problems worked out under intense interest occasion as a natural consequence and exercise of independent thought, perseverance, patience, selection of help, many of those qualities which mean character.

Plenty of exercise of those qualities of character means that those qualities become a habit or subconscious with the pupil, and the growing of these qualities into habits means forming of character.

These things all can be done for children through drawing, but this statement does not mean that drawing always does do these things for its pupils-drawing as a subject in school is only a tool and may be used so as to mean nothing. Vital in the forming of a child's life-it even may be used to produce harm by arousing distaste for those things that it should create a liking for, or it may produce passive indifference. But rightly taught what a tool for leading children to desire to be good, to love the good, to dislike evil, what an opportunity tn develop in them, powerful instinct to want to do, to be able to do, and to do all that may produce happiness for themselves as well as for those whose lives they influence in their journey through life!

## INDUSTRIAL CUTS IN THE SCHOOL.

George W. Eggers, Chicago.
Two frequent criticisms of the present-day teaching of design are:
(a) "We do not limit the design problems sufficiently."
(b) "We ask children to make designs up out of nothing."

The fault is not that our design problems really do lack limitations, however, but that we fail to see the limitations which always do sur- ${ }^{-}$ round a design problem.

## These are:

(1.) Conditions of the need which the object being designed is to fulfill.
(2.) Conditions of the material employed: what it will do and what it will not do, safely, readily and economically (of material and of effort).
(3.) Conditions of handling and using the material. In school this last really means the possibilities and limitations of the children's skill -a thing which they themselves cannot well estimate and which the teacher therefore has to dictate.
(4.) Conditions of right decorative treatment. This involves:
(a) Possible arrangements of decoration in the given space-such as allovers, borders, panels.
(b) Significance of the forms or motives to be used as units.
(c) An understanding of the logical and systematic way of ap. proaching a design problem, from conception to the execution of the object designed; i. e. making those decisions which are the most important practically, and then the decisions which are most important visually, first; following these with the decisions next in importance, and in making all these decisions, recognizing at every step the conditions of the problem.
Conclusion: The nations which today most fully recognize the need for this scientific and logical approach to design are Germany and Austria. These nations have not only organized the subject of design but they are specializing it for every one of their industrial schools, and in addition to this are endowing the production of beautiful books and other objects in order to educate their public outside as well as inside the schools. A failure to recognize this emphasis upon art in German education will cost America dear when we put into practice other aspects of German industrial education.

## DOMESTIC SCIENCE CONFERENCE.

Miss Emma Conley presided as chairman in place of Miss Harner whose name appeared on the program. Miss Celestine Schmidt of the Milwaukee Trade School for Girls read a paper on Millinery in Schools, and exhibited a fine display of trimmed hats, baby bonnets, ribbon flowers of various sizes in artistic arrangements, fur work and unusual crochet work-all made by pupils of the trade school.

She said in part,-There are many useless people because of lack of training in industrial arts. Millinery will teach girls to be neat and accurate and to understand the value of well made articles. The course in the Trade School begins with the making of hand-made frames, and with this they learn slip-stitching and wiring; then the making of trimmings such as bows, rosettes and ribbon flowers; they learn to cover velvet hats, to prepare appropriate trimming and also to trim simple felt hats.

As the millinery seasons are short, the girls are given plain sewing between seasons; they make a corset cover, drawers, petticoat and dress for themselves. At other times they make baby bonnets, muffs, and various articles of crochet work.

Millinery is also given to the advanced dressmaking classes; four weeks of five days of five hours each or one hundred hours altogether being allowed for this brief course.

But they learn many things through the making of hats; of the relation of the hat to the wearer; of the origin and manufacture of silks, velvets, ribbon of various weaves, straw braids, feathers, aigrettes, lace, fur flowers and the many accessories of the trade.

They learn art and history; for Byzantine, Egyptian, Grecian, Roman, the Directoire and Renaissance periods of art had each its style of hats. A little bonnet with a dent in it may mean nothing to the student until she learns that it was the style worn by Mary Stuart. The round cocked hat of Napoleon and George Washington are elements in history. And were not even religious epochs marked by different styles of head covering as the Puritan and Quaker?

Thus besides learning a trade by which they can make a livelihood, they become educated for their vocation and find joy in the expression of their ideas through the work of their hands.

## THE GIRL WHO CAN.

Mrs. Nellie Kedzie Jones.

The first school to give any definite attention to training girls for household duties was Miss Lyon's School for Girls in Holyoke, Mass. "Mary Lyon struck the keynote which has swelled into a great harmony." She spoke of the painstaking care given to the raising of farm animals; of the money that had been spent by the government and state experiment stations; of the study of feed and conditions necessary for best results, and asked, What about the child that doesn't grow; that is puny and delicate? We have been told that such things as disease and malformation were visitations of Providence. Now we are learning that the rearing of the children needs at least as much study and care as the raising of farm animals. When the Agricultural Colleges of Illinois, Kansas and Iowa undertook the teaching of Domestic Science, it was in a very small way. In Kansas, the equipment consisted of a sewing machine on one corner of the platformand this was about all they had for three years. In Illinois they began with cooking, but discontinued even this after a little while, though Illinois now stands in the front ranks. In Iowa the work was permanent and has had a steady growth. Now they are saying that they will take Home Economics out of the College of Agriculture and put it into the University; but to this there is emphatic protest throughout the state. Objections are made to the introduction of these studies because of the expense. Some counties have no money to spend for such schools, but do have money for jails, almshouses and
workhouses. But the good Father made the hand as well as the head and a man or woman is only half educated if the brain is educated and not the hand, or if the hand is educated and not the brain. The judge riding in the Tennessee mountains was utterly helpless when his thill broke until a darkey came along and with a withe from the bushes near by and a strap from the harness, repaired it for him. To the judge's question, "Why couldn't I do that," the darkey frankly replied: "Dunno Massa, but some folks am jes' natchally smarter than some folks."
Children learn easily about the things that they use. I wish every little boy and every little girl at ten years of age could have an allowance to spend for certain purposes-and be obliged to go without the article or pleasure if they waste the allowance.
Every girl ought to look pretty and should be taught to dress. prettily and appropriately. Children readily appreciate beauty and the effect of color-as the boy when asked his opinion of a soft green wall said, "It looks sort of peaceful. I guess there wont be no fighting in this house,"-and the artist tells us green is a restful color. The girls' clothing if made right and pretty helps her self-respect.

To teach Home Economics we must teach Botany,-by story perhaps to arouse the interest; teach Entomology-flies and mosquitoes as disease carriers; teach Bacteriology, how the diphtheria germ growing in the decaying vegetable in the cellar, or the uncleanly dish cloth, may result in there being carried from the home a little white coffin. Let them catch something besides germs; for it is not the thing that's taught, but the thing that's caught, that helps. Teach Nature Study, Chemistry, Drawing, Hygiene-but teach it with the great thought that the girls are to be the home-makers of the nation.

The story of the Rappahannock, Mrs. Jones said she had told in Louisiana, and a man in the audience came to her and said, "I am glad you told that story, I was there." She told it in northern Wis. consin and a man wearing the G. A. R. button came and said, "I want to thank you for telling that story." The two armies, the gray and the blue, lay on opposite sides of the river around their camp fires. The band on one side struck up "John Brown's Body" and across the river the other band responded with "Dixie." Again the band wearing the blue started "The Star Spangled Banner," and again the response came back-"The Bonnie Blue Flag". Then away down the river a lone bugler began playing another air; and all up and down the river on both sides, from the bands and from the throats of men wearing the blue and from the throats of men wearing the gray there floated out on the air the strains of "Home, home, sweet, sweet home, Be it ever so humble there's no place like home."

# DOMESṪIC SCIENCE IN THE GRADES. 

Principal Thomas Lloyd Jones, Madison.

The question oî what, and how much, work in household arts, (domestic science and domestic art), should be given in the elementary school is a big one. I do not feel in any way equal to the task.

We are living in a changing age. Many people are sure that all is wrong in present day education. Not a few teachers have condemned, in the papers and the magazines, for a consideration, their own life work. So we are compelled to take an inventory, to study carefully our motives and methods. We must build for the future and into our work must go the best there is in us. Our courses of study have been enriched by the introduction of manual training, domestic science, art, music, and physical training. We have learned that culture comes from any study which "grows out of a pupil's life and which goes back into it again to enrich it." Manual arts and physical training, games, and good times if you please, have too long been isolated subjects, attached to, rather than incorporated in, the curriculum of the elementary school. These subjects will not come out. It is true that mistakes have been made. We must eliminate the sham and inefficiency from the work in household arts, and we must apply the same acid tests to arithmetic, geography, and grammar. I firmly believe that the household arts, as taught in our best schools, are no more fads than arithmetic.

Tremendous changes have taken place in our economic and industrial life. The home, once the center of industry, is now becoming less and less a real home, and more and more a place in which to stay, protected from the cold of winter and the glaring summer sun. Rosenkranz says that "the family is the organic starting point of all education". Se we as educators must constantly seek to improve the conditions of the home and foster all movements for the preservation of the family.

Thus it is that I am here to-day in the interest of greater stress upon our work in Household Arts for through it we can ameliorate the conditions of the home, make less pressing the problems of domestic service, and quicken vocational development.

It is not my purpose to discuss with you the order of topics in the course of study, it must be broad and rich, it must be well graded and logical but there is in my judgment no call for uniformity. Let me confess here too that I am afraid that we sometimes lug in things in the name of correlation. Every course of study should include,

1. Execution-sewing, cooking, cleaning, sweeping, washing, ironpressing, dusting, etc. Girls need to be trained in the necessary motions of house craft. The home cannot get along without labor.
2. Study of labor saving machinery. The drudgery of the home must be lessened and it is our duty to teach women how to do this.
3. Study of foods-preparation and serving; comparative food values; adulteration; substitutes.
4. Art of preserving.
5. Cooking for special purposes.
6. Economics of marketing.
7. The Home-planning and arrangement of rooms; home decoration; furnishing the house; sanitary conditions.
8. Textiles-quality and variety of fabrics; rugs; etc.
9. Household art-Good taste in design. To be given for benefit of a. The girls themselves.
b. The entire community.
10. 

## MORAL EDUCATION LEAGUE.

VOCATIONAL AND MORAL GUIDANCE IN THE HIGH SCHOOL.
Jesse B. Davis, Grand Rapids, Mich.
The first public schools established in America were particularly strong in religion and morals, and from the modern point of view very meagre in the field of knowledge. To glance over the records and textbooks of the early days will show the strongly religious trend of teaching. Noah Webster's Spelling Book of the edition of 1843 contains a Moral Catechism. This Catechism bases its teaching upon the authority of the Bible and treats of humility, mercy, peace-making, purity of heart, anger, revenge, justice, generosity, gratitude, truth, charity, avarice, frugality, industry and cheerfulness. Selections for reading were chosen for their patriotic or moral sentiment rather than for their literary or informational value. Every source of information regarding the early history of education in this country points to the chief aim of all teaching as moral and religious.

Since the Civil War the entire history of our country has changed in a most astonishing manner. We may be too near, even yet, to see clearly what it all means. But, in all walks of life, commercial, industrial, and educational, we have witnessed great changes. Today our schools are crowded with such a mass of subjects, such a variety ot
information, scientific, industrial and historical that both teachers and pupils are overwhelmed with its volume. No wonder that we have forgotten religion and morality in our effort to cram the youthful head with all the progress of the most wonderful age of the world's history.

Our public schools are not unmoral nor have they entirely eliminated religion from their teaching, but we have given up to a large measure the attempt to systematically develop the moral and religious nature of our pupils. Individual teachers are still the inspiration of many lives but we have not yet brought this most important side of our work up to the scientific standard of all our other teaching.

Whether the products of our schools of to-day are weaker in moral character than those of the early days can never be proved. Just how much of the immorality and indifference toward religion of the present age can be charged to the public schools can not be determined. Nevertheless the standards of moral conduct, the ideals upon which honest living and sound business stand, are the ideals of the public schools. We are, however, coming to realize that something more than the occasional or accidental method of applying ethical lessons is necessary. Committees and commissions have periodically been at work upon schemes that will avoid dogma on the one side and mere morality for morality's sake on the other.

About four years ago we began to realize that most of the failure to do successful work in the school was due to moral weakness: lack of ambition, lack of definite aim in life and work, lack of appreciation of the real benefit of education, lack of knowledge of the world's work, in fact a lack of any idea of the meaning of life itself.

A more complete study of the need for Vocational and Moral Guidance brought us to the point of working out a plan that would reach every pupil in the high school. This was done through the Department of English. The teachers were enthusiastic about the plan and the success which the results seem to indicate is due to the spirit with which they have undertaken the work. The word "guidance" has in this connection a special significance. From the vocational point of view, it means the gradual unfolding of the pupil's better understanding of himself; it means the opening of his eyes to the broad field of opportunity in the world; it means a selection of and a preparation for his own best field of service as a social being. From the moral standpoint, the idea of "guidance" is peculiarly essential in the development of the pupil. Ethical instruction that merely informs the brain does not necessarily produce better character. It is of most value when it is in some way applied to the actual thinking and acting of the pupil. In this connection guidance means the better un-
derstanding of one's own character; it means an awakening of the moral consciousness that will lead the pupil to emulate the character of the good and great who have gone before; it means a conception of oneself as a social being in some future occupation, and from this viewpoint, the appreciation of one's duty and obligation toward his business associates, toward his neighbors, and toward the law.

In our attempt to aid our pupils to choose their course of study with a degree of wisdom, to give an aim and purpose to their work, and to plan definitely for some vocation for which they seem best fitted, we outlined a plan which we called "Vocational Guidance". It is not often that in an attempt to find a solution for one problem one happens to work out a scheme that proves to be a very satisfactory solution of another perplexing question. Such, however, was the result in this case, for we found that the plan not only tended to give vocational aim to the high school course, but, as the work progressed, it developed into a very practical course of moral instruction.

The following outline describes the work in Oral and Written Composition in English from the eighth grade through the twelfth:

## 8th Grade. 1st Semester. <br> Topic-Ambition.

OBJECT: To arouse in the pupil a desire to be something and somebody in the world. To begin to look forward and not to live entirely in the present.

AIDS: 1. Saturday excursions.
2. Brief talks on biography.

> 8th Grade. 2nd Semester.
> Topic-The Value of an Education.

OBJECT: To guide the pupil to take the steps beyond the requirements of the compulsory education laws that will be of greatest advantage to his future career; to lead to a proper choice of schools or when necessary to the best kind of employment.

AIDS: 1. Catalogues of local high schools, academies, technical or commercial.
2. Catalogues of trade schools etc. of high school grade.
3. Placement bureau.

9th Grade. 1st Semester.

> Topic-Elements of Success in Life.
> Sub-Topic-Self-Analysis.

OBJECT: Through the study of the elements of character that make for success the student is lead to reveal himself to the teacher or vocational counsellor. Personal experiences, environment, associates, tastes and ideals are brought to bear upon the possible future bent of the pupil.
11-T. A.

AIDS: 1. Themes handed in are strictly confidential and often are discussed only with the teacher. Discussion in class is always of a general nature to determine the fundamental habits that tend toward successful living.

9th Grade. 2nd Semester.
Topic-Elements of Success in Life.
Sub-Topic-Biography.
OBJECT: To study the elements of character that made for success in the lives of the great men and women and to compare their characteristics with those of the writer.

AIDS: Plan of conducting the work through debates and the discussion of comparative merits in certain characters. More oral than written work in this grade.

10th Grade. 1st Semester.

## Topic-The World's Work, A Call to Service.

OBJECT: To broaden the pupils' vision of the opportunities for service beyond the horizon of his past experience; a study of vocations.

AIDS: 1. The Junior Association of Commerce (Boys).
2. Work of Women's Organizations (Girls).
3. Card Index of Vocations (Compiled by Students).
4. The "Home Study Club"' (Girls).

10th Grade. 2nd Semester.

## Topic-Choosing a Vocation.

OBJECT: To assist the pupil in making a definite choice of a vocation. Here is applied all that has been developed before. Again the pupil examines himself as to his ability and possible future and makes a careful application of these to the field of opportunity before him. The key note is obedience to the call of service.

AIDS: 1. Vocational Counsellors.
a. Teachers of English.
b. Session room teachers or grade principals.
c. Principal of school, chief counsellor.

11th Grade. 1st Semester.
Topic-Preparation for Life's Work.
OBJECT: To begin immediately to connect daily tasks and duties with future achievement; to select the subjects necessary to meet the requirements of the college or the industry that it is proposed to enter.
AIDS: 1. Comprehensive selection of catalogues of colleges, universities, professional and technical schools.
2. Vocational card index to catalogues.
3. Trade journals.
4. Vocational bulletins etc.

11th Grade. 2nd Semester.<br>Topic-Business and Professional Ethics.

OBJECT: At this period the pupil should take time to consider the ethics of his calling. He should understand the moral responsibilities that will rest upon him in his life work. This topic gives a personal and concrete application to the study of moral ethics that is extremely practical.

AIDS: 1. Investigations of questionable transactions.
2. Talks by men and women able to give of their experience to the subject.
3. Questionable advertising.

12th Grade. 1st Semester.
Topic-Social Ethics: The Individual in his Vocation and Society.
OBJECT: To make a practical study of social ethics from a concrete point of view.

AIDS: 1. Assisting in social work as helpers or entertainers at:
a. Slum districts.
b. Social settlements.
c. Playgrounds.
d. Social centers (schoolhouses).
e. Charity Organization.
f. Y. M. C. A. and Y. W. C. A.
g. The church.
2. Girls' Social Service Club.
3. Boys' Leadership Club.

## 12th Grade. 2nd Semester.

Topic-Civic Ethics: The Individual in His Vocation and the State.
OBJECT: To present the obligations of government in a personal and concrete manner and to arouse an interest in civic problems that will result in a more righteous citizenship.

AIDS: 1. Schemes for getting into actual touch with civic conditions.

> 2. Tours of inspection such as:
> a. Pavements.
> b. Lighting of streets.
> c. Enforcement of juvenile laws.
> d. Health conditions.
> e. Fire protection.
> f. Safe-guarding public money.
> g. Pure food laws, etc.
> 3. Boys' "House of Representatives". (Debating Club)

The grade principals or session room teachers, who are in charge of about two hundred pupils each, may be called vocational counsellors. These teachers have full charge of matters of petty discipline and of maintaining the standard of scholarship in each group. These duties afford a splendid opportunity for moral guidance that few other teachers have. It is also their privilege to advise with each pupil in
the selection of his studies for each semester. Again this affords a peculiar opportunity for guiding the pupil toward the career for which he seems to be best fitted in character and ability.

Through the various organizations among the students, it is possible to guide their thought and action along the lines of future service. The work among the boys in the clubs known as the Leadership Club, the House of Representatives and the Junior Association of Commerce, and among the girls in such societies as the Social Service Club, the Senior Sorosis, the College Club, and a Home Study Club, it is possible to create an atmosphere within the school that is charged with vocational ambition and with deep interest in future opportunities for service.

To give any tangible report of the results of our four years of effort in this work is very difficult. They are more intellectual and spiritual than material and cannot be estimated by statistics. We no longer consider vocational guidance as an experiment but as an established part of the curriculum. One must mingle with the pupils and the teachers to appreciate the spirit of the institution. The work has at least eliminated a large proportion of the drifters who were the troublesome element of the school; it has reduced discipline to an almost negligible quantity. While each pupil may not have chosen a definite career, he is at least taking life more seriously; he is making the attempt to find that thing which he must do if he is to fulfill his highest ideals.

The opinion of the teachers regarding the value of the themes is indicated in the following expressions:
"It has undoubtedly prevented some misfits in the choice of vocations."
"It has stopped several of my pupils who were drifting."
"Even though it may not determine a pupil's actual vocation it adds inestimably to his outlook on life and his attitude toward work, and makes for bigger and better lives."
"It gives an opportunity to use the pupil's ambition as a lever to lift him away from harmful habits and to strengthen his character."
"The pupils appreciate the fact that character counts in practical life."
"They give evidence of a higher sense of honor, a finer feeling for others and a better understanding of what is necessary to make good."

Perhaps the one bit of testimony that expresses more than all the rest is this: "It makes the teacher feel that she is doing more than teaching English; that she is having a share in the wonderful work of moulding lives."

This last statement sounds the keynote of the entire plan. The demand for a practical course of moral instruction in the public schools
and particularly in the high school has been urgent for many years. It is not effective when taught as a course in formal ethics; it fails to reach those who need it most when made elective; it is not personal or practical when taught in the abstract; and it does not give time for growth when given as a single semester course. Through five years of composition work in the department of English, all of these difficulties are surmounted, and, furthermore, the pupils are getting the moral training, not as such, but as a part of practical preparation for life. With the wide choice of subjects in the cosmopolitan high school, with the diversity of entrance requirements for technical schools and colleges, and with the need of a closer relationship between the public schools and the commercial and industrial community that supports them, comes this most positive demand. We are called upon to guide and prepare those who are to go out into the numerous ways in life in a manner that will eliminate the misfits and that will make for a greater efficiency in every vocation. In our attempt to meet this demand upon the public schools we are solving several problems of school administration and at the same time we are fulfilling our chief mission in preparing our boys and girls to meet the moral issues of life and to better serve humanity in that calling for which their maker intended them.

## LAYING FOUNDATIONS OF CHARACTER.

Mrs. Frederic Schoff, Philadelphia.

Heaven is not reached at a single bound.
We build the ladder by which we rise,
From the lowly earth, to the vaulted skies
And we mount its eminence round by round.
Every life begins in the same way, whether in hovel or palace the helpless babe opens its eyes, he comes enwrapped in a sphere of innocence, with soul untarnished by the world, receptive to every influence, sweet innocent and with infinite possibilities for good or evil he comes fresh from the Creator. Back of him are billions of ancestors, some good, some bad.

Whatever their responsibility for the babe which through many lines and many centuries now begins life, the Divine Father has given him what he gives to each child of earth, the germs of goodness, the freedom to choose good or evil, the opportunity through life's experience to ascend from the helpless innocence of infancy, to the stronger
innocence of manhood, where through choice of the right, through resisting temptation, a man rises to the innocence of knowledge and noble manhood.

A great step forward will have been made when it becomes a generally accepted fact that no children are born who have not a spark of the Divine which may become a flame kindling to life the whole being, or which may be dimmed by neglect.

God has placed on fathers, mothers, and teachers the great responsibility of nuturing the inner life of the child, of guiding him through the helpless years of infancy and childhood, of leading him in the path which has for its goal a manhood moulded on the pattern that Jesus gave to every human being.

To do this with any degree of efficiency parents and teachers must be walking on the path themselves, seeing the goal, day by day, hour by hour, guiding their own lives accordingly. It is the influence which goes out from man or woman in every deed and every act which speaks louder than words.

No one can lay the foundations of character in either who has not first begun to build his own, who has not realized what character building is. We all know of the foolish man who built his house on the sand, the rain descended, the floods came and the house fell, while the other house founded on a rock withstood tempest and storm because it was founded on a rock.

In Zurich there is a house built in 1320 in the days when the Romans were there.

It was my privílege to be a guest in this house which is still occupied. A great earthquake visited Zurich some years ago, houses were demolished and terror reigned, but in this house which has endured through so many centuries not a tremor was felt, not a trace of the earthquake. It was founded on a rock, and while the earth shook, the rock remained firm. It stands to-day an example of the value of a strong safe foundation.

What the rock is in nature, truth is to the spirit. The life which is to successfully meet the temptations and trials of life must be founded on the Rock of Divine Truth, must gain its strength from the inflowing of the Divine spirit, must look to the only source of life and power, and guide life by His law.

Ten laws of life He gave to man, which again were condensed into the two great commandments, Love to God and Love to the neighbor, and yet again in a single sentence is voiced the goal of life "What doth the Lord, the God, require of thee but to do justly, to love mercy and to walk humbly with thy God."

To put into the heart of every child the desire to do right seems to be the duty we are given as parents and teachers.

To point out to him the great object of life, to direct him to look for strength to the only One who can give it, is to lay deep and strong the foundations on which the whole superstructure may safely stand.

There can be no moral education that is not superficial, and built on sand, unless it goes back to God. There is no life which can rise to its highest possibilities that does not recognize dependence on Him and that whatever power or strength may be given, it is from Him.

The things of the spirit we do not see with our natural eyes, but the real things which endure are the spiritual things. It is the souls of men which are guiding the world's work, which are shaping and changing the world's surface, yet in a few short years those are active to-day in this world's work pass on to the world of realities, to the world for which this is but the school.

To live in the world, doing the world's work, yet with the spirit open to the great animating purpose of it all, gives a power of discrimination into relative values which comes in no other way. It gives poise and strength to meet sorrows and disappointments, for God's great plans for the universe are not worked out in the short space of human life. Here is the beginning, here the seeds are planted, which will go on growing and developing to eternity.

The seeds must be planted however or there will be no harvest. They do not plant themselves. Parents and teachers are the planters, the tillers of that ground of the spirit. It is a God-given privilege and duty, and in His word He impressed it on us in the strongest terms.
"Inasmuch as ye have done it unto one of the least of these ye have done it unto me."
"It is not the will of your Father in Heaven that one of these little ones should perish." "Unless ye become as a little child ye cannot enter the Kingdom of Heaven."

The vision of what we have to do, the Divine commission to do it, we have seen. How are we to go about it? How are we to nurture the good sweet impulses of the little child and strengthen them?

First by learning ourselves of the development of the spirit, of the race tendencies and normal growth of child life. By learning the times and seasons of planting, the methods which will be successful, and those which blight and kill.

By learning that while we may plant the seeds and see that the environment is favorable, the child himself must develop from within, and that we must learn when to let him alone.

It is not possible to make character by learning truths. They only become a part of life as they are used. Day by day in the little hap. penings of daily life, the truths that are really grasped may be recog. nized as they influence deeds and thoughts and desires. In the vege-
table world spring is the seed time. In the human plant the Spring time of life is the seed time. The spirit is receptive, the young soul is questioning and learning. It is not resisting and arguing. It is nearer to spiritual realities than after the ego of self develops. The seeds planted then are never forgotten, until life's close, the memories of childhood endure. All the seeds may not germinate and grow at once but they are in the treasure house of the soul coming into the mind to influence and strengthen in many an hour of trial. Not to fill the treasure house of youth with God-given ideals of life and service is to deprive it of something that can never be made up. It is like sending a ship to sea without a compass, to drift and find its way as best it can.

The foundations of character are laid in infancy. Parents have the entire responsibility of this work for the first five years of life. When they realize that it is a responsibility that cannot be delegated to others, that it is entirely theirs, through infancy, and primarily theirs through childhood and youth, when they learn how to efficiently meet this responsibility, teachers will find it easier when their turn comes to share this responsibility.

Share it they must and do, for it is a responsibility no teacher can escape. He may be engaged to teach Latin or mathematics but consciously or not he is a vital factor in laying foundations of character.

Schools may have no moral education course on the curriculum, but every school is influencing and shaping character whether with intention or not. It is unavoidable.

Many a teacher has been the ideal of life for a child, while others have starved and blighted the inner life of the child.

What a teacher is; means even more than what he knows.
When the principal of a high school met the teacher who was troubled by the pupils' thefts of pencils and tablets with the remark, "Oh, those are such little things," one need not go farther to know that he lacked the primary qualification for principalship of a school. If he had only known enough of childhood to say:
"It is one of our duties as teachers to teach regards for other's rights and other's property. No child realizes this unless he is taught.

As a baby he takes anything that strikes his fancy. He knows no wrong. He will continue to do this unless he is taught that he must respect other's property as he would have them respect his. The children's parents have taken it for granted their children would not steal. They have not realized that honesty is a lesson to be taught to every child and to neglect it is dangerous and lays the foundation for theft. What is innocent in the baby is condemned in the child and is criminal in the man."

There are no little things, no trivial things where great principles are involved. There are many little things which children do which are passing phases of childlife and superficial which may be overlooked, but not acts which are based on the violation of fundamental principles of life.

There is not a commandment of the decalogue that a child may not violate, and still be a normal child. Faults committed through ignor. ance are very different from those committed with knowledge.

Only as the divinely given command is followed, when after giving the commandments to men he said, "Ye shall build them as frontlets before thine eyes, Ye shall speak of them at thy downsitting and thine uprising," will childhood learn as it should these foundation truths of life.
More children are arrested for stealing than for all other offenses put together. More men and women are in prisons for that offense than for all others put together.

Courts would lose half their business were it not for stealing in its many forms.

There is no lesson to-day of greater importance than to teach children in ways that will be effective, "Thou shalt not steal."

It is the crime of to-day.
From the petty thief who takes lead pencils and tablets or takes the lunch of his schoolmate, to the burglar, the embezzler, the man who steals his nomination, or an office, or the corporation who grasps for selfish benefit the food products or the coal and oil that should belong to all the people, may seem a long step. It is but the logical development of child dishonesty not checked in childhood. The neglect to teach by precept and example that stealing is base and dishonorable, that life gained at the cost of dishonor is gained at too great a sacrifice has been the underlying cause for the crime of manhood.

The teacher who sent for a police officer to arrest a boy who stole her pocketbook had not thought deeply of her duty to that boy. She did not discriminate between his lack of responsibility because of youth, and the responsibility that would have rested on her had she committed the same act.

Her place as teacher should mean that she is able to cope with childhood's faults and help to overcome them.

Is she not fitted by education to shape character more than a court or prison?

If she is not, she is not qualified to hold her place.
Sincerity and truthfulness are attributes of most children unless fear or some outside influence causes deceit and falsehood.

The imagination of little children is vivid. Many have imaginary companions, and the practical parent is troubled and thinks the child untruthful. That the eyes of infancy are open to see what those of older growth cannot see must be admitted. Too many and too convincing have been the instances of this to question their accuracy. By school years though this phase is passed, and the teacher does not meet it.

She must ask herself if she is a thoughtful teacher whether her methods are developing deceit and concealment. Too many rules may inspire children to do things they would not have thought of unless the rules had been made.

The power of suggestion cannot be ignored. If Johnnie is told he must not go near the water he immediately longs to do it. If he is told he must not whisper, he thinks of a hundred things that must be said just then, and he breaks the rule. Then when the teacher asks how many children have whispered, he is silent to avoid the confession. If he feels that the teacher is watching him and that only by such watching can he be made to do his duty, he soon learns to break the rules when her back is turned.

Self-helpfulness, self-control, and personal responsibility are qualities that must be developed from within by every individual. They are essential all through life. The foundation of these qualities is not laid in the school which makes hard and fast rules. They are laid by the teacher who takes the children in her confidence, who shows them what school is for, what the end is for which they are together working, and then tells them how they can help.

A little boy who hated school and who could only be made to attend by force was visited one day by a teacher of long experience. She said, after listening to his dislike of all that school gave: "Do you see those men digging ditches?" "Yes," said he. "It's hard work. Would you like to do it all your life?" "Oh no," said he. "Well that is all you will be able to do when you are a man if you do not go to school when a boy." The lesson went home. "I'll go to school," he said, and he did from that day forward. How much more effective it was to make him see why he should go and do it voluntarily than to force him through his truant officer, or arrest of his parents.

No real progress is ever made by force. It acts from outside. It does not affect the inner life. As soon as the force is removed, the child reverts to his own mistaken course.

To get the children's viewpoint, to correct it where it is wrong, not giving up until he himself sees the true viewpoint and adopts it, is the only way to lay foundations of character.

History and biography have many illustrations of heroism and no-
bility which in the hands of a wise teacher become inspirations and object lessons to the children.

Children are imitators. They imitate what they see older people do, and many a little child accused of impure acts is but copying what he has seen. To blame him would be unjust. To help him to the right is the duty of the teacher.

Much is said to-day of moral training in schools.
Hygiene including the care and use of every function and organ of the body should be taught. The omissions of the past are no less harmful than over emphasis or wrong teaching in regard to the highest functions of the body. Hygiene should be taught including everything. Sex-Hygiene should not be differentiated from the general course. There are many good reasons for this. The normal child under wholesome healthy influence is not dwelling on this. Unless properly taught, the very faults against which he should be guarded may be suggested. It too must be viewed from a spiritual standpoint to give the right conception to the child.

To answer the questions asked by the children will tax the teacher and puzzle her many times but when she feels the dignity and responsibility of her office, of its effect on the whole after life of the child, she will realize that while by her work the child has passed creditably from one grade to another, that is not her only duty: Whether under her influence the child has developed better ideals of life, strength of character, self-control, reliability, and trustworthiness, is of even greater importance than whether he has been promoted. Whether for good or ill, every teacher is shaping the lives and ideals of the children under her care. Guided by truth from the one and only Source of truth, helped by insight and understanding of the growth of mind and spirit, and filled with love and patience, the teacher is equipped to lay the foundations of character, to have a large share in giving to childhood the foundation stones of principle which as life advances blossom into helpful deeds of service and of use to others.

God the great teacher of all of us has shown us the way. With Him we are working when we teach His little ones. Only He who reads 'all hearts, who sees the motives, can see the harvest of all that we have sown. To have one's work for childhood live in hundreds of lives, through good deeds and service for all the years of life is surely the richest compensation for those who lay the foundation of character. No child is hopeless, none so lowly that patience, love and insight cannot effect a transformation.

COMMERCIAL SECTION.

## USEFULNESS THE KEYNOTE OF MODERN EDUCATION.

Carl C. Marshall, Cedar Rapids, Iowa.

It has been estimated that it costs about five thousand dollars to properly rear a boy or girl to the age of self-supporting maturity. This is a little less than board cost at five dollars a week for twenty years.

Now, the great human corporation cannot be run at a loss. It is necessary for the average man, not only to be self-supporting, but to pay back into the human treasury the first cost of his rearing. If he dies before he does this, he dies a pauper, whether he is a millionaire in his palace or a tramp on a park bench.

Education began when the first savage learned to capture fish with a net or a notched stick, and, in the interest of the family larder, taught the art to his son. Education was industrial then; it is industrial to-day. After the fish were caught, the youthful savage might amuse himself by carving rude figures on the chalk cliffs, enhancing his personal appearance by means of beads or nose rings, or tattooing -but only when there was enough fish. So it is to-day. Man has soul needs, but his soul needs are subordinate to his body needs. Until he is assured of his bread and butter and a coat to his back, he will do well not to concern himself too much with the Greek mythology and the higher criticism. There is no more pitable being than an educated incompetent.

Some ten years ago, a distinguished Oxford professor, himself a classicist, startled his scholastic caste by announcing that the basis of education in the future would be the control of natural forces-in other words that it would be industrial rather than cultural. That scholasticism would give way before applied science, that the schools would hereafter concern themselves more with the transmission of electricity than the translation of ancient manuscripts, and would give more time to the problems of organic chemistry and less to the intricacies of Greek verbs. These things would come not merely to gratify the human passion for knowledge, but as a paramount social necessity.

It needed no prophet to foretell this abandonment of the old traditional education-an education that was for ornament rather than service, a luxury rather than a necessity, and which was exclusive and aristocratic rather than social and democratic. The eighteenth and nineteenth centuries had seen government socialized; the twen-
tieth century would see the socialization of industry, and the socializing of education would come as a necessary feature in this procession of triumphant democracy.

With this condition are we confronted to-day. The public demands of the school something more serviceable than the things they have from time immemorial been ladling out under the name of education. With the coming of inventions and discoveries and new forms of machinery, the work of the world has become so difficult and complicated as to require the agency of schools to teach it effectively.

It is no longer safe to turn a youth of twenty out into the world with a little book-learning, and trust to the chance that he will in some way be able to find a place in the industrial scheme.

The people have learned this truth sooner than the schoolmasters. The latter has been content to go on in the old way, because he had learned that way, and because it really made but little difference to him what he was called on to teach. But it makes a great deal of difference to the parent, who gives ten or twelve valuable years of his child's life to the school, only to find him at the end of the time utterly inefficient both as to hands and brains.

But while the dullest citizen school patron has been able to see that something is wrong, very few of the general public have been able to see what is wrong. As a result of this uncertainty various experiments have been tried. We have had manual training, schools of domestic science, commercial departments in the high schools, variously offered as a solution. Nothing as yet seems to have quite touched the spot. Most of the manual training thus far is rather a joke among practical mechanics, while a great deal of the "domestic science" does not get much nearer the real problem of the kitchen, than the preparation of lettuce, sandwiches and chocolate fudge. Commercial high schools and departments are doing practical and good work in many cities, but only harm can come from the overexploitation of bookkeeping and shorthand as a number of young people who can be profitably employed in their vocation is necessarily limited. Furthermore this form of vocational training is already well supplied by the private business schools that have come into existence all over the country in the last fifty years.

Perhaps the most hopeful recent proposal in the direction of useful education is found in the movement for continuation schools that have proved so successful in Germany, and the system of alternate school and work as carried out in Northhampton, Mass., Cincinnati and other cities. Gary, Indiana has gone further by frankly teaching a number of trades in her schools, employing as teachers mechanics and artisans who carry trades union cards, and who, it hardly
needs saying, are not required to show a college degree before they can be put on the payroll. There is much else in the remarkable, new departures in school methods and management at Gary, to shock the sensibilities of the educational standpatters. With the march of sociai progress and welfare, we may expect the Gary methods, or those on similar lines, to spread until we shall no longer look upon a school as a place where a boy may get something called an education which will enable him to live without work.

It will be a grand time 'in this country when our schools clasp hands with the shops and teach in their daily routine, both in theory and practice, the dignity and virtue, the manliness, the womanliness of useful work.

It is beyond the purposes of this address to discuss details. I shall have accomplished all that I hope, if I convince you that to train a boy or girl for self-support is not only a legitimate function of our public schools, but an imperative duty of the state.

Nor does this purpose stop with the grade and secondary schools. Training for useful service is the noblest function of the college or university. It is the worthy pride of the state of Wisconsin that her great university is a state school that really serves the state. It is a glorious prophecy of the possibilities of education, when we see the governor of a state turning away from political bosses and cheap partisan politicians to form an advisory cabinet from his university teachers, and through their wise counsel, solving such vexed problems of statecraft, as railroad transportation, taxation and the like. If all of our states had a Robt. M. LaFollette, and a Wisconsin University, this would soon be a lot better country to live in.

But I should treat this theme most inadequately, my fellow teachers, if I should insist that the whole purpose of education is to consume the material welfare of the people.

Usefulness may be spiritual as well as physical. If there is nothing worthy in human endeavor, but.the production of food and clothes, and shelter, God might better have created us without souls.

He who gets nothing more out of life than the mere satisfaction of his physical needs and desires, might as well have been born a sheep.

While in the program of man's necessities, the power of self-support comes first, and is therefore the first thing to be made certain in the training of our youth, there is a higher usefulness to consume. Man must be taught to think and feel and imagine as well as work. There is not a human vocation that does not have a spiritual side to it. Leave this out of view and you get the "Man with the Hoe." To avoid this tragedy, we must mix poetry with work and put something of beauty in everything made with human hands. We must combat on
every hand that degrading materialism that measures everything by the dollar standard. We must maintain that Emerson and Ruskin are as useful as Edison and Whitney.

We must teach that ideas are the strongest things in the world, that a "Battle Hymn of the Republic" may be more potent in saving a nation than a million troops or a fleet of battleships.

As the country fills up and the struggle for existence becomes harder, we shall more and more need to combat this deadening materialism. Our schools must be used to the utmost to make effective workers of our boys and girls, but along with the useful training they must learn that they are more than mere workers, that industrial usefulness is a means to spiritual usefulness, and that even for the purposes of this world, it shall not profit a man to gain the whole world and lose his own soul.

## KINDERGARTEN SECTION.

## IDEALS OF SCIENTIFIC PEDAGOGY AND THE MONTESORI EXPERIMENT.

Anna E. Logan, Oxford, Ohio.

Every art is based on a science, whether consciously or not. This is as true of the art of teaching as of any other. But the fact that teaching, and the inborn instincts and talents which make artistic teaching possible, are as old as the race-as old as parenthood-have made some teachers slow to believe that science has any message for them.

The spirit of the present age is constantly seeking to make the connection between each form of art and artizanship and its correlated science as conscious and effective as possible. Even Big Business is following this trend of the age in applying "Scientific management" to many departments of labor, from the simple act of bricklaying to the most complex commercial enterprises.

In making such a widespread and comparatively sudden innovation as this, there is of course danger of going to extremes; either to think that instinct and a knowledge of the subject matter is enough for us because it was enough for our forefathers-which is distinctly a Chinese argument,-or to believe that scientific training could construct a man-made teacher out of any one who was not already a God-created educator. If I should speak favorably of scientific pedagogy as I understand the phrase, I beg you not to think that I am verging on this second extreme.

Fortunately there is a safe middle ground. If only born teachers were allowed to take the Normal training it would be safe to give them any desired quantity of the correlated sciences involved in teaching; they would find and keep such a warm human touch on the pulse of human nature that it would prevent their erring in either direction. The danger of over-emphasizing the art of teaching is not only that it blinds one to the child's equally important art of learning, but it might lead to a too esthetic and effeminized form of education, such as our nation is just beginning to deplore. The danger of over-emphasizing the scientific phase is, that inexperienced people are tempted to use laboratory methods in the schoolroom-to substitute tests for lessons, and to observe the children as impassively as if they were frogs.

The sciences on which teachers have founded their theories and by which they tested their practice, were philosophy and metaphysics, and later psychology. The latter as taught even now in most normal schools in this country is a sort of spookology-a tangle of incomprehensible words about the intangible workings of an unseen Something.

Educational philosophy has, after many struggles, become enough connected with modern human nature to be a sane and ethical guide to teachers in choosing large principles. But the actual application of such principles is far harder to discover and attain than the principles themselves. For this purpose we are now using physiological psychology, which gives us a glimpse of the machinery of mind in connection with its workings. We believe now that this has always been the real basis of our ancient profession although unconsciously applied; yet it is the cause of more tears before examination and more jokes afterward than any other subject and is most apt to receive a speedy burial. Practically, so far as the ordinary Normal student is concerned, it is just a bugbear, not a revelation nor a fundamental point of view; even if one should really grasp it and its implications, the best psychologists warn teachers not to be too conscious of this science when with the children. They tell us to absorb it in training school, think out its applications by ourselves at night, and to make these applications so habitual that we can do the right thing by intuition acquired as well as inborn.

No one could be more convinced of the wisdom of this warning than I, not only from observation of other teachers but from experiences in my own schoolroom. In the beginning of my teaching experience I quite naturally tried to apply what had already been for some years my favorite study, and experimented hopefully for a long time before I was convinced that the teaching attitude of mind and the psychological attitude are mutually exclusive. The reason for this, I
believe, lies partly in the fact that all psychologizing which is worth the name is based on intrcspection; you must climb down deep into the more childlike levels of your own mind and remember vividly your own point of view at an earlier stage of development, in order to interpret the external signs of what is going on in the mind of a child. This attitude, even if assumed temporarily, while it enormously increases insight, lessens the weight of authority which a child expects of his elders. Moreover, psychology as usually taught is analytical. It tells us that the child is a unit composed of mind working through body, but it describes this unit in so many chapters that the teacher cannot synthesize them in her own mind without detaching herself from the present situation and concentrating her attention intensely on an essentially adult view of events. To ṣum up the reasons why psychology must not be applied consciously in the educative process; it requires the observer to assume (1) a childlike mental content, (2) a passive will, and (3) an adult point of view. You will surely agree that the qualities of an effective teacher are just the opposite: (1) a broad sweep of mental horizon, (2) an active, inspiring personality, and (3) a spontaneously childlike point of view. Hence the disappointment of many teachers in first attempting scientfic pedagogy. The bearing of this fact on Dr. Montesori's work we will consider later.

Then is there any science so concrete and adaptable to human nature as to fill our great lack of a practical and reliable guide in schoolroom emergencies? By what unit of measure can we test our dealings with problem children and with the mental crises of normal children? In a discussion of unusual or original methods on what basis can we value them justly and discriminate their strong and weak points?

The science most nearly meeting these needs is founded on modern clinical experience, not on the adult abstractions of university theses, wise though these may be. I believe this recombination and re-emphasis of science will become known to teachers as psychological physiology. This is a form of training which makes teachers alert to every change in a child's breathing and circulation, nourishment and fatigue. It adds to a teacher's artistic instinct and holy human devotion just the one thing needed to insure that the parental duty of nurture shall be shared by the schools, and supplied to "all the children of all the people."

This is the science which Mme. Montesori has so bravely attempted and, in the practically unanimous opinion of experts, so signally failed to formulate.

Her great experiment has attracted the attention of the educational world, largely because she has claimed to have accomplished
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what all modern educators, since Rousseau have been trying to do. Her doctrine of freedom is identically that of Rousseau. Her méthod of teaching writing was described by Quintillian in the first century except that he used ivory instead of sandpaper letters. This substitution of sandpaper for this purpose is almost the only useful idea in her system which was not already known to students of the history of education before Montesori appeared on the educational horizon. Not only has she drawn from the repertoire of methods which modern educators draw from on occasion, but she bases her most characteristic procedures on theories which were proved incorrect thirty or more years ago.

Let us consider a few of the points in which her work violates basic principles of this new composite science of psychological phys. iology. In the first place, education consists in such adaptation to child nature as will raise it to a higher level. Not merely to observe and follow the child, but to inspire and steady him. In a recent discussion of Montesori's work, Doctor Kilpatrick of Teachers College, Columbia University, said, "A maximum of consciousness is necessary for a child to get on a higher plane. Aciivity for skill only does not involve a maximum of consciousness. Montesori recognized this and said when a child reaches this stage he should pass on to other materials,-but-these she has not." The materials which she has, and the way in which sne uses them tend to limit the child's consciousness to an almost animal level of simplicity. Only the children of a race which has for centuries been trained to unreasoning obedience would long endure such limitation.

Second, her theory of sense training which she took from a book written about seventy years ago, is based on the now disproved theory that training the eye to great efficiency in one line will make it see all things more clearly, and that training the ear or hand or memory in a similar limited way will develop enormous efficiency in all the functions of these parts of the individual. Her belief in this now rejected doctrine of formal discipline proves that she is not in touch with the world's progress towards scientific pedagogy, as this theory was dead and buried thirty years ago. To quote again from Doctor Kilpatrick, who is one of the committee of experts sent by Columbia University to Rome this summer on purpose to study Montesori's work; "She gives intellectual gymnastics for refining the senses, not for knowing color etc., fur to sharpen the sight as you would a knife. This training does not carry over into other spheres of seeing."

Another point in which Montesori is far behind the educational ideals of the present day is that she over-emphasizes the intaking anabolic processes and so limits the child's activity to reactions upon
a comparatively stationary environment. She approves of letting children from four to six years of age do over and over again for hours at a time or through a period of months an act so simple that a two year old baby could do it at the first trial. The unnatural docility which makes it possible for children to do this without protest can only be matched by the extreme docility of womanhood in oriental countries at the present time and in many countries until the last two generations.

Professor Thomas in Sex and Society says the only difference between the mental efficiency of man and woman is that men have been forced to form habits of reacting freely and swiftly to the emergencies of a swiftly moving environment (animals, enemies, machinery, etc.) while women have reacted to the more fixed environment of garden and house. He puts up a tremendous argument to prove that brain power is developed by the individual being forced to make swift necessary movements, and that an environment is educative in proportion to the variety of its sudden hindrances to the carrying out of man's strongest purposes; thus stimulating his powers of invention and adaptation. If this is true, no place of education from the kindergarten up can afford to ignore it, and the "play-groundizar tion" of education must be our ideal, instead of increasing infinitesimal knowledge of useless and uncoördinated details by such abnormally slow observational processes as Montesori teaches.

Another of the Columbia University delegates to Rome, Dr. Hellegas, emphasizes the uselessness in modern life of those censory discriminations which Montesori spends so much time in developing. He says, "Instead of training for delicate discriminations of weights and distances, modern civilized people can trust to instruments." We no longer need to read time by the height of the sun in this age when nearly every man has a more accurate means of time measurement; the world's progress requires so much more of the higher mental capacities that a few of those functions needed by savages might safely be left to disappear.

A member of the faculty of the Chicago Kindergarten Institute, Miss Jenkins, says, "We should consider what could reasonably be expected from one of Montesori's personality, her training and her experience. She is a scientist and a humanitarian, a womanly woman, gracious, and with a winning personality. But she is not an artist, this she frankly admits, also the one-sidedness of her work because of this limitation. She is highly creative in her thought, wonderfully inspirational, but too individualistic to work harmoniously with other people for any length of time. She has withdrawn from her friends one after another, and at present there is no school in existence which she is willing to have called by her name. Her back-
ground for educational work is that of the Italian schools which are for the most part medieval in character; her teaching experience has been almost entirely with subnormal children. In view of these limitations, why did all educational roads suddenly lead to Rome? Was it solely the result of cleverly written popular articles followed by the aggressive advertising methods of the American Manufacturer? Or has Dr. Montesori in her efforts to meet Italy's educational need put her finger with the physician's. searching touch on our own educational sore spot? Our lack of freedom in the schools."

Add to her limitations in background the fact that her medical training was obtained in a university which cannot yet compare with those of Germany, although it has made great strides within the last few years. Also her medical training was obtained before this recent improvement of the Italian universities, so that the curious gaps in her physiological knowledge are quite explainable. Hence we must not be surprised that she advises teachers to feed the children garlic and rue in order to "disinfect the lungs", and that she discusses gravely the "pedagogic cure for rickets". Her immense advance over the methods used in other Roman schools entitles her to the greatest admiration, and her humanitarian purpose warms our hearts toward her in our struggles with social problems which are still unsolved in our country as in hers.

Just a few quatations from experts before I close. Professor Kilpatrick says that sense training is not necessary nor desirable, and that her system is not fitted to American conditions. Professor Earl Barnes expresses regret over Montesori's taking the young children from their homes for the whole day and so setting the mothers free to work, intensifying a social situation which saps the vitality of the coming generation by over working the mothers, as well as flooding the market with unskilled labor. Professor McManis says that Montesori's exercises are stultifying to the children. Professor Gesell says "'Sense training' is in great part motor training." Dr. Jenny Merrill says "The Montesori material, being so limited, is fast outgrown, and I think Dr. Montesori will be bound to develop the occupational side more than she has. We can teach her there."

In conclusion, a new and practical science for the guidance of educational practice, a science of which a teacher or kindergartener will dare to be conscious even in the throes of actual work with the children, is in process of development but has not yet been formulated nor even named.

## LIBRARY SECTION.

PRACTICAL APPLICATIONS OF READING.

Chas. H. Judd, University of Chicago.

The fourth grade is a turning point in reading. At this time the children's interest in the mechanics of reading begins to lag and their interest in the content of reading must henceforth be the main motive.
One-third to one-half more time is required for reading aloud than for reading silently. Too much emphasis is placed on reading aloud and too little on silent reading. The importance of silent reading should be given special emphasis beginning with the fourth grade. It is the usual practice, however, to have the child read in the fourth grade just as he has been reading in the third grade.

Application of reading is different from acquisition of reading. Acquisition is entirely justified in the early grades. If you have a person who does not read well by the time he reaches the sixth grade you have almost a hopeless case, because they are not so docile in that age and they will be unwilling to go through the drudgery necessary. Children can get the mechanics of reading in the first few grades; then the difficulty is of finding material for them.
The fourth, fifth, and sixth years in school are very crucial periods. Teachers as a rule do not care to teach in the middle grades and yet these are the crucial grades. This is not usually recognized by the general public.

Children in the lower grades enjoy fairy tales, while those in the middle grades are more interested in the actual facts of the real world. This is the time when children leave school because they want to get into real life. We must therefore offer them reading on practical things. Reading along the line of the various industries is to be recommended here. Some day someone will write a classic on the manufacture of a lead pencil.

We have so mixed reading for information and reading in which the emotions are mainly concerned, that children have not realized the difference between the two. Inspector Terry's recent article on this subject in "The School Review" makes this distinction and the reason for it clear.

Children leave school without the realization that reading is something of practical value in life. We made an investigation recently of the reading ability of boys from fourteen to sixteen years of age who were employed in factories in Chicago. We tested whether or not they could read as well as when they left school or as well as those who were in school, but had been with them in their classes.

We found that they had lost a great deal of their ability to read. They did not seem to have the idea that reading is something worth while keeping up. The trouble is, the boys who leave school have had mainly oral reading. Therefore they do not keep it up after they leave schcol.

Practically no children in school know that there are such things as trade journals for every trade. They do not know anything about practical books. I am perfectly willing that the reading of classics should be replaced by practical reading in the middle grades. Then when they leave school they will know what reading is for. We gave the boys referred to reading matter connected with their work. Then we asked them to discuss what they had read. The results indicated absolute inability to get something from the printed page.

The Studebaker Co., of South Bend, Ind., realizes the importance of practical reading by their employes. The managers asked themselves, "Why should not we have in the factory all of the reading matter connected with our work that is published anywhere?" So they got all the trade journals and books connected with their work. Their librarian goes over the matter and selects what is of special interest to men in special work in the factory. Then the attention of the men is called to this material. This company is ready to spend a large sum of money on that library from the purely commercial point of view.

A certain teacher in the Indianapolis schools was having great diffculty with her school. And really when you examine some of these reading books it is no wonder. Well, the teacher in despair tried to find out what her boys were especially interested in. Right around the corner was a saw factory, and the boys were interested in this more than in their school work. The teacher got some of the trade catalogs dealing with saws. The teacher found that the children were greatly interested in reading those catalogs and so was helped to get control over her school. In spite of the interest that children have in such practical reading we offer them the most attenuated material in the world.

We, who teach reading, should realize that it is the application of reading that is the important thing. What is more useful, even in the most mercenary matter, than the ability to read?
I was told of the case of two young men during the strenuous tymes in the banking business a few years ago. Both had graduated from college. One of them was made very nervous by the panic. He did not know how to prepare to meet his troubles. The other got together all the literature he possibly could on finance. He sent and got the things that were free on this subject. The result was that he was so prepared for what came from time to time in the course of the panic that
he was without worry and met the difficulties with a cheerful mind. The difference between these two brothers was that, while both of them knew how to read, only one of them knew how to make practical application of this ability.

Skill of hand cannot compare in importance with the value of reading. Industrial training should be mainly for the purpose of making practical these things which we are now teaching. The fundamental error in school work is that we have failed in the matter of application.

DeQuincy said: "If you want to get the best literature, rob the mail bags." I would be willing to cut out Belles Lettres in the fourth, fifth and sixth grades. At least I would be willing to reduce it to one recitation per week. I would get the child interested in reading about the industries in the community in which he lives. One trouble with our school readers is that they are intended for the entire country and so there is fired, as it were, a scattering shot, with the thought that some of them at least will strike home.

If you could get the children to read a large quantity of what they want to read, then reading would come to have such a meaning to the pupils that they would take this instrument of civilization into their practical everyday concerns.

There is enormous enthusiasm for correspondence school work in this country. Somebody comes to a young man and says, "Why don't you read up on your special work and become a foreman? We will get you some books that will help you." Thus the practical view of reading is made use of here. The trouble is the correspondence student becomes too dependent on those who are directing his reading. Now, if we had prepared those boys properly they would have had the habit of vocational reading when they left school. I think teachers ought to make the reading material for the middle grades.

The difficulty with our literature has been that it is soon exhausted. You can get up a quarrel any time between high school and grade teachers on to whom Julius Caesar belongs. Then too, literature is general but the business of life is individual and particular. When boys and girls leave school they should carry with them particularized ability.

## THE TEACHER'S GREATEST TOOL.

Lutie E. Stearns, Wisconsin Free Library Commission.
Former Commissioner W. T. Harris in a thoughtful address once said, "The great aim and object of education, I take it, is to train the child to use a library intelligently." However partisan I have always
been in my appreciation of the value of books, I will admit that this remark of Mr. Harris' came to me with somewhat of a surprise, showing as it did the tremendous importance placed upon the library in the educational program. But please note Mr. Harris' remark again. It deals with the intelligent use of a library. In these days when manual training is much to the fore, when textbooks are being carted off to the secondhand store or the paper mill, and when many modern educationists are advocating getting away from books altogether, it may be well to consider the book as still the teacher's greatest tool. It must be conceded that whatever aids most in the development of character is the teacher's greatest tool-aside from the personality of the teacher herself. What can compare with books-"those windows of the soul," as they have been so aptly termed? One hundred great men were asked as to what had contributed most to their character building-was it the father, the mother, some friend, some teacher? More than seventy-five per cent of those interrogated declared it was the books they had read. The majority gave first place to the Bible. Last week, while at the Kansas Agricultural College, I heard the Bible read to 1200 students, followed by a reverent prayer at the purely voluntary chapel exercises, and I could not but regret that the reading of the great Book of Books had been barred in Wisconsin, thus denying to our future citizens the world's greatest instrument for moral teaching. And this brings up the sort of books with which our young should become acquainted and the method of that acquaintanceship. A child, sentenced at the start to a whole year's imprisonment with one reader, can develop a hatred for letters and combinations of words that will last him all his life-just as in later years, in his high school period, the required reading and examination of Milton ofttimes proves to be a "Paradise Lost" never to be "Regained." In this connection I would make a plea for the reading of biography as one of the greatest tools in character building. But, as someone has pointed out, the story of a life which offers nothing but its incidents, informs us of nothing but its achievements, was never worth the telling. If he who lived the life is not in himself more interesting and more significant to us than all the circumstance of his life, then the circumstance is vainly set forth. What biography should give us, as Mr. Larned has said, is the personal revelation, the inseen portraiture of here and there a human soul that is not common in its quality-with what motives, from what impulses, with what powers, to what ends, in what spirit the work of their lives has been done. When biography does that for us, it is one of the most precious forms of literature.

And this brings up the third point that I would emphasize and that is that what we ought to seek everywhere in books is escape from the
commonplace-the commonplace in thought and the commonplace in character. Under many conditions in our daily life our chief dependence is on books to bring us into intercourse with the picked, choice examples of human kind, to show us what they are or what they have been, as well as what they have thought, what they have done, as well as what they have said." When, for example, a great historian tells us that the speeches, letters, messages and proclamations of President Lincoln are the most extraordinary in wisdom, in spirit, and in composition that ever came in any country or any age from the tongue and pen of one man, then it is we should realize how inadequate should be considered a one-syllable biographical make-shift of Lincoln so frequently offered our future American citizens.

Closely allied with biography is history, because it gives more exercise than any other, not alone to every faculty of our intelligence, to our reason, our judgment, our memory, and our imagination, but to every moral sensibility we possess. Why not read History as historians would have us read it? Not as a mere collection of dates, of stories of war and battle, revolution and adventure. "To read history in that way," we are told by an authority, "is to lose all its meaning and teaching." "We should read the thrilling narrative of our Civil War," historians tell us, "not simply as a tragical story which begins at Sumter and ends at Appomattox, but as the tremendous catastrophe of a long series of effects and causes which runs back from the New World into the Old and through centuries of time, slowly engendering the conflict which exploded at last in the rebellion of a slave-holding self-interest against the hard won supremacy of a national conscience."

I think I have gone far enough to show you that I believe in reading for a purpose. I also, however, believe in reading for refreshment and here I want to repeat what I have said many times before that no book should be read by young or old that does not inform, or refresh, or inspire. To these three I would follow one of the world's greatest moral teachers by adding a fourth requisite-"Does the book leave any kind of fine and wholesome feeling in the mind of one who reads it? Does it come like a draught of water from a cool spring?"

If a child is ever to become acquainted with the great books, it must be during the tender, impressionable years of childhood. We are apt to under-estimate the capacity of the average child to understand Shakespeare and Tennyson and even Browning in the grades. To memorize great poems in early life is to lay a store in the mind for which its happy possessor can never be too thankful in after years. Dr. J. J. Blaisdell, of Beloit College, the man who for many years was called "the grand old man of Wisconsin," often acknowledged his indebtedness to his father for compelling him tq learn the great poems
by rote, though he considered it the most burdensome drudgery so to do in his youth.

Of course, the great problem that confronts every teacher in this connection is that of how to secure this literature for the pupils. The solons of Wisconsin made a wise provision in making school libraries compulsory, through the setting aside of ten cents for each child of school age in each district for library books. This, however, furnishes but a meagre amount in sparsely-settled districts, a country schoolhouse ofttimes being provided with not more than six or eight books a year. Some other provision must be made for additional volumes and it is at this point that the Wisconsin Library Commission can be of assistance. Collections of from twenty-five to one hundred books are sent by the Commission to the rural hamlets and villages of the state to be kept for a period of six months, when it is returned for a fresh supply. This feature-that of the constant exchange of the collections -is a most valuable one, as it keeps a community supplied with fresh and recent literature. The only expense connected with securing these libraries is simply the payment of freight by the school district upon receipt and return. An application blank, furnished by the Commission, must be signed by the school director, school clerk, and teacher, and provision must be made for hours out of schooltime so that the adults in the community may secure the books. The collections are made up of the best of the most recent books of history, travel, biography, science, and fiction for old and young. Books on school management and other books of assistance to teachers are frequently included. The Commission is most desirous of supplying the communities of the State with these books for it believes that "it is after all not the few great libraries but the thousand small ones that may do most for the people."

## RURAL SCHOOL LIBRARIES OF WISCONSIN.

O. S.. Rice, State Library Clerk, Madison.

In the libraries of the more than 6000 one-room rural schools in Wisconsin there are approximately a million volumes. What books are in these libraries, in what proportion the different classes of books are represented, the physical condition of the libraries and the use that is being made of them, are matters of vital concern to the thousands of boys and girls enrolled in the country schools and to the adult population of every rural community in the state. To arrive at information regarding the condition and use of such libraries the State Department of Education last April sent a questionnaire, through the coöperation
of the county superintendents, to about one out of every ten teachers of one-room schools in the various counties of the state. Returns have been received from over 500 schools, representing an enrollment or 17, 658 children and having in their libraries 85,000 volumes. The facts gathered will form a broad basis for help in making out the next township library list, in the selection of books by superintendents and teachers, in the use of the school libraries, and in bringing about needed legislation.

## LIbrary housekeeping.

The books have been completely accessioned in all but 57 of the 500 schools. Inventories were taken from one to 32 times in all but six ot the schools. Only 117 books were reported as lost during the school year. Seventy-one schools report inadequate bookcases. This condition, however, is a great improvement over conditions when the township library law was first in effect, when it was the exception to find a bookcase in a one-room school. The library is fully catalogued in four out of every five of the schools reporting.

Only 225 of the 85,000 volumes have been rebound, while 3,197 volumes are reported as needing rebinding. Evidently some legal provision is necessary in order that books in rural school libraries which need rebinding shall be sent to some good bindery. A bill will probably be introduced into the next legislature providing for a state committee to select binderies to which school library books may be sent for rebinding at a specified price. The bill will probably also provide that at the end of the school year the teacher and the district clerk go over the library books together and determine how many of them should be sent to the bindery; the matter then to be brought to the attention of the school board, who shall have the authority to send them to one of the designated binderies.

SELECTION OF BOOKS FOR SCHOOL LIBRARIES.
In selecting annually from the township library list the books which are to go into the school libraries, superintendents and teachers largely determine to what extent books and reading shall influence the lives of the boys and girls who are committed to their charge. From the reports received, it is clear that not enough books on Agriculture have been chosen for the libraries and the same is true with regard to the books on Conduct of Life, Picture Books, and Periodicals.

VOCATIONAL GUIDANCE.
The many and far-reaching movements now bestirring the educational world all have for their basis the principle that education should
prepare the child for life; that there should be at every point in the school course a vital contact with those things which will make or mar the child's future. With most, if not all, of these movements the school library is intimately connected.

It has come to be recognized as the function of the school to help the child to make the right choice of a vocation. The choice of the wrong vocation and the utter lack of choice of vocation are the causes of a large proportion of failures in life, with their attendant misery, and of a tremendous financial and civic loss to the nation as a whole. Among the schools which have made vocational guidance a vital part of their course of study is the central high school of Grand Rapids, Michigan, and the main dependence for this work in that school is placed on the use of the library.

Rural $\bar{s} c h o o l s ~ h a v e ~ h e r e ~ a ~ d u t y ~ t h a t ~ t h e i r ~ l i b r a r i e s ~ w i l l ~ h e l p ~ t h e m ~$ fulfill, and the choice of books for these libraries should be based to a considerable extent upon this need. Among the classes of books which can especially be made use of in vocational guidance are Biography, Conduct of Life, the Useful Arts, and certain types of juvenile fiction. In discussing with the children books which they have read the teacher should call their attention to the features which bear upon vocational guidance.

## THE SCHOOL LIBRARY AND THE SOCIAL CENTER.

In the present movement for the wider use of the school plant the rural school library'must contribute its share. In rural communities there is the greatest need of library facilities and there is the least provision for meeting the need. Who can get so much information from a library which they can apply to their daily occupations as the farmer and the farmer's wife? Who has more long evenings in which to read instructional books? Who has greater need for the companionship of books? Statistics show that an excessively large percentage of the inmates of insane asylums are farmers' wives, brought to that condition by the loneliness and drudgery of homes unrelieved by social recreation and the tonic of good reading. As a partial relief to this situation the state library commission maintains between 600 and 700 stations with about 35,000 volumes. County traveling libraries supply 334 stations with 15,000 volumes, making in all about 50,000 volumes at 1,000 stations. But there are in the state over 6,000 rural school districts, each of which is a community entitled to library facilities. If the rural school library becomes also a community library, then with the activity of the state and county traveling libraries we shall have added to the telephone, the rural free mail delivery, and the automobile, another agency for bringing country life to its own.

The 500 schools report 3712 loans of books to persons not enrolled in the school. 123 made no loans, 32 schools made 20 or more loans, one school reports 82 loans, another reports 150 loans and one reports 304 loans. We have here a beginning toward making rural school libraries also community libraries. It is to be hoped that all the rural school libraries of the state will, ere long, be of as much service to the community in the way of loaning books as the last school mentioned.

## EXCHANGES OF BOOKS BETWEEN RURAL SCHOOL LIBRARIES.

The average number of books in rural school libraries is from 150 to 175 . Some of the school libraries, especially in the northern part of the state, have only a very few books. While the township library law provides for additions to each rural school library every year, yet the increase in many districts is too slow for the needs of the community and the school. For this reason some plan of exchange of books between school districts is desirable. A bill will probably be introduced into the next legislature making possible such exchanges. If the bill becomes a law, county superintendents can arrange circuits for exchanges of books so as to increase by several times the number of books available for each school district.

In the great changes which are now taking place in education the school library must take part. It should be placed in the broad and mighty current of present-day movements. We should be keen to see the possibilities of rural school libraries and how these possibilities may become actualities.

## PHYSICAL EDUCATION SECTION.

## THE PLACE of PLAY and DANCING in a PUBLIC SCHOOL PHYSICAL EDUCATION CURRICULUM.

Juliet Vinton Yeakle, Whitewater.

Every grade teacher in the state should be required to teach plays and games and Folk Dancing. If she cannot do this there should be no alternative but for her to take a summer course at the state university or at one of the state normal schools. This would not only insure the spreading of Playground Methods and management throughout the state and into the district school but would place the principals and superintendents in a position where they in turn would feel the importance and the necessity of carrying out this law.
The state superintendent should be called upon to issue a course of study on plays and games, similar to courses of study in other branches
of instruction. Such a graded course, suitable to age, grade and sex, to indoors or outdoors, should include a few well chosen, popular traditional and seasonal games, schoolroom games and recreations, in which all the children could take part in a very few minutes.

Supervised play, well-equipped playgrounds and exercises which make a strong appeal to the child are superseding much of the formal gymnastics once taught.

The public schools are making a demand for teachers who can conduct "live" work in physical training. For this reason, normal schools are sharing the time about equally between Methods in "free" gymnastics, supervised plays, and games and Folk Dancing.

Playgrounds have "set the pace." The physiologist, hygienist, sociologist and the teacher find the field of action so large that the boys are always in the lead, physically, hygienically, socially and morally forming high ideals for future citizenship.

The best authorities, under properly modified rules, believe that girls should engage in athletic sports and games and be encouraged in games of coöperation and team playing.

Folk Dances are much liked by teachers and pupils and on account of the great interest taken in them and the amount of real exercise gained in their performance, the physiological benefits are considered very great.

## PHYSICAL EDUCATION IN SMALL TOWNS AND RURAL SCHOOLS.

Hester P. Carter, Oshkosh Normal.

To-day, the subject of Physical Education in the public schools needs no champion. There is comparatively little opposition to its place. The well-established departments of Physical Education in our large cities are the best argument and proof of what its value is and can be, and in practically all of our larger cities provision is made, either by means of state or of municipal legislation for compulsory Physical Education in elementary, secondary and high schools. But what about the smaller towns and villages? What about the rural communities? Do they have any form of Physical Education? In this state there is practically nothing. Physical Education being a very broad term and including much, we can say that in the great majority of schools in small towns and country, the only organized or systematic form of Physical Education is found in the theoretical course in Physiology and Hygiene required by the school manual, and
in the games played at recess either in the schoolroom or in the schoolyard. These latter have been helped out very considerably by the pamphlet published recently by Superintendent Cary, on the value of Play and Games. All of this is good as far as it goes, but it ought to go farther. The actual practical work is rather a minus quantity, except in individual cases, where the teacher can and does add to the regular curriculum, what she can of gymnastic exercises. But the great mass of children in our smaller schools have absolutely nothing of systematic physical training.

Now the question arises-do they need it? Or are they situated in such an environment that their needs are essentially different from those of the city child? And is systematic training of the body not therefore, of sufficient value to warrant giving time to it in school? In the case of the city child, these facts were urged, when considering the necessity of such work in the schools; the crowded conditions in the city; the crowded conditions in the schoolroom; the great confinement of children to the house; the general lack of activity; and of course, the faulty posture, resulting from the constant use of the schoolroom desk and chair,-emphasizing health and prevention preeminently. The country boy and girl on the other hand, live in separate houses spend much time out-of-doors, and to a certain extent, lead a life of great activity in comparison with the city child. But does this meet the demands and the aims of Physical Education? While the environment is such that healthy boys and girls are produced, there are other conditions present which make Physical Training extremely valuable to the country population. Farm activities make use of certain groups of muscles, which become greatly over-developed and shortened as a consequence, especially the pectorals and other muscles of the chest. As a result of this over-development, we find round shoulders, round back, faulty posture generally, slouchy walk and poor carriage, slow and clumsy movements instead of quick and graceful ones. Add to this the fact that some conditions exist in the schoolroom as in the city or even worse; for the classes are small, the recitation periods are correspondingly short and the child spends more time at the school desk than the city cousin does. While the child probably has ample chores to do at home and several miles to walk to and from school to give plenty of healthful exercise, yet these do not aid him in forming the correct habits of good posture, nor do they broaden the chest nor yet give him a sense of coördination and rhythm.

Then the child must be educated socially as well as intellectually and physically, and here games and plays have exceeding great value, giving an opportunity for development along social lines at the same time that good hygienic results are being obtained, physically, from the exercise involved. The physical and social must be recognized
as integral parts of a whole, man can, by means of personal contact with his fellowmen, adjust himself to the world as a whole. By mingling with others, he gives a little of himself and receives a little of everyone else. In rural life, there is great need of increasing the ways by which man can meet man with population scattered, there cannot be abundant social intercourse, nor can there take place at the average farm home, the large organized group games, which can be carried on at the school with advantage. Games at recess time, especially group games, where team-work and coöperation play an important part, are a valuable factor in developing the self-confidence, prompt action, courage, fairness and squareness needed in the citizens of the future. As Superintendent Cary emphasizes in his pamphlet, the play should be supervised, but not dominated by the teacher, and the children should know how to play a large number of different games. For play is the most effectual method of securing both bodily development and relaxation, and conduces to a happy and normal childhood.

The same conditions exist in the village schools although in a much less marked degree and the same kind or type of work would be suitable for both.

Then, we find that the promotion of health is far in the background when we consider the physical needs of the child of the country or small town. In its place arises the need for exercises which will teach the pupil self-control: that is, to command their own bodies. Exercises, which will bring about a better posture, which will develop a grace of carriage, a better walk and a strong sense of rhythm. Add to this, games which tend to produce self-confidence, initiative, prompt action, spontaneity and a sense of coöperation.

If fifteen or twenty minutes per day could be given to Physical Training in all of the small schools of the state, we could do a great deal for the well-being of the children. In considering the subject, it seemed feasible to me, to suggest a plan of work which would be adaptable to the various schools, and yet cover the essential points. I should say then, that the groups of exercises should be classed as follows:
1.-Formative Exercises: such as breathing exercises of all kindsto develop the chest expansion and increase the lung capacity; also those exercises which produce a good carriage of the body. This group is very closely associated with the next group and many of the same exercises could belong to either.
2.-Corrective Exercises: to counteract and overcome as far as possible the bad posture already existing, and have to do largely with the muscles of the back, chest, shoulder-girdle and abdomen. Such exercises as would stretch the shortened chest muscles, shorten the
muscles playing over the shoulderblades, and strengthen the lax abdominal walls. Exercises which would make the puipl realize that a hollow back is just as much a bad posture as round shoulders. In these exercises the intensity of the muscular contraction would be great and really over correct the fault.
3.-Balance Exercises: and rhythmical steps, to develop coördination, grace and rhythm. Where possible, some of the simple Folk dances would be excellent.
4.-Games and Plays: which aside from their effect upon social ethics, increase the heart and lung activity and have great hygienic value. Large, organized group games should be especially used.
These four groups combined and carried out in all of the smaller schools ought to make for more efficient boys and girls and help keep the straightness in the backs and elasticity in the steps of our school children.

## SPECIAL EDUCATION SECTION.

## Miss Anna Nugent, Chairman.

The program was opened by a paper on Manual Training for the Deaf by Mr. Walker, President of the State Institution at Delavan. He said in substance:

Manual training takes its place beside geography and arithmetic, and has come to be considered of equal importance with any of the cultural branches.

Time was when it was supposed that the highest culture was attained through the training of the mind alone, but we are making rapid steps in our educational progress and are coming to realize that he who works with hand and mind is attaining a newer and higher culture.

Manual training is a misnomer for it trains not only the hand but the mind. It develops honesty, courage, joy and appreciation. Two reasons why manual training should be taught to hearing students are first for the sake of the cultural training which it gives and secondly for utilitarian reasons.

The deaf are lacking in imagination and anything which will help to develop and train this power will help them toward a fuller and more complete life. Without imagination it is impossible to appreciate the beautiful in music for instance. A low degree of imagination means lack of creative power and therefore inefficiency.

Mr. Walker then brought out the practical reasons for the teaching of manual training to the deaf. The problem which every school for the deaf must meet is: "How shall we train our students to be wageearners?" The only solution of this problem is to make our manual training work consist of vocational training, and by so doing send our deaf out into the world as fully equipped to cope with its problems as are our hearing students who have been so trained.

In conclusion Mr. Walker admonished the teacher of the deaf to beware of getting into a frame of mind which allows her to apologize for poor work because of mental limitations. The habit of excusing poor work is dangerous, because it begets a spirit of depression in the school, and consequently the work loses its joyousness. The mind of the teacher should not be clouded by the thought of the pupils' limitations. The human mind, next to the Deity is omnipotent, and the teacher should keep in mind that in spite of psychological conclusions to the contrary, the power of the human mind is unlimited, and there is no excuse for low ideals. He concluded with a quotation from Lowell: "Perhaps the longing to be so helps to make the Soul immortal."

Mr. Walker's talk was followed by two selections by the Orchestra of 'the Janesville School for the Blind. The ovation which they received bespoke hearty appreciation of the marvelous work which is being accomplished in that Institution.

The third number on the program was a talk on The Exceptional Child by Mr. Nelson, Superintendent of Schools, Racine.

Mr. Nelson defined the exceptional child as one whose mental powers have been so dwarfed that they cannot do the work in the ordinary school. He made the point that the margin between the exceptional child and the child in the ungraded school is not a wide one.

The problem set for the teacher of the exceptional children is an exceptional problem; is it possible to make these children self-supporting? These children if left uneducated will be a state charge. The child in the exceptional school is double the expense to the state that the child in the ordinary school is. Now the question is, how will the education of these children differ from the education of the ordinary child. The exceptional child should be trained vocationally. During his time in school his employment should be largely industrial because these children are not able to accomplish much along intellectual lines. The teacher should endeavor to cultivate virtues in these children which will offset their handicaps. Teachers are inclined to give a great deal of time to obtaining statistics which are absolutely useless, unless they can be used to benefit the child in some way. The time spent in this way might be used to better advantage in instruction.

Much time should be given to the physical instruction of these children; the physical director should spend more time with these children than with the ordinary child. It is the duty of the teacher to see that these children are properly nourished, if hey are not cared for at home the teacher should see that they are nourished. The city in caring for these children is performing the same function that the state is performing when it cares for its deaf and blind. Mr. Nelson believes that the exceptional school should be separated from the other schools because of the influence that these children have over the other children.

Mr. Nelson's talk was followed by a demonstration of class work in lip-reading and speech by Miss Stella Flatley, Principal of the Green Bay Day School for the Deaf. To those not familiar with the oral method this work was a revelation, and those present who realized the obstacles which must be overcome in developing good speech were edified by the superiority of voice and articulation in these little ones totally bereft of hearing.

The next number was a talk on the Day Schools for the Deaf by Guy D. Smith, Supt. of Schools of Fond du Lac. Mr. Smith expressed his appreciation of and sympathy with the work done in the Day Schools for the Deaf. He enumerated the advantages of the Day School over the Institution: the Day School makes it possible for the child to remain at home, and nothing can take the place of the home influence. Then in the Day School there is the advantage of association with hearing children which tends to make the deaf child more like the child who hears, and thus makes him capable of meeting people and keeping abreast of them when later on he takes his place in the world. It is possible for children who have come up through the eight grades in the school for the deaf to go into high school and do the regular work of the hearing children. This has been done in the Fond du Lac school. Two boys who were graduated from the school for the deaf have gone on as regular students, one in the Fond du Lac High School, the other in the Trade of Milwaukee, and are excelling in scholarship. Mr. Smith expressed his appreciation of the work being done by the visiting committee in his town. In every city where there is a Day School for the Deaf a visiting committee has recently been appointed by State Supt. Cary. The object is to get the community interested in the school and to give the children an opportunity to get acquainted with people, thus increasing their powers of lip-reading and speech, and broadening their interests.

The program was closed by America, played by the orchestra of the Janesville School for the Blind.

Agnes Sullivan,
Secretary.

# GRAMMAR GRADE CONFERENCE. 

## VOCATIONAL GUIDANCE.

Kenneth G. Smith, U. W. Extension Division, Milwaukee.
Everyone who works beyond the limits of the campus in the peculiar line of education known as University Extension is confronted with two important problems: (1) increasing the efficiency of individuals in positions at present occupied, and (2) fitting individuals for positions which they hope to be able to fill in the future, usually the near future, and the nearer the better. It is in the solution of this latter problem, the fitting for definite future jobs, that vocational guidance finds its place.

The aim of modern education, especially vocational education, is to fit for particular and specialized lines of work early in life. Consequently the choice of a life work must be made earlier than heretofore in order that the boy and girl may choose the course of training best fitted to their needs.

With all various specialized lines of vocational training now open to the boy or girl early in life, the necessity of some sort of vocational advice is apparent. Certain methods which have been adopted in order to secure necessary information and give this advice and help intelligently, will now be briefly discussed. To make the matter perfectly definite, let us take up the question under three heads:
(1) What has been done?
(2) What can we do?
(3) Who shall do it?

1. What has been done?

Boston so far as I know established the first vocation bureau which has three important lines of activity:
(a) A school for vocational counsellors conducted in one of the public school buildings.
(b) The investigation of various trades and businesses in Boston and the publication of the results in pamphlet form for the use of pupils, parents and counsellors.
(c) The securing of the coöperation of various organizations in necessary investigations, chiefly the investigation of the various opportunities for vocational education offered in the city of Boston. The results of this have been published in chart form. Of the necessity for these investigations I shall have more to say a little later.

The actual vocational counsel to individual pupils is given by the
teacher, assisted by the facts gathered and instruction given by the vocation bureau. Mr. Meyer Bloomfield, director of the bureau, is doubtful about the value of scientific psychological tests in determining fitness for certain occupations. Vocational advice then remains, as Stratton D. Brooks says, an appreciative art rather than an exact science.

It seems to me that we might call such work as that which the Boston Bureau has done, the objective side of vocational guidance. It is a study of the field with a view to presenting the facts to the inquirer and thus helping him to make his decision intelligently and with eyes open to conditions.

In the Grand Rapids High School a somewhat different plan has been developed. Here, as I understand it, an attempt is made to draw the pupil out in regard to his vocational preferences all through his high school course by means of a series of themes on autobiographical and vocational subjects. The preparation for life and life's work is the underlying purpose of the whole scheme. The emphasis seems to be laid on the pupils getting general information about his chosen work, rather than developing an appreciation of it through actual experience or a study of local conditions: The plan as stated is for high school pupils. Many, whether we approve or not, must make their choice earlier.

The Vocation Bureau of Cincinnati is planning to make a five year comprehensive study of the work of children in that city. This study is divided into five departments or schedules:
(1) The child's school record.
(2) Physical examination.
(3) Psychological test.
(4) Industrial history of the child.
(5) Home conditions.

The purpose of the study is to compare children entering employment at fourteen with those who remain in school. Such a study would seem to establish a scientific basis for vocational counsel. Mrs. Wooley, director of the bureau, believes that the psychological tests have value in determining the child's fitness for certain occupations, though she has actually used the results in only three cases and awaits further tests.

The above three bureaus whose work has been outlined give us a fairly good idea of what has been done. There can be no doubt about the necessity for the work and for that reason I have spent no time discussing this phase.

The question is an educational one and if so, what can we, as representatives of our community do? Let us take Milwaukee or any
other city for example. I believe we should urge that a study be made of the various vocations open to boys and girls with a view to determining
(a) Nature of the work.
(b) Conditions.
(c) Qualifications required.
(d) Positions, pay and chance of advancement.
(e) Demand for workers.

This information should be as specific as possible and obtained first hand. With this information available, the vocational counsellor can intelligently inform an inquirer as to conditions to be met and opportunities offered in any given occupation. This to my mind is one of the chief functions of the vocational counsellor and will materially assist a boy or girl in making a wise choice. Mistakes, I am sure, are often made because the candidates (and the adviser too) have little or no idea of what certain occupations mean. For instance I find few boys who have any real idea of what it means to be a machinist, a patternmaker, or a molder and a still smaller number understand the meaning of civil, electrical or mechanical engineering, though they are preparing to take engineering courses. I have discouraged some enthusiastic aspirants with mistaken ideas as to conditions to be met. I fear that our technical and commercial schools sometimes play the part of vocational counsellors with selfish motives in their eager desire to secure students. The first requisite then for a vocational bureau is a definite knowledge of vocations. This is self-evident. Such an investigation has been made in smaller cities than Milwaukee. For instancee in Poughkeepsie, N. Y., where the school board has published a pamphlet on vocations for girls in that city.

The second line of investigation is a study of the opportunities offered for vocational education, including trade schools, agricultural schools, and vocational courses in public and private schools. Few boys and girls know where to go to get the training they need and this knowledge should be a part of the counsellors' stock in trade. Charts containing this information should be hung in factories, business houses, shops and schoolhouses so as to give the working boy and working girl and the schoolboy and schoolgirl a more complete conception of the opportunities open to them.

Now who is going to do this? It does not seem to me that it is such a Herculean task to get the information about various occupations, much of it may be available already. If not, I know of no greater service that women's clubs, social betterment clubs and study clubs could render than the securing of just this information. School boards would be glad to publish it in pamphlet form. The investigation of opportunities for vocational education would be still less diff.
cult and its publication in chart form less expensive. These two investigations must be made before intelligent vocational advice can be given to any large number of boys and girls.

To describe the organization of a vocation bureau would take too long, but one question is especially important. Who is to be the direct vocational counsellor for the pupils? The executive head of the bureau cannot be. The parents cannot be, for they love the child too well to judge impartially. The psychological expert is too far away and has not the intimate acquaintance necessary. Between the expert on the one side and the parent on the-other is the teacher on whom must rest, for the present at least, a large part of the responsibility for vocational advice.

Not all teachers are fitted for this work, but the same qualities which make the real teacher will make a good counsellor provided there is added the definite information of which I have spoken. Experience in some line of productive work outside of the profession of teaching is also very desirable. This is especially true if th, teacher is to give advice to those about to enter industrial work, for he needs to get the viewpoint of the active participant as well as that of a spectator.

In conclusion let me repeat that vocational education has come to stay. One of the immediate results of it has been to make the choice of a life work come earlier. We may not like this, but, whether we like it or not, it is a condition to be faced and one of the most serious duties of the true teacher in the future is going to be to give intelligent advice in regard to choosing a life work, as well as expert assistance in securing the necessary training for it.

Note: The law providing for the publication of the Proceedings at state expense does not permit the publication of the membership list and financial statement in this volume. These will be issued separately and will be distributed at the Annual Meeting, or may be obtained earlier from the secretary.
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# TWENTY-THIRD REPORT 

## OF THE

## State Board of Health

OF WISCONSIN

FOR THE

Two Years Ending September 30, 1910

WITH

# REPORT OF THE STATE BUREAU OF VITAL STATISTICS FOR THE CALENDAR YEARS OF 1909 AND 1910 

C. A. HARPER, M. D.<br>Secretary and Executive Officer.

MADISON, WIS.
Democrat Printing Co., State Printer, 1912.

## MEMBERS OF THE BOARD

Wm. F. Whyte, M. D., Pres., Watertown
C. H. Sutherland, M. D ..... Janesville
E. S. Hayes, M. D. Eau Claire
L. E. Spencer, M. D ..... Wausau
H. A. Meilike, M. D Clintonville
L. P. Mayer, M. D. ..... Hudson
C. A. Harper, M. D., Secretary ..... Madison
L. W. Hutchcroft, Statistican ..... Madison
M. P. Ravenel, M. D., Director of the State Hy- gienic Laboratory Madison

## LETTER OF TRANSMITT゙AL

State of Wisconsin,
Office of the Secretary of the State Board of Health.
Madison, Wis., January, 1911.
To His Excellency, Fráncis E. McGovern, Governor of the State of Wisconsin.
Sir: In compliance with law, the twenty-third report of the State Board of Health is herewith submitted, the same being for the biennial period ending September 30, 1910.

Respectfully submitted,
C. A. Harper, M. D.

Secretary and Executive Officer.
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## SECRETARY'S REPORT.

## To the State Board of Health.

Gentlemen: I have the honor to submit to you the following report for the biennial period ending September 30, 1910.

## January Meeting, 1909.

Pursuant to the call of the president, Dr. Wm. F. Whyte of Watertown, the State Board of Health met, as required by law, in regular annual session at the Park Hotel, Madison, Wisconsin, January 26, 1909, commencing at 11 A. M.

There were present Dr. Wm. F. Whyte; president, Watertown; Dr. L. E. Spencer, Wausau; Dr. E. S. Hayes, Eau Claire; Dr. Q. O. Sutherland, Janesville; Dr. L. P. Mayer, Hudson; and Dr. C. A. Harper, secretary, Madison. Dr. H. A. Meilike notified the secretary by telegram that he had missed the train and therefore it would be impossible for him to be present.

The minutes of the last regular semiannual meeting held June 25th, at Hotel Pfister, Milwaukee, Wisconsin, were read by the secretary and approved by the board.

The committee on finance, consisting of Drs. Spencer, Hayes anḍ Sutherland, reported that all vouchers had been carefully examined and found to be correct and satisfactory. Moved and seconded that the report of the committee on finance be adopted. Carried.

Dr. Sutherland, the Wisconsin representative of the Lake Michigan Water Commission, gave a report stating that he had attended the meetings of the commission held at Chicago, Grand Rapids, and Indiana Harbor. He reported that the commission had made investigations at Milwaukee and Racine, Wisconsin cities, and that there would be published by the commission a number of reports showing the results of the various investigations made by 1-B. H.
the joint actions of the states of Michigan, Indiana, Illinois, and Wisconsin. Illinois had ordered 10,000 of these reports published, Michigan some 8,000 or 10,000 , and if Wisconsin desired to have any of these reports published, the same could be procured if possible, through the state printer, unless some appropriation could be made out of the funds of the board to purchase a sufficient number of the reports to be used in this state. Moved and seconded that the report of Dr. Sutherland be adopted. Carried.

Upon motion of the secretary it was moved that a resolution be adopted by the board asking for legislation and an appropriation of $\$ 2,500$ for the purpose of studying the sanitary conditions of the water supplies of the lakes and rivers of the state in conjunction with the Lake Michigan Water Commission. Adopted.

The committee on legislation, consisting of Drs. Mayer, Sutherland and Harper, reported as being in full accord with the legislation already advanced by the board and recommended to the board certain measures for their consideration and for general discussion.

First. To amend section 1412, statutes of 1898, for the purpose of locating more definitely infectious and contagious diseases that are to be reported to the health authorities as provided by law. The amended portion to have added the age, name, sex and residence of the afflicted person.
Moved by Dr. Sutherland and seconded by Dr. Hayes that such changes be recommended. Carried.

Second. The committee recommended certain specific changes concerning disinfection before quarantine is removed:
(a) That disinfection be entirely completed before raising of quarantine.
(b) That the bill should specifically state the responsibility of the narties in meeting the expense of disinfection and that the exnense should be met by the town, village or city in which the work is to be done.
(c) That the health officer do the disinfecting or be held directly responsible for the thoroughness of the work in his substitution of a deputy.

It had been found that about 85 per cent of the towns, villages and cities were paying for the disinfection and that in the remain-
ing 15 per cent of the towns, villages and cities, the individual was held responsible for payment and disinfection was at timees wholly worthless, if done at all.

Moved and seconded that the legislature should be asked to make such change. Carried.
Third. The committee recommended for consideration of the Board the advisability of introducing a bill, providing for a State Inspector, whose duty it would be to be on the road all the time. After general discussion as to the proposition at this time, it was decided to take no definite action.

Fourth. The committee recommended that a bill be introduced authorizing the State Board of Health or its secretary to call a meeting of the health officers in one general conference or in special conferences throughout the state as conditions might require it from time to time. It was the consensus of opinion of the board that much good could be gained by such legislation and this part of the report, after a motion duly made and seconded, was carried.

Fifth. The committee recommended that a bill be drawn up for the consideration of the 1909 legislature which would specify more definitely the powers and duties of the local boards of health and the health officers, and also provide in said bill a provision by which the health officer is not held liable for property destroyed, if it be shown afterwards that such property was not necessarily in itself a nuisance or dangerous to the public health, providing the destruction of such property was done in good faith by the health officer and health board. In such cases the town, village or city should be held for damages and not the individual members of the board.

Adoption moved by the secretary and seconded by Dr. Mayer. Carried.

Sixth. Upon motion of the secretary, it was moved that a bill be introduced in the legislature, providing for the teaching of sanitation and hygiene, oral and written, once a week, in all the schools of the state during the school year, the State Board of Health to outline by circulars and letters the methods to be used when giving this instruction. Seconded by Dr. Hayes. Carried.

Seventh. The consideration of Ophthalmia Neonatorum was taken up by the board, after general discussion no definite action was taken.

A resolution was unanimously adopted by the board, asking that the governor and superintendent of public property provide the State Board of Health and Bureau of Vital Statistics, rooms in the capitol building at as early a date as possible.

After general discussion of the public health work now being done in the state, as to the best ways and means of continuing and improving these lines of work, the board turned to the next order of business, the election of officers for the ensuing year.

Dr. Mayer was appointed teller. Dr. Wm. F. Whyte received the majority of votes cast and was re-elected president.

Appointment of committees. The president reappointed the same committees to act for the ensuing year, namely : the committee on printing to consist of Drs. Meilike, Whyte and Hayes.

Committee on legislation-Drs. Harper, Mayer and Sutherland.

Committee on finance-Drs. Spencer, Hayes and Sutherland.
There being no further business to come before the board, it was moved and seconded that we do now adjourn. Carried.

The board then adjourned.

C. A. Harper, M. D.,<br>Secretary.

## June Meeting, 1909.

Pursuant to the call of the president, Dr. Wm. F. Whyte of Watertown, the State Board of Health met, as required by law, in regular semiannual session at the Park Hotel, Madison, Wisconsin, June 26th, 1909, commencing at 11 A. M.

There were present Dr. Wm. F. Whyte, president, Watertown; Dr. E. S. Hayes, Eau Claire ; Dr. Q. O. Sutherland, Janesville; Dr. H. A. Meilike, Clintonville; and Dr. C. A. Harper, secretary, Madison.

Dr. L. P. Mayer was absent on account of very serious illness; Dr. L. E. Spencer notified the secretary that it would be impossible for him to attend.

The minutes of the last regular meeting held at Madison, Wisconsin, January 26th, 1909, were read by the secretary and approved by the board.

Report of standing committees:
The Committee on Finance, consisting of Drs. Sutherland, Spencer and Hayes, reported that all vouchers had been carefully examined and found to be correct and satisfactory. Moved and seconded that the report of the committee on finance be adopted. Carried.

The committees on printing and legislation had no report to make.

There was no report of special committees.
In compliance with chapter 32, laws of 1909, which is an amendment to section 4608a of the statutes, relating to the transportation of the dead, empowering the State Board of Health to make rules and regulations for the transportation of the dead as in its judgment may be necessary to preserve the public health, and under section 2, granting the State Board of Health power to make special rules and regulations for the transportation of dead bodies sent to medical colleges. The board unanimously adopted the following rule which amended the rules made by the State Board of Health, August 7, 1907, and published in the official paper August 29, 1907, to wit:

The provisions of rules 2,3 and 4 shall not apply in the case of budies shipped from any part of the state to any schools or medical colleges located in the state and in substitution the following special rules governing the shipment of dead bodies to medical colleges were adopted:

Rule 10. Bodies of those dead of smallpox, bubonic plague, Asiatic cholera, yellow fever, typhus fever, diphtheria (membraneous croup), scarlet fever (scarletina, scarlet rash), measles, erysipelas, glanders, anthrax or leprosy, shall not be accepted for transportation to medical colleges.

Rule 11. The bodies of those dead from puerperal fever, tuberculosis, typhoid fever, or any other diseeases not mentioned in rule 10, may be received for transportation to medical colleges when prepared for shipment by the washing of the body with disinfecting fluid, the closing of all orifices, the wrapping of the body in absorbent cotton and the enclosing of it in a sheet soaked in bichloride of mercury 1:500. Bodies thus prepared must be enclosed in a sound coffin or casket encased in a strong outside wooden box with handles. All such bodies must reach their destination within sixty hours after death. As soon as received at
the medical college the body must be at once carefully embalmed by the injection of a preserving and disinfecting fluid into the blood vessels."

The Board then proceeded to a general discussion of the presence of rabies within the state and devised ways and means of establishing a plan in connection with the state hygienic laboratory of administering the pasteur treatment to citizens of Wisconsin desiring such antirabic treatment. It was agreed that the offer of Surgeon-General Wyman to furnish material for administering the antirabic treatment from the federal hygienic laboratory to the State Board of Health of Wisconsin be accepted and that at an early a date as possible provisions for administering the pasteur treatment in Wisconsin be made. Moved and seconded that a nominal charge of twenty-five dollars per patient be made to cover the necessary expenses in connection with the administering of the pasteur treatment. Moved by Dr. Hayes and duly seconded that the secretary of the State Board of Health be instructed to appoint a physician to administer the pasteur treatment and make arrangements for the compensation of such physician out of the funds received for the treatment of patients. Carried.

Dr. M. P. Ravenel, director of the state hygienic laboratory, was present by invitation and gave a report of some of the work that had been done in the state hygienic laboratory from June 1, 1908 to June 1, 1909, stating that the laboratory had $\$ 2,250$ as an appropriation and also that the laboratory had earned something like $\$ 500$ which was added to this fund. Work had been done for 280 towns in the state and for 350 doctors. There were made about 450 examinations of water; 650 specimens of sputum ; 650 examinations for diphtheria; 550 for typhoid; 100 of rabies; and 150 miscellaneous examinations; making a total of 2,550 examinations made this year, which was more than double the amount of work done in any one former year.

Dr. Ravenel then read the rules of the laboratory as published in Vol. 1, No. 21, of the State Board of Health "Quarterly Bulletin."

Moved by Dr. Hayes that the rules as read for the use of the bacteriological laboratory be accepted as official by this board and incorporated in the report of the State Board of Health. Seconded by Dr. Meilike. Carried.

The following rules for the use of the laboratory were adopted:

Instructions for the Use of the State Hygienic Laboratory.
The work of the hygienic laboratory consists of the examination of specimens for the prevention of communicable diseases. Under this heading the work as outlined by the director of the laboratory, is as follows:

The examination of sputum for tubercle bacilli from suspected cases of tuberculosis.

The examination of cultures and swabs from suspected diphtheria.

The examination of blood from suspected typhoid patients for the Widal reaction.

The examination of urethral pus from suspected cases of gonorrhea for gonococci.

The examination of the central nervous system of animals in suspected rabies.

The chemical and bacteriological examination of water for its general fitness for drinking purposes.

The examination of specimens from suspected cases of anthrax, glanders and actinomycosis.

The following rules must be observed, and failure to comply with these rules will debar the examination of said specimen:
All specimens examined must come from persons or animals in the state of Wisconsin.
The examination of sputum, blood, pus for gonococci, and for diphtheria will be made only on the request of a practicing physician in the state of Wisconsin.

The examination in cases of suspected rabies, anthrax, glanders, or actinomycosis will be made only on the request of the local health officer or a registered veterinarian in the state of Wisconsin.

The examination of water is made only on the request of the local health officer. An exception may be made to this rule in cases of schools, village boards, etc., when the request is official.

There is no charge for the examinations above described. The only requirements are that the specimens must be sent by the proper persons, either by mail or express,-charges prepaid,and that correct and accurate data be furnished with each specimen.

## SPUTUM.

The specimen must always be secured from the first expectoration in the morning. Rinse the mouth with water before collecting. It should be collected in a clean, wide mouth bottle of about one ounce capacity. About one dram of a 5 per cent solution of carbolic acid should be added to the sputum to prevent decomposition. The bottle must be securely corked with either a rubber stopper or a paraffined cork. The name of the patient and the name and address of the physician, must be attached to the bottle. The bottle must be sent in a mailing case. It must be remembered that a single negative examination means nothing. Sputum should be examined at frequent intervals before any weight can be placed on negative examinations. In sending the second, third, or fourth specimen always give the previous case number and name. Children may not show tubercle bacilli in their sputum owing to the fact that they may have so called "closed lesions." The number of tubercle bacilli found in sputum is no index to the condition of the patient and will not be reported. The finding of tubercle bacilli in the sputum is the only diagnosis that the laboratory can make in suspected tuberculosis, and once found, the diagnosis confirms the physical examination.

The finding of pneumococci in the sputum does not necessarily indicate pneumonia, nor dees the finding of streptococci or stephylococci indicate a lobular pneumonia, a bronchitis, or a sore throat.

Specimens improperly sent are a menace to the health of all who are compelled to handle them, either en route or in the laboratory, and may cause the United States government to deprive the laboratory of mailing privileges.

Don't send saliva for sputum.
Don't forget to mark the specimen so it can be identified.
Don't send a specimen peorly corked.
Don't send specimens express charges collect.

## BLOOD IN SUSPECTED TYPHOID.

Outfits with directions for the collection of specimen of blood are sent free of charge on the request of health officers and physicians. It must be remembered that the reaction does not usually appear until the end of the first week of the disease or later.

In persons who have had a previous attack of typhoid fever the blood usually retains its power to produce a reaction for a considerable period, sometimes for years. A negative finding does not absolutely exclude the possibility of typhoid fever. Sometimes it is necessary to repeat the test before getting a positive result. A positive result without a suspicious history or symptoms should not be held as final.

Den't send blood on glass slide in an envelope.
Don't send blood in a bottle.
Always send specimen with correct data and be sure to send sufficient blood. '

Read directions on outfit carefully.
If you expect to receive a prompt answer send specimen by special delivery.

## DIPHTHERIA.

Swabs and culture media with directions and data cards for the securing of specimens in suspected diphtheria are sent, express charges collect, on request of health officers and physicians. Many of the pharmaceutical houses have prepared tubes of Loeffler's Blood Serum on the market, and they can generally be secured from the retail pharmacist. In case of an emergency the following procedure is recommended: An iron wire is heated to redness, and by twisting a small amount of sterile cotton over one end a swab may be made. The swab is rubbed on suspected area and then placed in a sterile test tube (a test tube in which some water has been boiled). Plug the tube with cotton, pack securely and send to the laboratory with a complete history of the case.

There is no disease in which an early diagnosis is more urgent than in diphtheria, and for this reason it is best to send all cultures by "special delivery." Always send complete data.

The laboratory diagnosis allows no time for animal inoculation. The bacteriologist depends on his stain and microscope to make a prompt report, and some of the reasons for correct data are given below :

There are five or six organisms, which are not pathogenic, from as many different sources, which resemble the diphtheria bacillus. These organisms may be found in the eye, nose, vagina, lung, etc. Virulent diphtheria bacilli are often found in the cultures from
the throats of nurses, physicians, or persons exposed to diphtheria. Cultures from such persons will often show the same microscopical picture as a virulent case of diphtheria. Occasionally a person may harbor diphtheria-like organisms without any clinical symptoms. The examination and passing of judgment on a piece of diphtheretic membrane is always provisional and should be corroborated by the cultural diagnosis. Diptheria may exist without a visible pseudo membrane. The streptococcus staphlococcus or pneumococcus may produce membranes and symptoms resembling diphtheria. For these reasons an honest and accurate history is an absolute requirement. 'In taking cultures do not touch any other part of the mouth except the suspected area.

The specimen should never be taken just after the use of an antiseptic wash or astringent gargle. See that the culture is not contaminated (liquified), and that it has not dried out.

The health officer is advised to have a few outfits on hand so as to be prepared for emergency cases. The culture medium and swabs should be kept in a cool, dark place, preferably an ice chest or in the cellar. The diagnosis is wired, charges collect, if so requested by the physician.

## RABIES.

The diagnosis of rabies is made only on request of local health officers or practicing veterinarians of the state of Wisconsin. The time required for diagnosis is about forty-eight hours.

There are certain rules to be observed in suspected rabies and a compliance with them will save considerable labor in the laboratory, and spare the person bitten much anxiety.
A dog suspected of being rabid should be kept chained and allowed to die. A rabid animal generally dies inside of six days. In case a dog is running at large and it cannot be secured it may be necessary to kill the animal. This should be done by shooting through the heart. The animal should never be shot or injured in the head. The brain is the part required for examination and injury to it makes the diagnosis difficult or impossible. After a dog is shot or has died the head is severed, and shipped to the laboratory packed in ice.

The following method of shipping is recommended: A large wooden pail is used as a container. A layer of sawdust is placed
in the bottom of the container to a depth of about three inches. On this place a layer of ice, then the head, and cover with a layer of ice, and finish with a layer of sawdust or shavings. The container must be marked plainly giving the name and address of shipper. The container is then shipped to the laboratory, express charges prepaid.

On sending a case of suspected rabies a letter must be sent to the laboratory giving a history of the case. This history should include a description of the actions of the animal before death, duration of illness, number of persons or animals bitten, and should also state if the animal had been killed or was allowed to die. It should state whether the animal was known in the community, or was a stray.

Don't tie an animal with a rope. A chain or wire had better be used.

Don't shoot or injure, in the head, an animal that is suspected of being rabid.

Don't ship head without ice.
Don't fail to send history of the case.
Don't neglect to mark container with your name and address.
Don't ship container "express collect." The express must always be prepaid.

Don't kill animal unless it is an absolute necessity.

## WATER.

In making a request for the examination of water the reason must be given, and the number of samples required to be examined. On receipt of such a request a container with sterile bottles, directions for collecting, and data blanks will be sent, express collect. The directions must be carefully observed, the data blanks filled out correctly, and the case with samples enclosed returned to the laboratory, express prepaid. The data blanks are to be sent to the laboratory by mail.

Don't send specimens of water for analysis except in regular containers.

Don't send specimens without ice.
Don't fail to mark each sample correctly.
Don't send specimen collect.
Don't keep containers longer than is absolutely necessary.

## URINE.

Frequent demands for the examination of urine call for the following announcement.
A charge is made in all cases of urinalysis. The examination includes the chemical and microscopical analysis. In sending specimen never send less than three fluid ounces. Place urine in a clean bottle and drop in same a small crystal of thymol. The specimen should be sent to the laboratory by express, charges prepaid. At the time of shipment a history of the case should be sent together with reasons for examination.

The charge for chemical and microscopical examination is $\$ 3,00$.
The charge for bacteriological examination for the presence of gonococci or tubercle bacilli is $\$ 5.00$.

Where a bacteriological examination is desired a twenty-four hours' specimen should be sent.

## AN'THRAX, ACTINOMYCOSIS AND GLANDERS.

The examination in cases of suspected anthrax, glanders, and actinomycosic tissue or pus is made only on the request of the local health officers or practicing veterinarians.

## ANTHRAX.

The ear from an animal dying of suspected anthrax should be wrapped in a piece of cloth thoroughly saturated with a solution of bichloride of mercury- 1 to 500 -and sent to the laboratory by express, charges prepaid. The container should be marked with name and address of sender. Always send a history of the case by mail to the laboratory.

## ACTINOMYCOSIS.

Suspected actinomycotic pus can be placed in a clean bottle enclosed in a mailing case and sent to the laboratory by mail. Actinomycotic tissue should be placed in a 10 per cent formalin solution in a glass container and sent to laboratory by express, charges prepaid. A history of the case should be sent to the laboratory by mail.

## GLANDERS.

Tissue or pus from suspected glanders should be placed in a clean jar packed in ice and sent to the laboratory by express, charges prepaid. The container should be marked "Suspected Glanders" together with the name and address of shipper. A history of the case should be sent to the laboratory by mail.

## GONORRHEA.

There are few things which contribute so heavily to conjugal unhappiness and which work such havoc on the eyes of innocent infants as gonorrhea. In its acute stage this disease is usually diagnosed in male patients without particular difficulty. But only a number of microscopic examinations can establish the, fact that the infection has been entirely eradicated. In cases of urethritis in males a thin smear of the pus on a glass slide or cover slip should be sent to the laboratory for confirmation of the diagnosis. When the discharge has entirely ceased so nothing can be obtained from the urethra, the prostate should be "milked" and the secretions pressed out through the urethra on to a cover glass and sent in for examination. Before the patient is discharged as cured several consecutive negative reports should be had from the laboratory. Gonorrhea is much more difficult to diagnose clinically in females. Hence suspicious cases of acute vaginitis, especially if accompanied by smarting or urination, should be subjected to laboratory examination. On account of the remarkable luxuriance of the bacterial flora of vaginal discharge, it is better to press out such secretion as has collected in the urethra and make the smear from this instead. During the past year a number of specimens of vaginal discharge from little girls have been sent to the laboratory and found literally loaded with gonococci. In all cases of vaginitis or of urethritis in these little patients a specimen should be sent to the laboratory at once.

The discussion then turned toward the best method of sending specimens through the mail and the advisability of taking up the measure with the federal post office department. The secretary was instructed to carry on such correspondence as would be necessary and to obtain information that would enable the
material sent through the mails in Wisconsin to be sent in compliance with the rules of the post office department.

As a result of the discussion on the provisions of the law pertaining to the certification of this board to municipalities contemplating putting in a sewerage system for the disposition of sewage or a water system for domestic use, the secretary moved that the various municipalities be required when sending in a certified copy of the proposed plans for a sewerage system or a water supply system that a detailed explanation of such plans be also submitted for the consideration of the secretary or for the consideration of the board through the executive officers and also be a permanent record in the office of the State Board of Health. Seconded by Dr. Meilike. Carried.

A messenger then delivered the following letter to the secretary :

My dear Dr. Harper: While your board is in session, will you not adopt a good ringing resolution downing the plan of connecting Mendota with our city water system? It would do great good now and hereafter and the state board is fully qualified to treat the horrid matter from a state-wide view point. Your board will get all manners of powerful support of that I can assure you, as I am after it now.

Cordially yours, O. D. Brandenburg.
P. S. If you could declare you propose to stop the project if it is attempted that would put a quietus on the whole bad business.

The board discussed the advisability of complying with the request made in the letter from Mr. Brandenburg and decided it would be out of the province of the board to make any ruling specifically for the city of Madison as such rule could not be uniformly enforced throughout the state. The board, therefore, had presented the following resolution, duly seconded and unanimously carried.

[^15]lakes or rivers is questioned and the use of which would be dangerous to the public health.
"The State Board of Health strongly advises against any such possible contamination of water supplies for domestic use and believes that such procedure on the part of the municipalities not only may endanger the life and health of all the inhabitants using such water for domestic use but also such connection is opposed to the advancement made by the modern methods of sanitation and hygiene."

The question of sexual hygiene was next taken up and discussed by the board.

Moved by Dr. Sutherland and duly seconded that a committee of three be appointed by the president to study the subject of "Sexual Hygiene" with a view toward getting out circulars for distribution. Carried.

The president, Dr. Whyte, then appointed the following committee: Dr. C. A. Harper, Dr. E. A. Hayes, and Mr. L. W. Hutcheroft, statistician for the board.

Moved by Dr. Whyte that a resolution be adopted to the effect that the expenses of members making investigations or attending conferences or other public health meetings shall not be paid out of the funds of the board until a written report of such meeting or conference has been filed with the secretary of the board to become a part of the records of the board and incorporated in the biennial report. Seconded by Dr. Hayes. Carried.

Moved by Dr. Meilike that the board adopt a resolution or rule requiring whenever possible a written report of conditions covering nuisances, epidemics or other complaints as to their final adjustment and that action that was necessarily taken in order to satisfactorily settle the controversy. Seconded by Dr. Whyte. Carried.

The board then took up for discussion what action should be taken concerning "Anterior• Poliomyelitis" as it appeared within the state.

A general discussion followed as to the best method of controlling epidemics of this dread malady.

As a result of the general discussion it was moved and duly seconded that all cases of anterior poliomyelitis should be quarantined and quarantine should be maintained on the premises wherein a case of anterior poliomyelitis exists for at least three weeks from the beginning of the disease. Carried.

There being no further business to come before the board, a motion was made to adjourn. Motion carried.

The board then adjourned.

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\begin{aligned}
& \text { C. A. Harper, M. D., } \\
& \text { Secretary. }
\end{aligned}
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January Meeting, 1910.
Pursuant to the call of the president, Dr. Wm. F. Whyte, of Watertown, the State Board of Health met in regular annual session, as prescribed by law, January 28, 1910, at the Park Hotel, Madison, Wisconsin. The meeting was called at 11 A . M.

The members present were Dr. Wm. F. Whyte of Watertown, Dr. H. A. Meilike, Clintonville, Dr. Chas. H. Sutherland, Janesville, and Dr. C. A. Harper, Madison.

Dr. E. S. Hayes of Eau Claire informed the secretary that business interests took him to Mississippi and therefore it would be impossible for him to be present at that time.

Dr. L. P. Mayer of Hudson, who had been seriously ill for a long period of time and was still confined to his home by illness was unable to attend. Dr. L. E. Spencer, of Wausau, was also absent. Dr. Chas. H. Sutherland, of 'Janesville, met with the board for the first time, having been recently appointed by Governor Davidson to complete the unexpired term of his father, Dr. Q. O. Sutherland, who died suddenly at his home in Janesville, Nov. 16, 1909.

The committee on finance reported that all vouchers presented during the last six months, giving a complete statement of the financial situation of the board were entirely satisfactory and were unanimously approved by the board.
The committee on legislation had no report to make as the legislature was not in session. The special committee appointed by the president at the June meeting, consisting of Dr. E. S. Hayes, Dr. C. A. Harper, and Mr. L. W. Hutchcroft, statistician for the board, to investigate the subject of sexual hygiene, was next called upon to make a report on the work that had been accomplished. In the absence of the chairman, Mr. E. S. Hayes, Mr. Hutcheroft rendered a report to the effect that there appears
to be a demand on the part of the general public for information celative to the subject of sexual hygiene and the committee beheves it advisabee at an early a date as possible to publish a pamphlet similar to the publication issued by other states relative.to this subject. The committee has collected considerable material and the work of the national association for the prevention of sexual disease has been carefully examined. The committee hopes to present in the near future for the consideration and approval of the board, material for a pamphlet on the subject of sexual hygiene which will be for general distribution.

The special committee to revise the textbooks on hygiene and physiology for the public schools made no report and under the rules the old committee holds over.
The board then took up for discussion and consideration the question of tuberculosis in teachers and pupils in the public and private schools of the state and considered the best method for dealing with the subject. Several communications from health officers in various parts of the state were presented setting forth that tubercular pupils and teachers, some of them being afflicted with an advanced form of pulmonary tuberculosis were permitted to frequent the schools and these health officers asked that some action be taken by this board to eradicate, as far as possible, the dangers incident to the school children and teachers from various individuals in the schools who were so afflicted with pulmonary tuberculosis. The board was unanimous in its belief that not only was the presence of a teacher or pupil suffering from pulmonary tuberculosis in a schoolroom dangerous to all individuals gathered in the schoolroom, but it is also of the belief that an individual suffering from pulmonary tuberculosis and working in the schools of this state was doing himself serious injury in his endeavor to carry out this line of work and thereby very materially lessening his chances of ever making a recovery from the disease, if not destroying by such efforts on his part all possibility of making a recovery. In view of the seriousness of the situation and dangers to all concerned, the board unanimously adopted the following rule governing pulmonary tuberculosis in the schools of the state of Wisconsin :

[^16]parochial or private schools in this state in the capacity of pupil or teacher until the health officer or one of his deputies of the township, incorporated village or city, where the school is located, furnishes a written certificate stating that the individual believed to have pulmonary tuberculosis or suspected of having pulmonary tuberculosis is free from the disease. (Section 1416-3, laws of 1907: No person shall interfere with or olistruct the entrance, inspection or examination of any building or house or the occupants thereof by the health officer, commissioner of health, or his assistants, of such town, incorporated village or city, or any officer of such department, when investigating a reported case).

Upon motion of Dr. Whyte, duly seconded, the above rule was unanimously carried. Moved and seconded that the rule made by the board for the control of tuberculosis in the schools be submitted to each member of the State Board of Health before publication.

The board next took up the subject of the common public drinking cup in its relation to the spread of infectious and contagious diseases by its use and after careful consideration, it was unanimously agreed that the common drinking cup was a menace and danger to those using it. It also considered carefully the rules adopted in cities and states for the control of this evil.

Upon motion of Dr. Sutherland, duly seconded, the following rule for the abolition of the public drinking cups was adopted:

Whereas, It has been repeatedly demonstrated that the use of what is usually known as the common drinking cup is dangerous and is an undoubted source of communication of infectious diseases; now, therefore, in the interest of the public health, be it ruled by the Wisconsin State Board of Health:

That the use of the common drinking cup on railroad trains, in railroad stations, in the public, parochial or private schools, and in other educational institutions of the state of Wisconsin is hereby prohibited from and after September 1, 1910.

No person or corporation in charge of any railroad train or station; no school board, board of education, town board of school directors, or board of trustees of any public, parochial or private schools or educational institution, shall furnish any drinking cup for public use, and no persoi or corporation shall permit upon said railroad train or station, or at any said public, parochial or private school, or other educational institution, the common use of the drinking cup.

Dr. Sutherland suggested the advisability of submitting the rule as adopted to the attorney-general for his approval before being published in the official state paper.

The rules regarding quarantine for certain diseases, where quarantine has been found to be necessary in order to protect the general public were discussed and the advisability for a limited quarantine in case of smallpox was considered.

After carefully reviewing the results of changes in methods of quarantine, it was the general agreement of the board, that some different method for the control of smallpox be adopted and advised that there be a meeting of the executive officers of the state boards of health of Minnesota, Iowa, Illinois, Indiana, Ohio, Michigan, North and South Dakota, Wisconsin and other states, if possible, to consider the subject of a revision of the rules governing the quarantine for smallpox.

The secretary reported that he had discussed this matter with many of the secretaries of the state boards of health herein mentioned and that there was a general willingness to meet with the board of health of the state of Wisconsin with a view of revising the rules of quarantine for smallpox. The subject of removing all quarantine restrictions for smallpox was discussed and the secretary was instructed to call a meeting, if possible, of the secretaries of the various state boards of health of the surrounding states to discuss ways and means of better handling the smallpox situation.

It was moved by Dr. Whyte and duly seconded that the following rule for the sale or use of dairy products be adopted. Carried.
"The sale or use of milk or dairy products from a place where Asiatic cholera, smallpox, typhus fever, bubonic plague, diphtheria, scarlet fever or typhoid fever is found to exist is strictly forbidden unless the milk is handled, milk utensils washed, stock cared for and product transported by persons, entirely disassociated with the quarantined family."

At the meeting of the State Board of Health on June 26, 1909, the following rule with reference to the prevention and control of anterior poliomyelitis was adopted:

It shall be the duty of every physician called to attend a person sick or supposed to be sick with anterior poliomyelitis to report within twenty-four hours in writing the name and residence of such person to the board of health or its proper officer within whose jurisdiction such person is found, and where a person is taken sick with anterior poliomyelitis, and a physician is not called, it shall in like manner be the duty of the owner or agent of the building in which such person resides, lives or is staying, or of the head of the family in which such disease occurs, to report in writing the name and residence of the patient to the local board of health or its proper officer.

It shall be the duty of the health officer of every board of health in this state, where a case of anterior poliomyelitis is found to exist, or supposed to exist, to establish and maintain quarantine for at least three weeks from the beginning of the disease and until patient and premises have been thoroughly fumigated and disinfected as provided for in section 1416-17, of chapter 279, laws of 1909.

The following are the rules relating to the transportation of the dead adopted by the Wisconsin State Board of Health on January 28,1910 . These rules are adopted to comply with the provisions of section 4608a, chapter 32, laws of 1909, and are in addition to the rules adopted by the State Board of Health on August 29th, 1907.


#### Abstract

Rule 9. The bodies of those dead of smallpox, bubonic plague, Asiatic cholera, yellow fever, typhus fever, diphtheria (membraneous croup), scarlet fever (scarlatina, scarlet rash), measles, erysipelas, glanders, anthrax or leprosy, shall not be accepted for transportation to medical colleges.

Rule 10. The bodies of those dead from puerperal fever, tuberculosis, typhoid fever, or any other disease not mentioned in rule 9 , may be received for transportation to medical colleges when prepared for shipment by the washing of the body with disinfecting fluid, the closing of all orifices, the wrapping of the body in absorbent cotton, and the enclosing of it in a sheet soaked in bichloride of mercury 1:500. Bodies thus prepared must be enclosed in a sound coffin or casket encased in a strong outside wooden box with handles. All such bodies must reach their destination within sixty hours after death. As soon as received at the medical college, the body must be at once carefully embalmed by the injection of a preserving and disinfecting fluid into the blood vessels.

Rule 11. All rules and parts of rules relating to the transportation of the dead which have been heretofore adopted and which conflict with these rules, are hereby repealed.


Dr. P. O. Schallert, the health officer for the town of Farmington, Jefferson county, appeared before the board and gave a history of the smallpox epidemic in the village of Johnson Creek and adjoining territory.

It appears that smallpox in this locality dated back almost two years ago when four or five families came down with a disease called chickenpox. More cases developed later, one of which was under his care and was diagnosed as smallpox. A dispute arose over the diagnosis and the health officer of the town of Farmington refused to quarantine. About fifty similar cases developed during the summer which were still called chickenpox. The State Board of Health was called to make an investigation and investigations were made twice by Dr. Wm. F. Whyte, of Watertown, and once by the secretary, Dr. C. A. Harper of Madison. All cases investigated by Dr. Whyte and Dr. Harper were diagnosed positively as smallpox.

The State Board of Health then directed Dr. Schallert to investigate some particular case of smallpox with a view to instigating prosecution proceedings. Dr. Schallert was then in-
structed by the board to procure the necessary information to warrant the board in starting action either against the attending physicians or responsible heads of the families who were violating the law in this respect.

The discussion followed on the scarlet fever epidemic at Beloit and a letter from the health officer, Dr. Spawn, was read which fully outlined the scarlet fever situation in Beloit. The board then directed that the secretary go to Beloit and obtain the facts in the case and if thought advisable, demand that an action be brought against the attending physician or the heads of the families who were apparently neglecting to conform with the laws of the state in regard to the reporting of infectious and contagious diseases.

The situation at Park Falls regarding diphtheria which had been present for a considerable period of time was taken up and the report of Dr. Spencer, who made an investigation there on January 21st was read. The facts show that the local health authorities as well as the local officers at Park Falls have been negligent in performing their official duties. It was agreed that a reorganization of the local board of health of Park Falls be requested before the State Board of Health could attempt to give further assistance.

A report of the number of examinations made at the state hygienic laboratory from July 1st to January 1st was then presented and was as follows:
Examinations for diphtheria. . . . . . . . . . . . . . . . . . . . . . . . . . . . 410
"، "، typhoid .............. . . . . . . . . . . . . . . . . . . 302
" " tuberculosis . . . . . . . . . . . . . . . . . . . . . . . . 517

"، " water . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 225
Miscellaneous examinations . . . . . . . . . . . . . . . . . . . . . . . . . . . . 142
Specimens not examined. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 110
Total examinations made. . . . . . . . . . . . . . . . . . . . . . . 1,772
The pasteur institute, which has been operated in connection with the state hygienic laboratory since November, 1909, treated 19 cases to January 1, 1910. In all cases the treatment proved successful with the exception of a little Indian girl, who was severely bitten about the face. The treatment in this case was not started soon enough to obtain the desired results.

It was moved by Dr. Whyte that in consideration of the loss sustained by this board in the death of one of its active members,

Dr. Q. O. Sutherland, that the following resolution be adopted and spread upon the minutes of this meeting and copies of the resolution be forwarded to the members of the afflicted family and also to each member of the State Board of Health:

Whereas, The public health service of the state of Wisconsin has suffered an irreparable loss of one of its most valuable officials, Dr. Q. O. Sutherland, who departed this life on November 16, 1909, and

Whereas, The State Board of Health and Bureau of Vital Statistics feels deeply the loss it has sustained in the death of one of its most active and efficient members,

Therefore, Be it Resolved, That this board extend to the bereaved family and friends of our deceased member its most heartfelt and sincere sympathy.

There being no further business to come before the board, a motion was made to adjourn. Motion carried.

The board then adjourned. .

> C. A. H $A$ RPER, M. D., Secretary.

## June Meeting, 1910.

By order of the president of the board, the State Board of Health met in regular semiannual session, as prescribed by law, June 24th, 1910, at the Plankington Hotel, Milwaukee, Wiscon$\sin$. The meeting was called at $10: 30 \mathrm{~A} . \mathrm{M}$.

The following members were present: Dr. Wm. F. Whyte, president, Watertown; Dr. Chas. H. Sutherland, Janesville ; Dr. L. E. Spencer, Wausau, and the secretary, Dr. C. A. Harper, of Madison.

The secretary read the minutes of the last meeting, held at the Park Hotel in the city of Madison, on January 28, 1910. The minutes were approved as read.

The reports of the standing committees were then called for.
The committee on finance reported that all vouchers presented since the last meeting of the board had been carefully examined and approved.

The special committee appointed to revise the textbooks on physiology and hygiene for use in the public schools of the state reported as follows:

In addition to the list of textbooks heretofore recommended, the committee endorsed and recommended the use of the Gulick series of physiologies. These books, the committee found, are carefully prepared for the use of the various grades and for high school instruction. The material in this series of books on the subject of the prevention and control of the various communicable diseases and on the general subject of sanitation and public hygiene was considered valuable.

The report of the special committee was adopted by the board.
The subject of providing a minimum period of quarantine for scarlet fever and diphtheria was considered and thoroughly discussed but no action was taken by the board on this subject. It seemed to be the unanimous opinion of the board that a minimum period of quarantine should be provided for each of these diseases in the near future.

The following report of work done at the state hygienic laboratory for the year ending June 1, 1910, was presented:

Three thousand and seventy-seven bacteriological examinations were made during this time.

There were 203 examinations during the month of July; 259 for August; 247 for September ; 318 for October; 260 for November ; 324 for December; 231 for January ; 272 for February ; 367 for March; 346 for April ; and 259 for May.

There were 801 examinations in suspected cases of diphtheria; 950 examinations of sputum ; 137 examinations for rabies; 360 examinations of drinking water; 454 Widal tests for typhoid fever; and 375 miscellaneous examinations.

There being no further business to come before the board, a motion was made to adjourn. Motion carried.

The board then adjourned.

> C. A. Harper, M. D., Secretary.

## Expenses.

The expenses incurred by the board for the past two years are as follows:

For the year ending October 1st, 1909, as shown by vouchers numbered 3565 to 3644 , inclusive, which have been audited, approved and paid, amount to a total of $\$ 4,505.99$, and are classified as follows:
Official expenses of members.......................... . $\$ 252.36$
Telegraphing ................. . . . . . . . . . . . . . . . . . . . . . 35.70
Stationery . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 96.77
Books and subscriptions. . . . . . . . . . . . . . . . . . . . . . . . . . 92.63
C. A. Harper, secretary's salary . . . . . . . . . . . . . . . . . . . . 3, 248.53
A. A. Walter, Stenographer and clerk. . . . . . . . . . . . . . 780.00

Total. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 4,505.99$

For the year ending October 1st, 1910, as shown by vouchers numbered 3644 to 3739 , inclusive, which have been audited, approved and paid, amount to a total of $\$ 4,718.41$, and are classified as follows:
Official expenses of members. . . . . . . . . . . . . . . . . . . . . . $\$ 447.94$
Telegraphing ................ . . . . . . . . . . . . . . . . . . . . . . 56.78
Stationery . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 110.69
Books and subscriptions................................ . . 73.00
C. A. Harper, secretary's salary . . . . . . . . . . . . . . . . . . . . 3, 250.00
A. A. Walter, stenographer and clerk.................. 780.00

Total.. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 4,718.41$

## PER DIEM FUND

October 1st, 1908, to September 30th, 1910
L. P. Mayer, M. D. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 10.00$
Q. O. Sutherland, M. D. . . . . . . . . . . . . . . . . . . . . . . . . . . . . 10.00
C. H. Sutherland, M. D. . . . . . . . . . . . . . . . . . . . . . . . . . . . . 20.00

Wm. F. Whyte, M. D . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 45.00
E. S. Hayes, M. D. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 10.00
L. E. Spencer, M. D . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 185.00

Total. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$280. 00

## BUREAU OF VITAL STATISTICS.

October 1st, 1908, to September 30th, 1909.
L. W. Hutchcroft, statistician
$\$ 1,800.00$

May Wolf, stenographer
$\begin{array}{ll}\text { May Wolf, stenographer .... . . . . . . . . . . . . . . . . . . . . . . . . } & 660.00 \\ \text { Alma Anderson, filing clerk. . . . . . . . . . . . . . . } & 600.00 \\ \text { Edna Pfister, filing clerī.. }\end{array}$
Edna Pfister, filing clerī. 600.00

Winnie Warner, index clerk 540.00

Leone Webster, index clerk. 461.18

## Expressage

117.11

Office supplies
395.94

Miscellaneous
134.00

Tatal.
$\$ 5,308.23$
October 1st, 1909, to September 30th, 1910.
L. W. Hutchcroft, statistician . . . . . . . . . . . . . . . . . . . . . . $\$ 1,800.00$
May Wolf, stenographer

May Wolf, stenographer .......................................... $\$ 1,80 .{ }^{660.00}$
Alma Anderson, filing clerk. . . . . . . . . . . . . . . . . . . . . . . 600.00

Winnie Warner, index clerk. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\quad 540.00$
Leone Webster, index clerk. . . . . . . . . . . . . . . . . . . . . . . . . . . $\quad$. 495.00

 37.88

Total. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\underset{\$ 5,257.73}{ }$
SPECIAL EXPENSE UNDER CHAPTER 188, LAWS OF 1909.
From July 1st, 1909 to September 30th, 1910, the sum of $\$ 5,744.37$ was expended by the State Board of Health in making copies of birth, death and marriage certificates filed in this office from October 1st, 1909, to and including September 30th, 1910.

This expense was paid from the fund created by chapter 188, laws of 1909 , which required the counties to pay into the state treasury the sum of three cents for each copy of a birth, death or marriage certificate delivered to the register of deeds, as the law provides.

The uniform law for the registration of vital statistics passed at the 1907 session of the legislature was amended by chapter 188, laws of 1909, at the request of the Register of Deeds Association for the purpose of providing a complete and continuous record of the birth, death and marriage certificates in the office of the register of deeds in each county. As soon as the law authorizing the State Bureau of Vital Statistics to copy the records for the register of deeds was passed, a force of copyists, consisting of
eleven clerks, were employed to do this work. The county treasurers, of the various counties, paid into the state treasury the amount due from such county upon the delivery to the register of deeds of the certificates of birth, death and marriage. The total amount paid by the counties for this work and the total expense incurred in making exact copies of original certificates will be included in the next regular financial statement.

## Embalmers.

For the calendar year ending December 31st, 1909, 59 applicants for licenses were examined. Of this number 8 failed to pass the examination and as a result a license was not granted.

For the year ending December 31st, 1909, there were 860 embalmers in the state holding licenses issued by the State Board of Health.

For the year ending December 31st, 1910, 67 applicants for licenses were examined. Of this number 7 failed to pass the examination and as a result a license was not granted.
For the year ending December 31st, 1910, there were $907 \mathrm{em}-$ balmers in the state holding licenses issued by the State Board of Health.

## Financial Statement.

On January 1st, 1909, there was in the treasury to the credit of the Embalmers' Fund, $\$ 1,282.47$. During the year the receipts amounted to $\$ 1,073.00$, and the expenditures to $\$ 921.34$.

The disbursements during the year were as follows:

| Printing and stationery. | \$227.00 |
| :---: | :---: |
| Postage . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | 60.00 |
| C. A. Harper, M. D., secretary, official expenses and serv- | 491.56 |
| ices . . . . . . . . . . . . . . . . . . . . . . | 18.63 |
| H. A. Meilike, M. D., services and expenses | 18.63 39.15 |
| Jno. A. Morris, services. | 5.00 |
| O. E. Oldenburg, services. | 5.00 |
| C. A. Brigden, services. . . . . . . . . . . . . . . . . . . . . . . . | 5.00 |
| T. H. Davidson, dues Prov. Boards of Health of N. A... | 10.00 |
| A. A. Walter, clerical services . . . . . . . . . . . . . . . . . . . . | 60.00 |
| Total. . | \$921.34 |

On January 1st, 1910, there was in the treasury to the credit of the Embalmers' Fund, $\$ 1,434.13$. During the year the receipts amounted to $\$ 1,187.00$ and the expenses to $\$ 842.66$.

The disbursements during the year were as follows:

| Printing and stationery | \$121.38 |
| :---: | :---: |
| Postage | 65.00 |
| C. A. Harper, M. D., secretary, official expenses and services | 536.36 |
| C. H. Sutherland, M. D., services and expenses. | 19.92 |
| O. E. Oldenburg, services. | 10.00 |
| J. A. Morris, services. | 10.00 |
| C. L. Truesdell, services. | 10.00 |
| Thos. H. Davidson, dues Prov. Boards of Health of N. A. | 10.00 |
| A. A. Walter, clerical services | 60.00 |
| Total. | \$842.66 |

## CONTAGIOUS DISEASES.

The statistical report of contagious diseases which follows this summary contains the reports of all cases of diphtheria, typhoid fever, whooping cough, smallpox, scarlet fever, measles, tuberculosis, meningitis and acute anterior poliomyelitis or infantile paralysis reported to the State Board of Health by the health officers for the various townships, incorporated villages, and cities. The actual number of cases reported for each disease is tabulated rather than estimated from the mortality reports which are accurate and complete. The report of deaths is obtained from the death certificates reported to the State Bureau of Vital Statistics and is practically complete for each disease with the exception of the element of error in properly stating the cause of death. The report of contagious disease is incomplete for the reason that the local health officer does not insist upon a strict compliance with the law requiring that all cases of contagious disease be reported to the local health officer.

Under the provisions of chapter 93, laws of 1907, it is made the duty of the attending physician to report to the department of health in each township, incorporated village or city, the full name, age and address of every person suffering from any one of the following infectious or contagious diseases: measles, smallpox, diphtheria (membraneous croup), scarlet fever (scarlatina), typhoid fever, tuberculosis (of any organ), rubella (rotheln),
chickenpox, typhus fever, bubonic plague, erysipelas, Asiatic cholera, whooping cough, cerebro spinal meningitis, and yellow fever.

It is likewise the duty of every person having knowledge of the existence of any person afflicted with any one of these infectious or contagious diseases, or who has reason to believe that such person is so afflicted, to at once report to the health department of the township, incorporated village or city all facts in regard to the case. All persons are forbidden to interfere with or obstruct the entrance, inspection or examination of any building or house by the health officer or his assistants.

It is, therefore, evident that we have the laws necessary to obtain accurate and complete reports of all dangerous contagious diseases. If there is an attending physician, the physician is required, under penalty of a fine, to report the case to the health officer within twenty-four hours. If there is no attending physician, then anyone having knowledge of the presence of the disease or suspecting the presence of the disease, is required to report the case to the health officer. This is a duty which any citizen should be willing to perform in order to safeguard the health of the community. We believe that the failure on the part of laymen to comply with this provision is due to a lack of understanding of the law in most cases.

If the health officer is worthy of the position, he should be anxious to have the coöperation of all the citizens, and should make a thorough investigation of all cases reported. If the cases have been reported to the health officer, as the law provides, and if this official neglects or refuses to take prompt action to apply the rules and regulations for the prevention and control of dangerous communicable diseases, a complaint should then be filed with the State Board of Health, and after an investigation if it is found that the local health officer is incompetent and unable to handle the situation, the State Board of Health may send a representative of its own choosing to the infected locality to take charge of the work at the expense of the township, incorporated village or city.

The health officer should be given an opportunity to coöperate with the citizens, and an individual, who knows of the presence of a dangerous contagious disease which has not been reported and who refuses to report it, is guilty of violating the
law and may be punished. Coöperate with your local health officers rather than obstruct them in the performance of their duties and there will be a great decline in the number of cases of contagious disease and a great saving in human lives.

It is shown by table No. 1 that for the calendar year of 1909, 1,984 cases of diphtheria, 935 cases of typhoid fever, 682 cases of whooping cough, 1,255 cases of smallpox, 3,539 cases of scarlet fever, 3,083 cases of measles, 1,043 cases of tuberculosis and 42 cases of meningitis were reported by the local health officers. The rules at this time did not provide for reporting cases of infantile paralysis so only the deaths from this disease are given.

The number of cases, per 10,000 population, as shown by table No. 1, is as follows: diphtheria, 8.9 ; typhoid fever, 4.06 ; whooping cough, 2.9 ; smallpox, 5.3 ; scarlet fever, 15.1; measles, 13.2; tuberculosis, 4.4 , and meningitis, .17 .

During the calendar year of 1910, as shown by table No. 2, the local health officers of the state reported 2,457 cases of diphtheria; 2,445 cases of typhoid fever; 1,156 cases of whooping cough ; 488 cases of smallpox ; 5,043 cases of scarlet fever; 4,931 cases of measles; 1,270 cases of tuberculosis; 36 cases of meningitis, and 22 cases of infantile paralysis.

The number of cases, per 10,000 population, for each disease during 1910, is as follows: diphtheria, 10.5; typhoid fever, 14.7; whooping cough, 4.9 ; smallpox, 2.09 ; scarlet fever, 21.6 ; measles, 21.1; tuberculosis, 6.1 ; meningitis, .15 , and infantile paralysis, . 09 .

TABLE NO. 1.-SHOWING CONTAGIOUS DISEASES REPORTED TO THE STATE BOARD OF HEALTH BY THE EOCAL HEALTH OFFICERS

| County. | Diphtheria. |  | Typhoid Fever. |  | Whooping Cough. |  | Smallpox. |  | Scarlet Fever. |  | Measles. |  | Tuberculosis. |  | Meningitis. |  | Anterior Poliomyelitis. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cases. | Deaths | Sases. | Death: | Cases. | Deaths | Cases. | Deaths | Cases. | Deaths | Cases. | Deaths | Cases. | Deaths | Cases. | Deaths | Cases. | Deaths |
| Adams |  |  |  | 1 |  |  |  |  | 3 |  | .10 |  |  | 7 |  |  |  |  |
| Ashland .. | 16 | 6 | 29 | 15 | .... | 5 | 8 | . . . . . . . | 13 | 3 | 10 |  | 4 | 45 | ........ | 16 |  |  |
| Barron ... | 25 | 3 | 18 | 7 | 2 | 2 | 130 |  | 52 | 8 | 24 |  | 4 | 28 |  | 4 |  |  |
| Bayfield .. | 3 | 6 | 3 | 4 |  |  |  |  | $\cdots$ | ........ | .... |  | 4 | 88 |  | 33 |  |  |
| Brown ... | 15 | 27 | 1 | 9 |  |  | 18 |  | 12 | 8 | 21 100 | 1 | 4 | 88 15 |  | 33 3 |  |  |
| Buffalo ... | 2 20 | 2 |  |  |  | . ${ }^{1}$ | 5 11 |  | 42 | $\dddot{2}$ | 100 10 | 1. | $\cdots$ | 15 13 |  | 1 |  | 2 |
| Calumet ... | 8 | 3 |  |  |  |  | 2 |  |  | 1 | 23 | 2 | 1 | 12 |  | 4 |  |  |
| Chipp'wa . | 3 | 1 | 2 | 3 | 16 | 6 | 99 | 3 | 15 |  | 249 | 3 | 21 | 63 | $\cdots$ | 6 | ........ | 3 |
| Clark .... | 13 | 7 | 10 | 5 | 34 | 1 | 64 | 1 | 31 | ........ | 7 | 2 | ........ | 26 | 2 | 3 |  | 2 |
| Columbia. | 2 | 1 | 3 | 1 |  | 3 | 1 |  | 14 |  | 77 |  | 2 | 26 |  | 9 |  | ........ |
| Crawford. | 31 | 1 | 1 | 4 |  |  |  |  |  |  |  |  | 2 | 26 |  | 1 |  |  |
| Dane ..... | 47 | 6 | 6 | 4 |  | 4 | 10 |  | 18 | a | 1 | 1 | 4 | 76 | i. | 16 |  | ... |
| Dodge .... | 10 | 4 | 6 | 6 | 2 | 9 | 1 |  | 15 | 3 | 21 | 2 | 6 | 42 | 1 | ${ }_{5}^{6}$ |  |  |
| Door ..... | 11 | 1 | 5 | 2 |  |  | .... |  | 1 | 1 | 10 | 2 |  | 14 | ........ | 13 |  | 2 |
| Douglas .. | 100 | 10 |  | 14 |  | 10 | 20 |  | 264 | 24 | $i^{*}$ | 1 | 1 | 46 |  | 13 |  | 2 |
| Dunn ..... | 10 | 1 | 4 | 4 |  | 3 | 39 | 2 | 17 | 2 | 1 | ........ | 1 | 22 |  | 1 | .......... | $\stackrel{2}{2}$ |
| Eau Claire | 1 | 5 | 1 | 8 |  |  | 2 | 1 | 7 | 2 |  | 2 |  | 39 3 |  | 2 |  | 2 |
| Florence .. |  | 1 |  |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |
| Fond du | 9 | 6 | 6 | 6 | 33 | 1 | 3 |  | 63 | 3 | 31 | 1 | 2 | 54 |  | 11 | ........ | 3 |
| Forest .... | $\varepsilon$ | 3 | . |  |  |  |  |  | 2 |  | 2 |  |  | 4 |  | 4 |  |  |
| Grant | 9 | 1 | 2 | 3 |  | 1 | ....... |  | 15 | 2 | $\ldots$ |  | 1 | 36 | . . . . . . | 13 |  |  |
| Green .... | 3 | 1 | 9 | 1 |  | 1 | . 1 |  | 6 |  | 5 |  |  | 14 | ......... | 4 | ....... | $\cdots$ |
| Green Lake | 4 | 1 | 2 | 4 |  | 5 |  |  | 21 |  | 4 | 1 | 3 | 15 |  | 3 |  | 1 |
| Iowa ..... | 35 | 3 | 2 | 1 |  | 2 |  |  | 10 | $\ldots$ | 1 | 1 | 3 | 26 |  | 3 | ...... | 1 |
| Iron ...... | 18 | 11 | 2 | 2 | 1 | . |  |  | 21 | 1 | 4 |  |  | 8 | ....... | 2 |  | 1 |
| Jackson .. | 15 | 6 | ...... | 1 |  | 4 | 1 |  | 10 | 2 |  |  |  | 15 |  | 2 | ..... | 1 |
| Jefferson . | - 13 | 5 | 4 | 3 | 3 | - | 13 |  | 2 | 1 | 5 | 1 | 1 | 31 | ....... | 7 |  |  |
| Juneau .. | 4 | 1 | 2 | 3 | 12 | 2 | 42 |  | 12 | $\cdots$ | 3 |  |  | 15 |  | 1 |  | $i$ |
| Kenosha .. |  | 1 | 8 | 7 | $\cdots$ |  | 79 |  |  | 2 4 | 10 |  |  | 22 |  | 2 |  | 1 |
| Kewaunce | 10 | 4 | 8 | 7 | 6 |  | 79 |  | 24 | 4 2 1 |  |  | 1 | 51 | ${ }^{\cdots} \cdot{ }^{\text {an }}$ | 5 |  | 2 |
| La Crosse | 31 | 2 | 5 | 7 | 1 | 1 |  |  | 44 79 | 2 1 | 11 |  | 1 | 17 | 3 | 5 |  | 1 |



TABLE NO. 2.-SHOWING CONTAGIOUS DISEASES REPORTED TO THE STATE BOARD OF HEALTH BY THE LOOAL HEALTH OFFICER

| County. | Diphtheria. |  | Typhoid Fever. |  | Whooping Cough. |  | Smallpox. |  | Scarlet Fever. |  | Measles. |  | Tuberculosis. |  | Meningitis. |  | Anterior Poliomyelitis. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cases. | Deaths | Cases. | Deaths | Cases. | Deaths | Cases. | Deaths | Cases. | Deaths | Cases. | Deaths | Cases. | Deaths | Cases. | Deaths | Cases. | Deaths |
| Adams . | 4 |  |  | 18 |  | 1 |  |  | 4 |  |  |  |  | ${ }_{26}^{13}$ | 2 | 13 |  | 1 |
| Ashland.. | 50 | 4 | 62 | 48 | 35 | 1 | 30 |  | 25 59 | $\cdots$ | 118 | 3 | 14 | 20 |  | 1 |  |  |
| Barron ... | 32 | 3 | 11 | 5 | $\begin{array}{r}3 \\ 30 \\ \hline\end{array}$ | 1 | 4 |  | ${ }_{30}^{59}$ | ${ }_{2}^{3}$ | 118 59 | 7 | 5 | 14 |  | 4 |  | 1 |
| Bayfield .. | 40 | 10 | 24 3 | 12 | 30 1 | 1 |  |  | $\stackrel{3}{6}$ | 11 |  |  | 7 | 48 | 2 | 25 |  | 1 |
| Brown ${ }^{\text {Buffalo... }}$ | 15 4 | 14 1 | ${ }_{1}$ | 12 | 1 |  | 5 |  | 9 |  |  | 1 | 3 | 8 |  |  |  | 1 |
| Burnett | 1 | 4 |  | 2 |  | 2 |  |  | 41 |  | 35 |  |  | 14 |  | 4 |  |  |
| Calumet |  |  | 3 | 2 | 31 | 2 |  |  | 5 |  | ${ }_{6} 25$ |  | ${ }_{13}^{2}$ | ${ }_{38}^{14}$ |  | 10 | 1 | 2 |
| Chippewa. | 4 | 5 |  | 6 | 15 |  | 3 |  | 4 | 1 |  | 4 | 1 | 17 |  | 5 |  |  |
| Clark .... | 6 | 3 | 11 | 6 | 14 | 4 | 16 |  | 599 | $\ldots .$. | 12 | i | 6 | 24 |  | 6 |  |  |
| Columbia. | 20 | 7 | 19 | 6 |  | 3 |  |  | 17 | 1 | 68 | 1 | 3 | 15 |  |  |  | 1 |
| Crawford. | 3 |  | 8 | 2 |  | 8 | 17 |  | ${ }_{32}^{17}$ | 1 | 26 | 2 | 1 | 80 | 1 | 16 | 1 | 2 |
| Dane .... | 32 | 5 | 4 | 13 | 34 | 8 | 2 |  | 32 39 |  | 10 | 2 | 4 | 39 |  | 10 | 1 |  |
| Dodge ... | 2 | 2 | 8 | 1 | 4 | 3 | 2 |  | ${ }_{26}{ }^{39}$ | 1 |  |  |  | 8 |  | 3 |  |  |
| Door .... | 11 | $\stackrel{2}{14}$ |  | 4 34 |  | ${ }_{3}^{3}$ | 55 |  | 181 | 8 |  | 5 | 1 | 55 |  |  |  |  |
| Douglas .. | 124 8 | 14 | 4 | 34 1 | 2 |  | 6 |  | 20 | 1 |  |  | 1 | 19 |  |  |  | 2 |
| Dunn Cau Claire | $\stackrel{8}{20}$ | ${ }_{9}$ | 4 | 8 |  |  | 8 | 1 | 25 | 3 | 19 | 2 |  | 35 | 2 | 5 | 1 | 2 |
| Florence .. |  |  | 1 |  |  |  | 38 |  | 4 |  |  |  |  |  |  |  |  |  |
| $\begin{gathered} \text { Fond du } \\ \text { Lac } \ldots . . \end{gathered}$ | 41 | 11 | 6 | 4 | 2 | 4 | 2 |  | 33 | 1 | 75 | 6 | 4 | 51 3 3 |  | 15 |  |  |
| Forest.... | 8 | 3 | 9 | 1 |  |  |  |  | 17 | 1 |  | 3 | 4 | 32 | 2 | 8 |  |  |
| Grant . | 23 | 8 | 5 | 2 | 13 | 3 | ${ }_{11}^{2}$ |  | $\frac{1}{25}$ |  | 24 |  |  | 17 |  | 4 |  |  |
| Green ..... | 7 |  |  | 1 |  |  |  |  | 14 | 7 | 47 | 3 | 4 | 15 | 1 | 1 | 1 |  |
| Green Lake | $\stackrel{4}{4}$ |  | ${ }_{10}^{2}$ |  |  | 1 | 42 |  | 23 |  | 3 |  | 6 | 25 |  | 1 |  | : |
| Iowa ..... | ${ }_{24} 36$ |  | 10 | 1 |  |  |  |  | 15 | 2 | 3 |  |  | 1 |  |  |  |  |
| Iron ...... | 24 5 5 | 1 | 2 | 2 |  |  |  |  | 33 | 2 | 4 |  |  | 11 |  |  |  | 1 |
| Jefferson.. | 5 | 5 | 1 | 1 | 15 | 2 | 29 |  | 66 | 1 | 18 |  | 10 | ${ }_{20} 2$ |  | 1 |  |  |
| Juneau .. | 12 | 7 | 1 | 3 |  |  | 1 |  | 4 | 3 1 | 11 | 2 | 1 | 19 |  | 16 |  |  |
| Kenosha | 2 | 2 |  | 7 |  |  | 1 |  | 79 |  |  |  | 3 | 13 |  | 6 |  | 2 |
| Kewaunee. | ${ }_{28}^{17}$ | $\stackrel{3}{2}$ |  |  |  |  |  |  | 149. | 8 | 52 |  | 16 | 48 | 1 | 5 |  | 2 |
| La Crosse. | $\stackrel{28}{2}$ | 2 | 21 8 | 9 2 | 22 | 3 | 25 |  | 2 2 11 |  |  | 1 | 2 | 15 |  | $\stackrel{2}{2}$ |  |  |
| Langlade. | 7 | $\dddot{2}$ | 7 | 3 |  |  | 8 |  | 11 |  |  |  |  |  |  |  |  |  |



## DIPHTHERIA.

TABLE NO. 3.-SHOWING THE TOTAL CASES OF DIPHTHERIA REPORTED TO THE STATE BOARD OF HEALTH BY LOCAL HEALTH OFFICERS SINCE 1902.

| Month. | Year. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1902. | 1903. | 1904. | 1905. | 1906. | 1907. | 1908.* | 1909.* | 1910.* |
| January | .... | 141 | 131 | 105 | 100 | 182 |  |  |  |
| February |  | 94 | 100 | 55 | 84 | 180 | 461 | 647 | 564 |
| March |  | 80 | 71 | 74 | 84 | 110 | ....... |  |  |
| April |  | 58 | 63 | 41 | 48 | 117 |  |  |  |
| May |  | 70 | 54 | 45 | 70 | 117 | 315 | 286 | 493 |
| June |  | 91 | 40 | 30 | 63 | 121 |  |  |  |
| July |  | 74 | 89 | 87 | 47 | 84 |  |  |  |
| August |  | 78 | 77 | 59 | 60 | 103 | 248 | 382 | 614 |
| September |  | 78 | 92 | 133 | 78 | 81 |  |  |  |
| October | 140 | 108 | 204 | 138 | 272 |  |  |  |  |
| November | 231 | 74 | 98 | 187 | 255 | 698 | 680 | 669 | 786 |
| December | 163 | 104 | 118 | 163 | 252 |  |  |  |  |
| Total | 534 | 1,050 | 1,137 | 1,117 | 1,413 | 1,793 | 1,704 | 1,984 | 2,457 |

* Quarterly.

During the calendar year of 1909, 1,984 cases of diphtheria were reported by the local health officers to the State Board of Health with a mortality of 411 . This shows a mortality rate of 20.7 per cent. Two hundred twenty-eight different townships, incorporated villages and cities reported cases of diphtheria during this year.

For the calendar year of 1910, diphtheria was reported in 251 different places. There were 2,457 cases of diphtheria with a mortality of 429 , showing a mortality rate of 17.4 per cent.

Table No. 4, which shows places reporting the disease and also total cases reported since 1895, reveals the startling fact that during 1910 there were more cases of diphtheria than for any year since 1895, when the first report of cases was tabulated and published. There were more deaths reported for 1910 than for any year since 1897 , when there were 461 deaths with a mortality rate of 22 per cent. The apparent increase in the mortality rate since 1898 is due, we believe, to the increased accuracy in the report of deaths without a corresponding increase in the reporting of cases.

The use of antitoxin in the treatment of diphtheria is now so generally known and so well understood that there should be no
hesitancy in using antitoxin in all cases of diphtheria. The fact that 429 people died in the state during 1910 from this disease shows either that antitoxin is not used as freely as it should be or as soon as possible after the discovery of the disease.

Table No. 3 shows the report of cases during 1909 and 1910 by quarterly periods. The disease is shown to be unusually prevalent during the early spring months and after the opening of school in the fall months.

TABLE NO. 4.-DIPHTHERIA.
From reports made by local health officers.

| For year ending | Number of places reporting | Cases | Deaths | Mortality per cent. |
| :---: | :---: | :---: | :---: | :---: |
| September 30, 1895. | 107 | 1,368 | 235 | 17. |
| September 30, 1893. | 130 | 2,097 | 410 | 19. |
| September 30, 1897. | 172 | 2,015 | 461 | 22. |
| September 30, 1898. | 169 | 1,775 | 271 | 15. |
| September 30, 1899. | 189 | 2,003 | 263 | 13. |
| September 30, 1900. | 185 | 2,056 | 282 | 13. |
| September 30, 1901. | 245 | 2,135 | 294 | 13.7 |
| September 30, 1902. | 221 | 1,898 | 272 | 14.3 |
| September 30, 1903. | 155 | 1,298 | 207 | 15. |
| September 30, 1904. | 334 | 1,003 | 113 | 11. |
| September 30, 1905. | 288 | 1,049 | 126 | 11.4 |
| September 30, 1903. | 302 | 1,131 | 127 | 11. |
| Oct.-Dec., 1906. | 130 | 776 | 69 | 8.8 |
| Calendar year of 1907. | 386 | 1,793 | 186 | 10.3 |
| Calendar year of 1908. | 441 | 1,692 | 376 | 22.2 |
| Calendar year of 1909. | 228 | 1,984 | 411 | 20.7 |
| Calendar year of 1910. | 251 | 2,457 | 429 | 17.4 |

## TYPHOID FEVER.

TABLE NO. 5.-SHOWING THE TOTAL OASES OF TYPHOID FEVER REPORTED TO THE STATE BOARD OF HEALIH BY LOOAL HEALTH OFFTCERS SINCE 1902.

| Month. | Year. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1902. | 1903. | 1904. | 1905. | 1906. | 1907. | 1908.* | 1909.* | 1910.* |
| January |  | 54 | 26 | 15 | 60. | 92 |  |  |  |
| February |  | 20 | 33 | ${ }^{6}$ | 93 | 88 | 142 | 234 | 644 |
| March |  | 21 | 21 | 43 | 48 | 30 |  |  |  |
| April |  | 27 | 17 | 3 | 63 | 26 |  |  |  |
| May |  | 22 | 32 | 112 | 75 | 33 | 187 | 156 | 692 |
| June | . | 24 | 17 | 21 | 33 | 31 |  |  |  |
| July |  | 8 | 19 | 42 | 51 | 39 |  |  |  |
| August |  | 24 | 24 | 55 | 64 | 32 | 197 | 225 | 677 |
| September |  | 20 | 102 | 97 | 75 | 59 | 197 | 225 | 6 |
| October | 60 | 125 | 242 | 80 | 159 |  |  |  |  |
| November | 70 | 35 | 62 | 59 | 119 | 295 | 319 | 319 | $43 \%$ |
| December | 24 | 42 | 54 | 81 | 69 |  |  |  |  |
| Total | 154 | 422 | 649 | 614 | 909 | 724 | 845 | 934 | 2,446 |

[^17]It is shown by table No. 5 that for the months of January, February and March, 1909, there were 234 cases of typhoid fever ; for April, May and June, 156 cases ; for July, August and September, 225 cases, and for October, November and December, 319 cases. This makes a grand total of 934 cases of typhoid fever during the calendar year of 1909. For this same period 352 deaths from typhoid fever were recorded, showing a mortality rate of 37.6 per cent. Cases of typhoid fever were reported in 110 different townships, incorporated villages and cities.

Table No. 5 shows that for the months of January, February and March, 1910, there were 644 cases of typhoid fever; for April, May and June, 692 cases; for July, August and September, 677 cases; and for October, November and December, 433 cases. This makes a grand total of 2,446 cases of typhoid fever during the calendar year of 1910. For this same period 558 deaths from typhoid fever were recorded, showing a mortality rate of 22.8 per cent. Cases of typhoid fever were reported in 154 different townships, incorporated villages and cities.

Typhoid fever is one of the most easily prevented diseases. If the discharges from the body of the patient having the disease are properly disinfected before they are disposed of, and proper precautions are taken to prevent a spread of the disease to the nurse or other members of the family, typhoid fever would soon disappear from our midst. It is therefore of vital importance that the methods for the prevention and control of this disease be thoroughly understood and practiced in all cases. The State Board of Health has printed for free distribution to all citizens of the state a circular relating to the prevention and control of typhoid fever. Copies of this circular may be had upon request.

TABLE NO. 6.-TYPHOID FEVER.
From reports made by local health officers.

| For year ending | Number of places reporting | Cases | Deaths | Mortality per cent. |
| :---: | :---: | :---: | :---: | :---: |
| September 30, 1895. | 59 | 993 | 144 | 14.5 |
| September 30, 1896.. | 66 | 1,234 | 171 | 13.8 |
| September 30, 1897. | 146 | 658 | 126 | 19.9 |
| September 30, 1898. | 165 | 1,085 | 109 | 10. |
| September 30, 1899. | 224 | 1,312 | 120 | 9. |
| September 30, 1900. | 233 | 1,465 | 178 | 12. |
| September 30, 1901. | 291 | 1,804 | 236 | 13. |
| September 30, 1902. | 208 | 1,007 | 153 | 15. |
| September 30, 1903. | 62 | 1,374 | 80 | 21. |
| September 30, 1904. | 126 | 393 | 20 | 5. |
| September 30, 1905. | 111 | 752 | 34 | 4.5 |
| September 30, 1906. | 132 | 782 | 112 | 14. |
| Oct.-Dec., 1906. | 58 | 348 | 23 | 6.6 |
| Calendar year of 1907. | 153 | 724 | 97 | 13.3 |
| Calendar year of 1908. | 183 | 845 | 319 | 37.5 |
| Calendar year of 1909. | 110 | 934 | 352 | 37.6 |
| Calendar year of 1910... | 154 | 2,446 | 558 | 22.8 |

## WHOOPING COUGH.

The report of cases of whooping cough, as shown by table No. 7, by calendar years, is as follows: 1909, 682 cases; 1910, 1,156 cases. Table No. 1 shows the distribution of cases of whooping cough by counties during 1909, and table No. 2 shows the distribution for 1910.

TABLE NO. 7.-SHOWING THE TOTAL CASES OF WHOOPING COUGH REPORTED TO THE STATE BOARD OF HEALTH BY LOCAL HEALI'H OFFICORS SINOE 1902.

| Month. | Year. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1902. | 1903. | 1904. | 1905. | 1906. | 1907. | 1908.* | 1909.* | 1910.* |
| January |  | 19 |  | 1 | 17 | 71 |  |  |  |
| February |  | 37 | ........ | 1 | 21 | 24 | 130 | 106 | 265 |
| March |  | 21 | 3 |  | 77 | 40 |  |  |  |
| April |  | 5 | 1 |  | 35 | 66 |  |  |  |
| May |  | 5 | 1 | 50 | 24 | 61 | 159 | 64 | ${ }_{406}$ |
| June |  | 5 | . | 4 | 79 | 28 |  |  |  |
| July |  | 2 | ....... | 56 | 37 | 33 |  |  |  |
| August |  | 3 |  | 12 | 27 | 16 | 218 | 241 | 278 |
| September |  | 20 |  | 31 | 37 | 22 |  |  |  |
| October | 43 | 50 | 12 | 4 | 129 |  |  |  |  |
| November | 130 | 23 | 9 | 12 | 82 | 92 | 65 | 271 | 207 |
| December | 38 |  |  | 23 | 58 |  |  |  |  |
| Total | 211 | 190 | 26 | 194 | 623 | 453 | 572 | 682 | 1,156 |

[^18]
## SMALLPOX.

During the calendar year of 1909, 1,255 cases of smallpox were reported. For 1910, 488 cases were reported. Table No. 8 shows the cases reported by quarters for 1909 and 1910. An examination of the number of cases of smallpox reported as given in table No. 8 shows that there were fewer cases of smallpox during 1910 than for any year since 1904. The disease was epidemic in Wisconsin during 1907 and reached a climax in 1908.

As a result of the prevalence of the disease at that time, a law was passed at the 1907 session of the legislature to prohibit the attendance at school, when smallpox is present in a school district, of teachers or pupils who have not been successfully vaccinated or who fail to show a certificate of recent vaccination. In addition, the State Board of Health advises that it is unnecessary to close the schools during the prevalence of smallpox in a district and as a result there is an incentive for the school teachers and pupils to become vaccinated. The marked decline in the number of cases, we believe, is due to vaccination.

TABLE NO. 8.-SHOWING THE TOTAL CASES OF" SMALLPOX REPORTED TO THE STATE BOARD OF HEALTH BY LOCAL HEALTH OFFIOERS SINCE 1902.

| Month. | Year. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1902. | 1903. | 1904. | 1905. | 1906. | 1907. | 1908.* | 1909.* | 1910.* |
| January |  |  |  | 256 | 143 | 144 |  |  |  |
| February |  |  | ....... | 108 | 101 | 109 | 566 | 719 | 197 |
| March |  |  | ... | 161 | 128 | 122 | ....... |  |  |
| April |  |  |  | 59 | 50 | 151 |  |  |  |
| May |  |  |  | 91 | 116 | 138 | 594 | 273 | 128 |
| June |  |  | ...... | 77 | 41 | 137 |  |  | ...... |
| July . |  |  |  | 54 | 77 | 53 |  |  |  |
| August ... |  |  |  | 11 | 57 8 | 40 26 | 173 | 160 | 54 |
| September |  |  |  | 9 <br> 8 | 8 19 | 26 |  |  |  |
| October November |  |  | 44 37 | 1981888 | $\begin{array}{r}19 \\ 135 \\ \hline\end{array}$ | 490 | 589 | 103 | 109 |
| December |  |  | 227 | 130 | 195 |  |  |  |  |
| Total |  |  | 308 | 1,115 | 1,070 | 1,410 | 1,922 | 1,255 | 488 |

* Quarterly.


## SCARLET FEVER.

During the calendar year of 1909, 3,539 cases of scarlet fever were reported by the local health officers. There were 352 deaths from the disease during this year showing a mortality rate of 9.9. Two hundred twenty different townships, incorporated villages and cities reported cases of scarlet fever during this period of time.

For the calendar year of 1910, scarlet fever was reported in 323 different places. This shows that the disease was present in 100 more places during 1910 than during 1909. The report of cases shows that there were 1,506 more cases during 1910 and this probably accounts for the marked increase in the number of places reporting the presence of the disease. 5,045 cases of scarlet fever were reported for 1910 . There were 304 deaths for this year as compared with 352 deaths for 1909, and a mortality rate of 6 per cent as compared with the mortality rate of 1909 of 9.9 per cent.

It is, therefore, evident from the increase in the number of cases and the decline in the number of deaths that the disease was present in a milder form during 1910. Whenever a mild type of a dangerous communicable disease appears, it always follows that there will be a marked increase in the number of cases, for the reason that proper precautions are not taken to quarantine the homes or otherwise prevent a spread of the disease. The mild cases should always be handled in the same manner as severe cases for it cannot be determined when a mild type of scarlet fever will develop into a virulent type and a great loss of life will result.

TABLE NO. 9.-SHOWING THE TOTAL GASES OF SOARLET FEVER REPORTED TO THE STATE BOARD OF HEALTH BY LOCAL HEALTH OFFICERS SINCE 1902.


* Quarterly.

TABLE NO. 10.-SOARLET FEVER.
From reports made by local health officers.

| For year ending | Number of places reporting | Cases | Deaths | Mortality per cent |
| :---: | :---: | :---: | :---: | :---: |
| September 30, 1895... | 427 | 1,514 | 59 | 3.8 |
| September 30, 1896. | 72 | 983 | 25 | 2.5 |
| September 30, 1897. | 118 | 717 | 32 | 4.4 |
| September 30, 1898. | 118 | 603 | 17 | 2.8 |
| September 30, 1899. | 141 | 1,288 | 39 | 3. |
| September 30, 1900. | 236 | 4,497 | 170 | 3.7 |
| September 30, 1901. | 294 | 3,594 | 98 | 2.7 |
| September 30, 1902. | 383 | 3,516 | 142 | 4. |
| September 30, 1903. | 170 | 1,888 | 86 | 4.5 |
| September 30, 1904. | 372 | 1,460 | 41 | 2.8 |
| September 30, 1905. | 257 | 1,275 | 41 | 2.4 |
| September 30, 19061. | 229 | , 811 | 30 | 3.7 |
| Oct.-Dec., 1906. | 55 | 242 | 7 | 2.9 |
| Calendar year of 1907. | 222 | 775 | 46 | 5.9 |
| Calendar year of 1908. | 330 | 1,445 | 127 | 8.7 |
| Calendar year of 1909. | 220 | 3,539 | 352 | 9.9 |
| Oalendar year of 1910 . | 323 | 5,045 | 304 | 6.0 |

## MEASLES.

It is shown by table No. 11 that for the months of January, February and March, 1909, 1,353 cases of measles were reported; for April, May and June, 1,334 cases ; for July, August and September, 302 cases, and for October, November and December, 94 cases. This makes a grand total of 3,083 cases of measles for 1909.

During the months of January, February and March, 1910, 944 cases of measles were reported; for April, May and June, 2,483; for July, August and September, 728 cases; for October, November and December, 576 cases. This shows a report of 4,731 cases of measles during 1910.

From an examination of the cases reported for each month since 1903, it is evident that measles are especially prevalent during the winter and early spring months and gradually subside until cold weather again appears.

TABLE NO. 11.-SHOWING THE TO'TAL CASES OF MEASLES REPORTED TO THE STATE BOARD OF HEALTH BY LOGAL HEALTH OFFIOERS STNCE 1902.

| Month. | Year. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1902. | 1903. | 1904. | 1905. | 1906. | 1907. | 1908.* | 1909.* | 1910.* |
| January |  | 87 | 154 |  | 259 | 89 |  |  |  |
| February |  | 75 | 59 | 2 | 519 | 105 | 557 | 1,353 | 944 |
| April |  | 29 30 | 57 | 35 | 433 | 165 |  |  |  |
| May |  | 30 97 | 43 94 | $\stackrel{2}{21}$ | 340 | 138 |  |  |  |
| June |  | 17 | 94 50 | 41 | 285 | 317 | 570 | 1,334 | 2,483 |
| July |  | 27 | 28 | 41 17 | 165 55 | 340 23 |  |  |  |
| August |  | 5 | 11 | $\stackrel{17}{29}$ | ${ }_{31}^{55}$ | 23 |  |  |  |
| September |  | 1 | 5 | 29 9 | $\stackrel{3}{2}$ | 18 | 192 | 302 | 728 |
| October . |  | 2 | 14 | 10 | 3 | 28 |  |  |  |
| November | 15 | 15 | 36 | 63 | 14 | 369 | 431 | 94 | 576 |
| December | 64 | 55 | 31 | 187 | 48 |  |  |  |  |
| Total | 83 | 440 | 582 | 426 | 2,154 | 1,590 | 1,750 | 3,083 | 4,731 |

[^19]
## TUBERCULOSIS.

Table No. 12, which contains a report of cases of tuberculosis since 1903 , shows that cases are better reported at the present time than ever before. The report of cases by calendar years since 1903 is as follows: 1903, 59 cases; 1904, 193 cases; 1905, 375 cases ; 1906, 841 cases ; 1907, 789 cases ; 1908, 973 cases ; 1909, 1,043 cases, and 1910, 1,270 cases.

It has been determined from a careful compilation of several thousand cases that the mortality rate is about one-fifth the number of cases or 20 per cent, i. e., about 20 per cent of the people afflicted with tuberculosis in the beginning of the year die before the close of the year. Based on this rate we have in Wisconsin at the present time about 12,000 cases of tuberqulosis. The report of 1910 shows that about one-tenth of the actual number of cases of the disease are reported to the local health officers as the law requires. The responsibility for this condition of affairs, as previously stated, is a divided one.

If the case of tuberculosis is being cared for by a physician, it is the duty of such physician to report the facts to the local health officer of the township, incorporated village or city where the person resides. If there is no attending physician, then any citizen having knowledge of the case is required to file the report. It is, therefore, evident, that the physician is not the only one at fault in failure to report cases. The responsibility of the physician, however, is much greater than that of the layman, for the reason that the physician on account of his superior knowledge of the disease can detect incipient cases when there are no visible evidences of the disease.

Much of the work which has been done by the local anti-tuberculosis associations has been in making a survey of the actual cases in the community. The money expended for this purpose should have been saved to the associations for work along other lines.

Since practically every case of tuberculosis sooner or later comes under the observation of a physician, if the physicians would report the cases promptly a valuable fund of information would be available for use in the prevention and control of this dread disease. So far as we can determine from our investiga-
tions the physicians individually are not averse to reporting their cases, and all that is required is concerted action on the proposition. One physician in a community is reluctant to report his cases if other physicians do not also report.

Likewise physicians often hesitate to make a positive diagnosis of tuberculosis knowing that if they do the patient will seek the services of another medical adviser until someone is found who is willing to state that the ailment is not tuberculosis. The physicians therefore merely reflect the attitude of the general public on this question instead of standing out firmly for what they know to be right in the prevention and control of tuberculosis.

TABLE NO: 12.-SHOWING TOTAL CASES OF TUBERCULOSIS REPORTED TO THE STATE BOARD' OF HEALTH BY LOCAL HEALTH OFFICERS SINCE 1902.

| Month. | Year. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1902. | 1903. | 1904. | 1905. | 1906. | 1907. | 1908.* | 1509.* | 1910.* |
| January |  | 5 |  |  | 47 | 75 |  |  |  |
| February |  | 10 | 11 | 3 | 93 | 60 | 217 | 226 | 358 |
| March |  | 8 | 3 | 2 | 57 | 78 |  |  |  |
| April |  | 11 | 48 | 3 | 66 | 59 |  |  |  |
| May |  | 10 | 10 | 53 | 125 | 68 | 280 | 251 | 325 |
| June |  | 2 | 5 | 3 | 71 | 79 |  |  |  |
| July |  | 2 | 14 | 2 | 54 | 63 |  |  |  |
| August . |  | 2 | 12 | 70 | 77 | 56 | 238 | 337 | 380 |
| September |  |  | 12 | 87 | 60 | 45 |  |  |  |
| October | 12 | 2 | 45 | 44 | 79 |  |  |  |  |
| November | 17 | 4 | 15 | 49 | 62 | $200^{\text {i }}$ | 238 | 229 | 227 |
| December | 4 | 3 | 18 | 59 | 50 |  |  |  |  |
| Total | 23 | 59 | 193 | 375 | 841 | 789 | 973 | 1,043 | 1,270 |

* Quarterly.


## MENINGITIS.

The report of cases of meningitis, as shown by table No. 13 for , calendar years, is as follows: 1908, 138 cases; 1909, 42 cases; and 1910, 36 cases.

The report of deaths by counties, given in tables Nos. 1 and 2, shows that for 1909 there were 499 deaths from simple meningitis, and in 1910, 478 deaths. It is, therefore, very evident that all cases of meningitis are not properly reported as the law requires.

The rules adopted by the State Board of Health for the prevention and control of meningitis provide for the isolation of the
patient from the rest of the family and quarantine for 14 days after the first appearance of the disease. Persons living in a house where meningitis is present are also advised not to mingle with the general public in any way until the disease has terminated.

TABLE NO. 13.-SHOWING TOTAL OASES OF MENINGITIS REPORTED TO THE STATE BOARD OF HEALTH BY LOCAL HEALIH OFFTOERS SINCE 1902.

| Month. | Year. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1902. | 1903. | 1904. | 1905. | 1906. | 1907. | 1908. | 1909. | 1910. |
| January ........ | . |  |  |  | ...o. |  |  |  |  |
| February |  |  | ...... | ...... | ...... |  | 15 | 9 | 14 |
| March |  |  |  |  |  |  |  |  |  |
| April . |  |  |  |  |  |  |  |  |  |
| May . | ...... |  |  | . |  |  | 20 | 10 | 8 |
| June . |  |  |  | . |  |  |  |  |  |
| August |  |  |  | ...... |  |  | 93 | 5 | 9 |
| September |  |  |  |  |  |  |  |  |  |
| October |  |  |  |  |  |  |  |  |  |
| November |  |  |  |  |  |  | 10 | 18 | 5 |
| December | ....... |  |  |  |  |  |  |  | .... |
| Total |  |  |  |  |  |  | 138 | 42 | 36 |

* Quarterly.


## ACUTE ANTERIOR POLIOMYELITIS.

The distribution of deaths from this disease by counties during 1909 and 1910 is shown on chart No. 14. For 1909, no cases of anterior poliomyelitis were reported for the reason that the rules and regulations adopted by the Wisconsin State Board of Health did not provide for reporting cases of this disease. During 1910, 22 cases were reported. The report of cases is very incomplete and entirely unsatisfactory for determining the prevalence of the disease in various parts of the state. Fiftysix deaths from acute anterior poliomyelitis were reported for 1909 and 41 deaths during 1910.

The rule providing for the reporting of all cases and for the quarantining of the disease was adopted by the State Board of Health on January 28, 1910, and published in the official state paper on March 22, 1910. The rule adopted and published for the prevention and control of this disease is as follows: "In conformity to the requirements of the law relating to its duties

OHART NO.14.-SHOWING DISTIRIBUTION OF DEATHS FROM ACUTE ANTERIOR POLIOMYELITIS OR INFANTILE PARAL YSIS BY COUNTIES DURING 1909 AND 1910.

and powers, the State Board of Health of Wisconsin hereby publishes, declares and classifies anterior poliomyelitis as a dangerous and contagious disease and adopts the following rule for anterior poliomyelitis to be of general application throughout the state.

Rule 12. It shall be the duty of every physician called to attend a person sick or supposed to be sick with anterior poliomyelitis to report within twenty-four hours in writing the name and residence of such person to the board of health or its proper officer within whose jurisdiction such person is found, and where a person is taken sick with anterior poliomyelitis and a physician is not called, it shall in a like manner be the duty of the owner or agent of the building in which such person resides, lives or is staying, or of the head of the family in which such disease occurs, to report in writing the name and residence of the patient to the local board of health or its proper officer.

It shall be the duty of the health officer of every board of health in this state, where a case of anterior poliomyelitis is found to exist, or supposed to exist, to establish and maintain quarantine for at least three weeks from the beginning of the disease and until patient and premises have been thoroughly fumigated and disinfected as provided for in section 1416-17, of chapter 279, laws of 1909.

All health officers in the state have been supplied with copies of this rule and the physicians and other persons have been notified of the duty to report through the bulletin and the newspapers. It will be impossible to properly understand the nature of this malady, or to devise ways and means for the prevention and control of the disease without accurate and complete reports of all cases and deaths resulting therefrom.

Acute anterior poliomyelitis is not included in the abridged national classification of deaths and, therefore, the report of deaths according to sex, age, conjugal condition, nativity, etc., is not given. The disease is confined almost entirely to young children at the age group of from five to nine years. A few deaths have been reported among older people and some deaths among children from two to four years of age.

The disease as shown by the chart is not confined to any particular region of the state, but appears to be more prevalent in the river valleys and along water courses.

The Public Health and Marine Hospital Service in its endeavor to collect reports of cases during 1910 has located 2,500 cases in twenty-three different states. The hospital authorities estimate that there were approximately 3,000 cases in the United States. The mortality rate is shown to be from 10 to 15 per cent.

A very large per cent of those who escape with their lives are left with permanent disabilities or paralysis which often results in a lifetime of dependence on the other members of the family. It is for this reason that the prevalence of the disease in any locality is of so much concern. Epidemics of other diseases come, go and are forgotten, but epidemics of poliomyelitis leave in their wake cripples who will remain as objects of sympathy and even charity to the next generation. Another serious feature is the mystery which still surrounds its origin and means of prevention. This results in a lack of confidence in the measures which have been adopted and magnifies the terror of the disease to the people.

Laboratory studies, a large and valuable part of which has been contributed by Flexner and Lewis from the Rockefeller Institute, have demonstrated that the disease is transmissible from human beings to monkeys and from monkey to monkey; animals other than the monkey have been found insusceptible, except by a few observers who report successful inoculations of rabbits.

It has been demonstrated that the specific causative organism is of minute size, being able to pass through a Berkefeld filter; that it is easily killed by heat and by comparatively weak disinfectants; that it is very resistant to cold and to drying. In the bodies of infected animals the virus (germ) of the disease has been demonstrated not only in the spinal cord and brain, but in the nasal mucous membrane, the salivary glands, mesenteric glands, and, after subcutaneous inoculation, at the site of inoculation and in the lymph glands receiving the drainage from that area. The cerebro-spinal fluid and blood have been found infectious in the early stages of the disease. It appears, however, that the virus is present in the blood only in the early stages of infection and then in small amounts.

The most uniformly successful method of inoculating monkeys is by injection of the virus into the central nervous system, but successful inoculations have been made into the peripheral nerves, intravenously, intraperitoneally, and subcutaneously; also which is of great importance, by introducing the virus into the stomach or intestines, by rubbing it into the scarified mucous membrane of the nose, and, as reported by one observer, by bathing the uninjured nasal mucosa with an emulsion of the virus.

Immunity after an attack of the disease is manifested in monkeys by insusceptibility to reinoculation. In the blood of both persons and monkeys after recovery from the disease specific antibodies have been demonstrated, capable of neutralizing in vitro certain amounts of the virus. The efforts to produce an antitoxin of therapeutic value have so far been unsuccessful, as have also the efforts to devise a safe means of protective inoculation or vaccination.

Reviewing briefly the results of laboratory experiments, it is shown that epidemic poliomyelitis is an acute infection due to a specific micro-organism. The demonstration that the secretions of the nose and mouth are infectious even in monkeys inoculated intracranially, and the successful inoculation of monkeys through the respiratory and digestive tracts, form a convincing chain of evidence that the disease is transmissible by direct contagion.

Epidemiological studies have, to some extent, confirmed the inference drawn from experimental work, that epidemic poliomyelitis is transferred from person to person by direct contact, and have further indicated the probability of conveyance of the disease by healthy persons. Widely divergent inferences have, however, been drawn from the study of epidemics in different localities.

Wickman stands as the pioneer in the epidemiology of poliomyelitis, having convinced himself, by extensive field studies in Sweden, that the disease is spread by direct contact. Other observers, reporting epidemics, have emphatically stated that there was no evidence of contagion. Such divergences of opinion may be partly explained by differences in the thoroughness of the investigation and in the personal equation of the observers. It must be evident, however, to anyone studying the reports that epidemics of poliomyelitis vary greatly in their degree of infectivity and in their apparent relation to contact.

Clinical studies have taught that the disease is protean in its manifestations, often diverging widely from the classical descriptions generally given in textbooks. This fact is important from an epidemiological standpoint, as it raises, at the very outset, an obstacle alike to investigation and prevention, namely, the difficulty of recognizing the disease. Of extreme importance in this connection is the occurrence of abortive forms of poliomyelitiscases in which there is no paralysis. The absolute diagnosis of
such cases has, in the past, often been impossible. There is, however, reason to hope that diagnostic methods worked out within the last year will aid greatly in their future recognition.

As regards the preventability of poliomyelitis, then, the disease is certanny aue to a specific microörganism which can be quite readily destroyed by the usual methods of disinfection. It is, therefore, preventable, provided that we can locate the organism accurately and apply the germicides thoroughly. The first problem is to locate the organism in that part of its cycle where it can be most readily destroyed. Our present knowledge indicates that man is the essential host, the breeding place of the organism, and that prevention should consist of the destruction of the organism as it is excreted from the body of the patient. The efficiency of such preventive measures remains, however, to be demonstrated. While it is, therefore, the duty of the health officer for the present to put into effect the preventive measures already indicated, it is highly important that he should at the same time make diligent investigation to ascertain whatever deficiencies there may be in such methods and to point out the means of supplementing or supplanting them.
As a result of the investigations conducted by the Public Health and Marine Hospital Service the following suggestions for the prevention and control of this disease are given:

1. Isolation of the patient, with isolation of the contacts so far as practicable, certainly to the extent of excluding the members of the patient's family from school for at least two weeks. Exclusion of insects and animals from the room.
2. Disinfection of the secretions of the nose and mouth and of the stools and urine. Disinfection of all articles which might have been contaminated by the patient.
3. Fumigation of premises after recovery.

In framing our expectation of results from these measures we must consider several circumstances:

1. The disease is already disseminated over a wide area. Experience with other widespread contagious diseases, such as scarlet fever, for the control of which we have to depend solely on isolation and disinfection, has demonstrated that we can hardly expect to eradicate such disease by present methods, but that much may be done in the way of limiting its spread.
5-B. н.
2. Epidemic poliomyelitis presents unusual difficulties in the recognition of even typical cases in their early stage and of abortive cases in all stages.
3. It will be difficult to estimate the effect of preventive measures, since the disease often fails to spread in communities where conditions seem most favorable for an epidemic.

The hope is certainly justified, however, that energetic preventive measures will result, if not in an actual immediate reduction in the total number of cases as compared with previous years, at least in a reduction of the number that would have occurred without such measures.

## THE PASTEUR TREATMENT.

As a result of the investigations conducted by the public health and marine hospital corps and also the conference of state and provincial state boards of health concerning the widespread prevalence of rabies in the United States, the Marine Hospital laboratory took under advisement, during 1908 and 1909, ways and means for supplying the various state and provincial boards of health with antirabic virus to be used in the treatment of patients who were bitten by rabid animals. Largely on account of their being no laws in the United States requiring the muzzling of dogs the disease has spread to practically all parts of the country. During 1908, it was found that there were 111 deaths from rabies in the United States, the deaths occurring in thirty different states and territories.

Early in 1909, it was found from the laboratory examinations that there were many cases of rabies in Wisconsin and that many people had been bitten by rabid animals. In some cases the persons who had been bitten took the Pasteur treatment for the prevention of rabies at a Chicago institute. On account of the large fee for the treatments, many poor people were unable to avail themselves of the treatment and there was great danger of death from this disease. The State Board of Health, therefore, took up with the marine hospital laboratory the question of obtaining the antirabic virus for the treatment of our citizens who had been bitten by rabid animals.

The legislature of 1909 was asked to make an appropriation for the establishment, in connection with the present state labora-
tory of hygiene, of an institute for the prevention of rabies. No appropriation for this work was made and, therefore, there were no funds available for the incidental expenses incurred in administering the treatment. A charge, therefore, to cover the actual cost of the treatment, which is about twenty-five dollars per case, is made. If the individual, who receives the treatment is unable to bear the expense, the township, incorporated village or city where the person resides is asked to assist.

The first patient was received in the laboratory on November 14, 1909. During the remainder of 1909 and for the calendar year of 1910, 119 persons received the Pasteur treatment at the state laboratory. Chart No. 15 shows the location by counties and districts of all patients who took the treatment during this period of time.

The usual charge for the Pasteur treatment before the virus was supplied by the marine hospital was $\$ 150$ per case. If the 119 patients who were bitten by rabid animals had been compelled to pay for the treatment at the rate of $\$ 150$ per case, it would have cost $\$ 17,850$. Twenty-one injections were given at the State Laboratory by a practicing physician. A nominal charge of twenty-five dollars per case is made to cover the cost of the treatment or a total cost of $\$ 2,975$ for the 119 cases. This represents a saving to the people of the state of $\$ 14,875$ in addition to the saving in railroad fare and other expenses incident to a long trip to Chicago or some other city where the Pasteur treatment could be obtained. Out of a total of 119 patients treated, there was but one fatality. This was the case of a little Indian girl from the Oneida Reservation, who was terribly bitten about the face. On the tenth day of the treatment, which was the fourteenth day after being bitten, the child developed symptoms of rabies and died within thirty hours.
The Pasteur treatment as is well known, is given for the purpose of preventing rabies rather than to cure the disease after it has developed. After one is bitten by a rabid animal, there is a lapse of from eighteen to thirty days or longer before the disease develops and the Pasteur treatment should be given during this period of time. As soon as the symptoms of the disease are noticeable in a person it is too late to begin treatments. The treatment is given for the purpose of rendering the person immune to the disease the same as is done by vaccination for smallpox or the use of prophylactic doses of antitoxin for diphtheria.

OHART NO. 15.-SHOWING LOCATION BY OOUNTIES OF PATIENTS TAKING PASTEUR TREATMENTS AT MADISON FOR PART OF 1909 AND 1910.


The emulsion containing a small part of the spinal cord of a rabbit which is injected by means of a hypodermic syringe is prepared in the following manner:
"A rabbit is inoculated with hydrophobia. After a certain length of time he dies or is chloroformed. His brain and spinal cord are now taken out, for that is the part that contains the hydrophobia poison. If a portion of this be ground up and injected into another rabbit it will produce another case of hydrophobia. It will likewise produce hydrophobia if injected into other susceptible animals, or man. This brain and spinal cord then must undergo treatment to attenuate it, that is to reduce the poisonous principle so that it will not produce an active case of hydrophobia when injected; for it is this same brain and spinal cord that is used in the treatment. The longer it is subjected to appropriate treatment the more attenuated it becomes. When it is attenuated or dried for eight days it is the right age for the first dose. The patient can take a stronger dose the second time than he can the first, and so on until he can take a twoday preparation. This means that he is immune to hydrophobia. And all this occurs between the time the patient is bitten and the time it would otherwise take the disease to develop."

As has been stated in this discussion the usual prevalence of the disease is due to a failure to provide laws for the muzzling of all dogs. The most eminent authorities on the subject agree that if all dogs were muzzled and a six months' quarantine established rabies would soon be unknown in this country. That is not a theory but a fact that has been demonstrated in England, Denmark, Sweden and Norway. In the two latter countries there has not been a case of rabies in over fifty years. England's experience with the muzzling law demonstrates its efficacy most clearly. In 1899 there were 312 dogs and 30 human beings that died with rabies. The muzzling law was passed and rigidly enforced so that in 1902 (three years) only 38 dogs and six people died with rabies. The "dog lovers" at this time appealed to the authorities to remove the "cruel muzzle" and they consented with the result that during the next five years 1,602 dogs and 51 people died of the most agonizing disease known to medicine. Despite this awful lesson these same "humanitarians" came again in 1905 with another petition signed by 50,000 of them begging to be relieved of the annoying muzzle. But the authori-
ties had learned a lesson and remained obdurate, with the result that in 1905 no case of rabies occurred in England, and there has been none since in man or beast. What has been accomplished in England, Sweden, Denmark and Norway can be done in the United States.

## ANTITOXIN FOR INDIGENT PERSONS AFFLICTED WITH DIPHTHERIA.

Acting under the authority granted by chapter 140, laws of 1907, the State Board of Health has continued its arrangement for supplying antitoxin to local boards of health for use on indigent persons suffering from diphtheria. The number of distributing stations has been increased so as to make the remedy readily accessible in all cases.

Under the provisions of the agreement with the Alexander Antitoxin Company, of Marietta, Pennsylvania, diphtheretic antitoxin is furnished to local boards of health for use on indigent cases at the rate of forty cents per thousand units and ten cents additional for each syringe. Three sizes of packages are supplied as follows:

Syringes containing 1,000 units
Syringes containing 3,000 units
Syringes containing 5,000 units
Therefore, the 1,000 unit packages, which are used to prevent diphtheria if a person has been exposed, will cost fifty cents; the 3,000 units will cost $\$ 1.30$, and the 5,000 units will cost $\$ 2.10$.

During the calendar year of 1909, the State Board of Health distributed to the various stations 1,771 packages of 1,000 units; 1,413 packages of 3,000 units, and 1,226 packages of 5,000 units. This antitoxin cost the local boards of health at the special price for indigents $\$ 5,297$.

For 1910, we distributed 1,085 packages of 1,000 units; 659 packages of 3,000 units, and 704 packages of 5,000 units which cost the local boards of health $\$ 2,877.60$.

The total cost, therefore, of the antitoxin used on indigent persons during 1909 and 1910 was $\$ 8,174.60$. If the antitoxin had been purchased at the regular market price it would have cost the sum of $\$ 30,547.00$. By subtracting from the cost of the anti-
toxin at the regular retail price, the cost at the special price, under the present arrangements with the Alexander company, we have saved to the poor people of the state, the sum of $\$ 22,372.40$. The actual saving in human life as a result of furnishing antitoxin free to families who were unable to purchase it is equal to many times the saving in the cost of the remedy.

As a result of supplying antitoxin to the local boards of health at the reduced price, all other antitoxin manufacturers, who desired to compete for the business, found it necessary to greatly reduce the price and as a result several of the companies are now furnishing antitoxin to all persons at the indigent rate instead of charging the exorbitant prices as heretofore. Many of the local boards of health have made arrangements to obtain their supply of antitoxin for indigents from other manufacturers. We do not object in the least to this arrangement, provided the remedy is obtained as cheaply as we can furnish it under our arrangements with the Alexander company.

In one of the smaller cities the health officer refused to use the antitoxin distributed by the State Board of Health and purchased the remedy from another company at the regular market price, which was greatly in excess of the price charged for the state antitoxin. The council refused to pay the bill and the attorney general rendered the following opinion with reference to the purchase of antitoxin by the local boards of health at the usual retail price:
"You state that your board made provision for the purchase by local health boards, of antitoxin for use in indigent cases, at a greatly reduced rate from that charged when the remedy is sold at retail prices; that your board has established distributing stations in various parts of the state and has issued instructions to all local boards as to the method of obtaining same for use in indigent cases. You inquire whether if the local health officer of a local board neglects, or refuses to avail himself of the antitoxin thus provided and purchases it for use in indigent cases at the regular retail price, the material must be paid for as other expenses of the board are paid. You state that, in a case that has been brought to your attention, the health officer has the authority of the local health board in purchasing the antitoxin obtained by him, but that the city officials refuse to pay the regu-
lar retail price and wish to know whether or not the claim is a valid one.
"In answer to your inquiry I will say that, under the statute as above quoted, the local boards of health are to furnish antitoxin free, in such manner as the State Board of Health may direct. As you have directed and instructed the local boards of health to purchase the antitoxin from the distributing stations, at a reduced rate, I believe that they had no authority to purchase it elsewhere, at a higher rate. Although the local health officer may have bound himself personally in the purchase of the antitoxin, I am of the opinion that he has not bound the sity, and that they may legally refuse to pay said bill."

The value of antitoxin in preventing and curing diphtheria can no longer be questioned and we urge that the remedy be used freely in all cases. The sooner antitoxin is used after the discovery of the disease, the better the chances for a complete and rapid recovery.

## PUBLIC DRINKING CUPS.

At the annual meeting of the State Board of Health held in the city of Madison on January 28, 1910, the following rule prohibiting the use of the common drinking cup was adopted and published in the official state paper on March 22, 1910:

Rule 14. Whereas, It has been repeatedly demonstrated that the use of what is usually known as the common drinking cup is dangerous and is an undoubted source of communication of infectious diseases; now, therefore, in the interest of the public health, be it ruled by the Wisconsin State Board of Health:

That the use of the common drinking cup on railroad trains, in railroad stations, in the public, parochial or private schools and in other educational institutions of the state of Wisconsin is hereby prohibited from and after September 1st, 1910.

No person or corporation in charge of any railroad train, or station, no school board, board of education, town board of school di-rectors, or board of trustees of any public, parochial or private school, or educational institution, shall furnish any drinking cup for public use and no person or corporation shall permit upon said railroad train or station or at any said public, parochial or private school or other educational institution, the common use of the drinking cup.

This rule was adopted in conformity with the authority granted by section 1408 of the statutes. Any person who shall wilfully violate any of its provisions may be punished according
to the law found in section 4608 of the statutes by imprisonment in the county jail for not more than three months, or by a fine not exceeding $\$ 100$.

Eight states including Wisconsin have now officially abolished the use of the common drinking cup on railroad trains, in the public, parochial or private schools, and in other educational institutions through the adoption of rules by the board of health of each state.
There are comparatively few people who will not readily admit that the germ diseases are to be found in the mouth and on the lips of the individual suffering from such disease, and hence the germs are constantly communicated to any drinking vessel that the person may use. This being the case the cup that is used in common, in public places, must inevitably be the constant medium of communication of such diseases and as truly a poisoned cup at times as though it contained arsenic or strychnine. The disease germs which are spread in this manner are even more dangerous than poisonous drugs, because neither to sight, taste, nor smell is a hint conveyed of the presence of the poison and because it gives no immediate indication of the injury it has inflicted. The agitation against the use of the common drinking cup is not a fad, and must continue until the evil is entirely abolished. It has been demonstrated conclusively that disease producing bacteria may be carried in the mouth and on the lips for a considerable period of time. The disease germs have been found on public drinking cups in numbers sufficient to infect many people and in addition to this it has been demonstrated that where a number of individuals drank from a cup previously used by an individual suffering from a germ disease, some of them became ill.

It has been proven that at least seven hundred thousand of the million and a half deaths occurring annually in the United States result from the minute parasitic plants and animals which gain access to the body. These invisible foes wage a continual warfare against the entire human race.

Recent investigations show that the germs of diphtheria and grippe frequently remain from one to three months in the mouths of the patients after they have recovered from the disease. The very extensive and careful observations of the Minnesota State

Board of Health demonstrated that in over half of the diphtheria cases virulent germs remained in the nose and throat of the patients three weeks after recovery. Most careful examinations by expert bacteriologists show that many of the common sore throats are really light cases of diphtheria. Of the 2,038 mild sore throats examined in the school children of Hartford, Connecticut, 591 were shown to be due to the true diphtheria germ.

It is an established fact that a considerable number of well persons harbor in their mouths the germs of grippe, pneumonia, diphtheria and tonsilitis. An examination of 4,250 persons by the Massachusetts Association of the Boards of Health showed that over 100 of them carried in their mouths virulent diphtheria germs. Pennington in 1907 found virulent diphtheria bacilli in nearly five per cent of a large number of apparently healthy school children in Philadelphia. In Minnesota, true diphtheria germs were found in the mouths of 70 persons in every 1,000 examined. The average results of a large number of investigations demonstrate that nearly one per cent of well persons carry in their mouths true diphtheria germs. In Boston, 60 per cent of all cases of common catarrh showed the presence of grippe bacilli. Considerable evidence is at hand showing that the germs of sore throat, pneumonia, and bronchitis are present in many people who mingle with the well and drink from the public cups.

Many people refuse to use the common drinking cup on all occasions, but for the benefit of those who do not realize the danger of contracting the disease in this manner it is important that they be protected from the peril of drinking out of public cups.
Foremost among the disseminators of disease is the common drinking cup and the water pail on the bottom of which often lies the drinking cup used in practically all of the public schools of the state where a public water supply has not been provided. Where there is a public water supply, it amounts to almost criminal negligence on the part of the board of education not to provide bubbling fountains or bracket fountains which may easily be attached to the water spigot.

Another great menace to public health and one which is perhaps equally as dangerous as the one just mentioned, is the use of the common drinking cup, or glass provided in railway sta-
tions and on railroad cars. At the stations where a public water supply is available, one or more sanitary drinking fountains should be provided. On the railroad trains the problem is very easily solved by refusal on the part of the railroad company to permit the use of the common drinking cup on the railroad cars. Individual drinking cups can be supplied very easily by installing the cup vendor, where a perfectly clean paraffin coated cup may be obtained for a penny. As soon as the common drinking cup is abolished on railroad trains, the traveling public will quickly provide themselves with individual collapsible drinking cups; but for the accommodation of many who may not be thus provided, a cup vendor should be installed.

In schools where a public water supply cannot be provided, individual drinking cups either of the collapsible metal type, the paraffin coated cups, or the collapsible paper cups should be provided.

We have no criticism to make with reference to any of the individual drinking cups; but advise that great care be exercised in the selection of a drinking fountain. In a fountain where the waste water cannot be discharged readily, there is great danger of pollution. Some of the devices are serviceable while others appear to be of doubtful efficiency in meeting the demands for a sanitary drinking fountain. The State Board of Health cannot recommend all fountains but after carefully examining and testing each device we will issue a leaflet recommending certain conditions which must be complied with in order to constitute a satisfactory sanitary drinking fountain.

REPORT OF SPECIAL INVESTIGATIONS MADE BY MEMBERS OF THE STTATE BOARD OF HEALTH AND REPRESENTATIVES OF THE BOARD FROM FROM OCTOBER 1, 1908, TO SEPTEMBER 30, 1910.

## Watertown, Jefferson County.

Scarlet fever diagnosis. Investigated by Dr. Wm. F. Whyte.
The attending physician in this instance, where there were four children in the family, diagnosed the disease as German measles. The health officer, after examining the cases, did not agree as to the diagnosis and a member of the State Board of Health was requested to make an investigation. The description of the symptoms and also the condition of the children when the investigation was made were sufficient to warrant a diagnosis of searlet fever. The home was quarantined until properly disinfected under the direction of the local health officer.
[This situation is typical of a great many complaints received by the State Board of Health and requests for investigations. Ordinarily there should be no occasion to call upon the officials of the State Board of Health to assist in making a proper diagnosis. If the health officer suspects that the attending physician has not accurately determined the nature of the ailment, he is fully authorized to make such investigations as he may deem necessary in order to determine the character of the disease present in the home and to take such action as may be necessary in order to safeguard the health of the general public. Whenever there is a question regarding diagnosis, if the disease is suspected of being a quarantinable one, quarantine should be established until the exact nature of the disease is known.]

## Johnson Creek, Jefferson County.

Smallpox diagnosis. Investigated by Dr. Wm. F. Whyte.
A complaint was received at the office of the State Board of Health with reference to an epidemic at Johnson Creek which was pronounced by one of the local physicians as chicken pox. Complainant stated that all cases break out by an eruption from the size of a pea to that of a dime forming pustules. The patients were found to be quite ill with a temperature of from 102 to

105, intense pains in the back and in the muscles of the body until the appearance of the eruption. The health officer, who was not a physician, was notified of the prevalence of this disease and he informed the people that the patients had chicken pox. Consequently no attempt was made to quarantine the cases, vaccination was not practiced and many people with pronounced cases of smallpox were about on the streets and otherwise mingling with the general public. One of the local physicians who was more public-spirited than his colleagues diagnosed a case which came under his observation as smallpox, and advised immediate quarantine, as the rules of the State Board of Health provide. For the reason that one of the physicians diagnosed all cases of this as chicken pox, practically all of the people afflicted were cared for by him so as to avoid quarantine or other restrictions.

The investigation also disclosed the fact that after several reputable physicians, including two members of the State Board of Health, had diagnosed the disease as smallpox, quarantine was not observed and the disinfecting after recovery was improperly carried out. A formaldehyde generator was used, and in large homes, containing several thousand cubic feet of air space, but a single pint of formaldehyde was liberated in the home. The investigation also showed that on account of the failure to make a proper diagonsis and disinfect the patient and premises, after recovery, smallpox had been present in the community for about two years.

As a result of the flagrant violation of the public health laws on the part of one of the local physicians, he was arrested for failure to report cases of smallpox as the rules provide. The defendant in the action was acquitted on account of inability to prove that the physician had made a diagnosis of smallpox in any of the cases not reported.

## Mineral Point, Iowa County.

Smallpox diagnosis. Investigated by Dr. C. H. Sutherland.
During the month of September, 1910, there was a question regarding the nature of an epidemic at Mineral Point. When the representative of the State Board of Health arrived there the case in dispute had been quarantined. Many of the laborers in the zinc mines had been exposed to the disease and after making a personal examination of these workers, two cases of smallpox were
discovered. The men were sent home immediately and quarantine established. In this case the health officer was held accountable for the conditions complained of on account of not making a proper investigation of the cases and establishing quarantine as should have been done.

Mellen, Ashland County.
Typhoid epidemic. Investigated by Dr. C. H. Sutherland.
During the fall of 1910, there was a persistent epidemic of typhoid fever at Mellen. About 150 cases were reported and the State Board of Health was appealed to for the purpose of assisting in determining the source of the contagion. Practically nothing was being done locally to control the epidemic except the work of the local physicians in caring for the individuals who were ill with the disease.

It was found that there was a contamination of the entire water supply, also an imperfect and dangerous system for the disposal of sewage. A mass meeting of the citizens was held at the city hall and much interest was manifested in knowing what must be done to prevent a further spread of the disease. The citizens were advised that a new system of water supply be installed and that the sewerage system be rebuilt. Until this could be done the people were directed to boil all the water used for drinking purposes. The general sanitary condition of the community was found to be exceedingly bad.

## Beloit, Rock County.

Scarlet fever epidemic. Investigated by Dr. C. H. Sutherland and Dr. C. A. Harper.
This epidemic was due very largely to failure on the part of the attending physician or responsible head of the family, where no physician was in attendance, to report cases of scarlet fever to the health officer as the law requires so that proper quarantine could be established. In several typical cases of scarlet fever the physician did not make a proper diagnosis and in other cases, where there was no physician in attendance, the responsible head of the family did not report the case, and every effort was made to conceal the presence of the disease. The health officer was thoroughly conscientious in the performance of his duties, but could not control the disease without the coöperation of the phy-
sicians and other citizens. An effort was made to obtain evidence against physicians where a diagnosis of scarlet fever was made and the case not reported. It was found that sufficient evidence could not be obtained to warrant a prosecution, but when the people realized the serious nature of the epidemic they coöperated with the health department and the disease was soon under control.

Almfna, Barron County.
Suspected case of Cholera. Investigated by Dr. L. P. Mayer.
The following is a report of my investigation of the immigrants suspected of cholera in Wisconsin. On my arrival in Almena, I looked up the local physician and located the parties in the Russian settlement about half way between Almena and Comstock. Contrary to newspaper reports, there were only two immigrants from Russia in the district, covering a period of several months. Only one case of bowel trouble was found in the locality and that was on the "Winderf" farm, three and onehalf miles from Almena. Here we found two Russian immigrants, both young men about eighteen years old. The younger of the two had been quite sick with some form of acute diarrhea or gastro enteritis accompanied by clinical symptoms of Cholerae Asiaticae.

The patient could speak the German language well so I had little difficulty in getting facts as well as the history of the case. In looking over his ship card I found that he had entered the United States under the name of Gottleb Gunske, residence given as Mankof, Russia. By his card I saw that he had passed through the Marine Immigration Bureau on November 17th, 1910. He said that he arrived in Chicago the night of the 19th of November. It was at this time that he began to feel tired and as he expressed it 'I felt very tired; my stomach pained me and I could not get enough water to drink. Then I began to vomit and cramps in the stomach and bowels became severe. This was accompanied by diarrhea." These symptoms lasted about three days, when they began to subside and he is now making an uneventful recovery.

Dr. Christman of Almena saw this fellow on November 23rd, and was inclined to suspect cholera. But in the absence of a bacteriological diagnosis. it would be difficult to differentiate between other forms of cholera. However, the case is being treated
just as if a positive diagnosis was made. Prophylactic measures for the prevention and spread of the disease are being enforced by Dr. Thompson of the United States Public Health and Marine Hospital service. Dr. Thompson is making bacteriological tests and will report his findings. He told me that he would remain a few days to study the case.

## Woodville, St. Croix County. <br> Smallpox epidemic. Investigated by Dr. L. P. Mayer.

Following your instructions I made a trip to Woodville, on Feb. 27, 1909. In company with Dr. Stockman, the health officer of the town of Eau Galle, we investigated the local smallpox epidemic. We found several families where the disease existed, but had no doctor in attendance owing to the fact that in some instances the patient was not sick enough to call a physician. In other cases the family refrained from calling medical advice so as to avoid quarantine. In some instances, children from these homes with a well defined rash were attending school, and mail, produce, such as cream and butter, were taken to market and the post office daily. The members of the town board were in an ugly mood because the health officer, Dr. Stockman, ordered the school closed until proper fumigation, etc., had taken place. I called the school and town board together and with the aid of Dr. Stockman talked the situation over, answering any question they wished to ask relative to their duties in matters of public health as a board.

We succeeded in getting them together and working in harmony after a system which they will learn to appreciate when they begin to see the results it is bound to bring.

Dr. Stockman informs me at this writing, that the disease is solely confined to the places we placed in quarantine, no cases developing in other families or localities.

## Deer Park, St. Croix County.

Smallpox diagnosis. Investigated by Dr. E. S. Hayes.
Yesterday I called on Dr. - at Cylon. He stated that he had resigned from the Health Board as there had been much kicking by the people on account of quarantine. He has only been in the town a few months and I think he feared the effect
on his practice. He seems a very good man and I urged the bcard to try and get him to reconsider.

A farmer was appointed in his place. I drove with him to Deer Park five miles away from Cylon where the epidemic has been most pronounced and called on Dr. -_-_, a young Norwegian, who stated there had been cases of a mild type since last January. He was away at the time and on his return in F'ebruary saw two or three mild cases which he called grippe but which he found later had a rash. Most of the cases did not call a physician. They have had reported in the town of Cylon, to date, 34 cases and in the village of Deer Park 9 cases; the rest in the country for several miles around. At present there are three cases in quarantine, one in the village of Deer Park, ready to be discharged, and two in the country.

At the present time I believe they are pretty well aroused as to the need of stamping out the disease. Dr. ——— stated that he had vaccinated about 140 children recently. Mr. is going over the town fumigating all houses where they have had smallpox, and is holding quarantine of the new cases. I was told that in the town of Anson they were having some cases and that they were not doing much to prevent the spread.

I believe that with the present sentiment the board of health of Cylon will stamp out the epidemic.

## Spooner, Washburn County.

Scarlet fever epidemic. Investigated by Dr. E. S. Hayes.
I visited Spooner as per request, and looked into the reported epidemic of scarlet fever. I called on the four doctors who reside in Spooner and visited many houses where there had been sickness.

At the present time there is a widespread epidemic of measles, typical and quite severe in form. Nov. 1, 1909, Dr. treated and reported three cases of scarlet fever. Later in the winter and spring of 1910 , he saw quite a number of cases which he diagnosed as scarlet fever, but did not report as he considered there were many other cases not reported. He saw no cases of German measles. I visited the homes of a number of Dr. cases and from the history believe they were scarlet fever. Also called on the McCann family, twelve children. They were treated by Dr. - and called measles. They are now fully recov-$6-\mathrm{B} . \mathrm{H}$.
ered but from the history of very sore throats, and the fact that about half the children peeled in a pronounced manner made the diagnosis of scarlet fever certain.
I saw one case, Harkness child, sick about two weeks ago, and showing evidence of peeling of skin on bottom of feet at present time. Dr. - , local health officer, visited all of these places with me. He stated that he had not seen any cases of scarlet fever but had seen German measles earlier in the season and later an epidemic of true measles. He expressed little doubt that some of the cases seen by us and giving a history of peeling, etc., were true scarlet fever.

I told Dr. - that Spooner has had a bad name extending over years regarding the care of contagious diseases; that the people were suspicious and that it was time for a sharp turn in the road. Advised that all the houses even suspected of having had scarlet fever should be cleaned and disinfected and a new order of things brought about. I advised him to write you a statement of what he is doing in this regard.

Athens, Marathon County.
Typhoid fever epidemic. Investigated by Dr. L. E. Spencer.
I visited Athens Monday and spent the day there. We had a conference at the opera house. Dr. - , health officer of Athens, Dr. R., three or four health officers from the country and fifteen or twenty citizens were present. We spent a good part of the afternoon discussing the conditions and I feel sure that some good will come from the meeting.

The source of typhoid in Athens no doubt was from polluted drinking water, although later cases cccurred and are occurring where they cannot be traced directly, which, of course, is what we might expect. There are several cases out in the country traceable to Athens, and out in the Polish settlements, adjacent to Athens. It is very difficult to get the coöperation of the families in properly observing sanitary rules that are laid down by attending physicians.

This much was accomplished at the conference. The health officers from the surrounding country towns promised to forget boundary lines of towns and villages and work together with the Athens people in trying to stamp out the epidemic. Among the things taken up with the out-of-town health officers was the mat.
ter of reporting cases of sickness unattended by physicians, impressing on the people where intestinal troubles are present the necessity of proper disposal of the excreta, rules relating to milk in families where typhoid is present, the placarding of houses and isolation of patients, etc. The subject of prophylaxis was gone over again and again with the country health officers and they will do something I am sure in the future. They promise to keep in touch with the doctors in Athens and carry out instructions.

There are not very many cases in the village at present but it is the new cases that come along all the time that have alarmed the people and in my observations of a day of course I cannot point out any better than the local doctors the source of infection in certain cases where they feel sure the water supply is pure. But after an epidemic of typhoid fever gets started is is not easy to trace all cases even where the original cases are plain. Athens is quite an old village, has no waterworks or sewers, and of course there are many vaults, cesspools and dry wells. The village lies on a side hill of rock formation. This rock formation is full of seams or fissures and it seems reasonable to suppose that seepage will and has taken place to considerable distances. Some of the samples of drinking water sent in to Madison have shown pollution and others have not.

Dr. - is a very able man and is doing excellent work. He has sent out a small leaflet for general distribution, advising the boiling of all water for drinking and cooking purposes. It also gives in a brief way instructions from a sanitary standpoint of the things to do and not to do to prevent the further spread of the disease.

All present at the conference seemed much in earnest in their assurances that they would do all they could in following the advice given them and in supporting Dr. -__ in his work as health officer.

## Mellen, Ashland County.

Typhoid fever epidemic. Investigated by Dr. L. E. Spencer.
In conformity with your request I went to Mellen, Wisconsin, September 4th, and returned Tuesday evening, the 6th. I find the epidemic of typhoid started in a well of the - home sometime in June. Fifteen out of sixteen people living in the house to which the well belonged have had typhoid with three
deaths. All the other people in this block used the well also because of the excellent quality (?) of the water, and seven families out of eighteen (the entire block) became afflicted during the summer, making about thirty-one cases directly traceable to this one well in one block.

The trouble with this well was plain sewage contamination, an open sewer opening right out in the surface of a ridge just a little beyond the well. Natural seepage could not help but occur and poison the well. The sewer was cut off and other families stopped using the water but I understand that the people who owned the well insisted on using it and are still using it and the well has now been closed. From this start the fever spread until it became epidemic in the city and as near as can be ascertained over one hundred cases have occurred. In many of the cases recovered from this source of contagion it was not easy to explain the direct method by which the infection was carried. Probably there were many cases due to flies carried from vaults and cesspools where the excreta of typhoids had not been properly cared for. Other cases possibly were due to the water which is unfit to drink.

The water comes from Bad river and in a season of drought like this summer, there is contamination as is shown by examination at hygienic laboratory at Madison. There are other wells also that are probably contaminated by sewage or vault leakage. The town is built in a valley between hills. The soil is heavy and it seems probable that there must be some contamination to wells on lower levels by vaults and slop holes on higher grounds.

The sanitary conditions are poor as a whole and the solution of the problem would be a new and good system of waterworks supplying good water for drinking from some other source than Bad river. There are men and money ready in Mellen to put in such a plant if the matter could be adjusted some way through the Railroad Rate Commission so as to take care of the party who now has the franchise and operates the waterworks.

## Schofield, Marathon County.

Scarlet fever epidemic. Investigated by Dr. L. E. Spencer.
In regard to the scarlet fever situation in this county, and my work of investigation in the past month, I have to report as follows: On June 15th, I visited Schofield and conferred with the President and Trustees of the village. They reported they were
willing to do all that was possible to stamp out the disease. I learned that there have been three deaths from scarlet fever and probably twenty-five or thirty cases as far as I can ascertain up to that date.

On June 16th, I again visited the village of Schofield and made a canvass of the town and found scarlet fever in seven homes. Complaint had been made by the Wausau health department that proper precautions were not taken in this village. I found that all houses were properly quarantined and the village marshal was making the rounds many times a day keeping track of and attending to the outside wants of the families. The authorities were doing good work and spending all the money necessary to safeguard the public. In the first cases, I am of the opinion, that the village officers were not overly strict but later on no fault could be found. I visited Schofield also on several other occasions as shown in vouchers and watched conditions closely so that the public in this city could not complain as Schofield is reached by street railway from here and there is close communication.

I have also visited all the towns and villages adjacent to this city and at the present time can say things look pretty good. There are only a few cases left in this city and I predict there will be scarcely a case of contagious disease in the city a month from now.

The village of Schofield probably had thirty cases of scarlet fever. I cannot get accurate statistics but this is not far out of the way. At the present time the village is absolutely free from disease.

Brokaw, a village seven miles north of here, had nine cases with one death (an adult), but they are also free of contagious diseases now. Mr. —, the village president, took prompt action upon the outbreak of the fever and got good results.

On July 6th, I visited a case of diphtheria in the town of Wausau at suggestion of Dr. -_ of this city. It was suggested that quarantine might be evaded, but upon my arrival I found that quarantine was being properly maintained. Since then the patient has recovered, the place has been fumigated, and no new cases have developed so far.

On July 2nd, I was called to investigate a case in which it was complained that children in the family of Mrs. -_ had been
released from quarantine too early, that the children were peeling: and that they were going about the city gathering in washing (the mother does public washing for a living). I found upon investigation that the complaint was well grounded and the facts were as above stated. I notified health officer ——, who found the conditions as already stated and immediately quarantined again, keeping guard night and day. After this the physician who had attended the family and had reported them recovered (Dr. - ) went to the house and tore down the sign, health officer ———_ swore out a warrant for his arrest and the case was set for trial. The case has been adjourned twice already on plea of the defense and I doubt if the case ever comes to trial.

If you want a fuller detail of the work I have done in the county, I will render more in detail. I visited all the towns and villages about here where there is any communication with the city and can say we have a pretty clean bill of health at present.

Town of Weston had several cases of scarlet fever and was not properly caring for them at first but got busy on my suggestion and are cleaned up now. Towns of Wausau, Stettin, Maine, and Easton are all clear now, I think.

Northern State Hospital for Insane, Winnebago County. Diphtheria epidemic. Investigated by Dr. L. E. Spencer.
A history of the trouble is about as follows: The first case of diphtheria appeared last December in the person of an attendant and of course was brought in from outside. How? We do not know. In about two weeks anether case developed in a patient in a ward distant from the ward in which the attendant belonged. This patient was maniacal and died on the eleventh day of the disease. Since that time and scattered along until about May 10th of this year, they have had about twenty cases, all moderately mild and all recovered. These twenty cases include five attendants and fifteen patients. From this time in May until September 16th, no new cases developed and the hospital authorities were congratulating themselves that they were rid of the disease. September 16th, a patient was isolated for what appeared to be a case of follicular tonsilitis but which proved later under laboratory and clinical diagnosis to be diphtheria, a mild case. September 21st, another patient developed a severe case in a ward
never before affected. These two cases as well as all others last winter had antitoxin. Those two are recovering rapidly.

Now in regard to source of contagion. No doubt the first case was brought in by the attendant who had it. Where he was exposed we do not know and no doubt the cases since that time have come in some way from this original case, but just in what way it is hard to say as the method and facilities they have for handling contagious diseases at the hospital cannot be improved upon in my opinion.

Dr. S-has been very careful in the handling of these cases and while I will not go into a detailed description of his method will say that his precautions and arrangements for handling the disease were elaborate and I do not see how they can be improved upon. I visited every part of the institution. The maintenance from a sanitary point of view seems to me excellent indeed.

I have positively no suggestion to make as to the management of the cases as I could see plainly that Dr. S-_ is doing and has done all that any one could do to stamp out the disease. Eternal vigilance and the systematic and thorough work he is doing will soon wipe out the disease in this institution.

## Park Falls, Price County.

Diphtheria epidemic. Investigated by Dr. L. E. Spencer.
I find that there have been about one hundred cases of diphtheria in and immediately about Park Falls since laast May. This number is estimated from information gained from Dr. - and Dr. -_ and confirmed by other parties whom I have interviewed. There is no doubt in my mind but that there has been great carelessness in handling the epidemic, also, that Dr. - has attended cases of diphtheria and diagnosed the cases as colds, quinsy, croupous pneumonia, etc. In the case of the -_ boy who died, Dr. - tells me that it was membranous croup. I had an interview with the doctor and of course he tried to hold up his side of the case. There is no question in my mind but that he has been careless in diagnosing and reporting his diphtheria cases as during the epidemic the other men were having many cases right along while he was reporting none, and no doubt, you have confirmatory evidence of this in some specific case in which swabbings were sent to the laboratory.

At the present time the trouble is all over. There is not a case of diphtheria in Park Falls to-day as near as I can find out, but they have had much trouble during the last six months and I think it due principally to the lack of an efficient health officer for which the village board is to blame. Either Dr. -_-or Dr. - , if they had been promised the backing of the board morally and financially would have taken the appointment as health officer, and could have easily controlled the epidemic long before it gained such progress. The village president, Mr. ——, tells me that the position was offered to the two doctors mentioned at a salary of ten dollars a year, and they would not serve. I told him that he had insulted these men and that if the board would say to either one of them "We will attach a nominal salary (or no salary at all) to the office. If any trouble arises when your services are needed we want you to go ahead and do what is right, we will back you up and pay your bills." Under such circumstances either of the men would take the office I am sure and they are both competent. The honor devolves at present upon the village marshal, Mr. -_ and from what I can learn he does not and has not considered the state of public health any of his business.
I would earnestly recommend that you urge the village board to appoint one of the physicians on the conditions as I have outlined above, and I am sure it will eliminate much trouble in case of another epidemic. With a good docter as health officer, suspected cases in the hands of incompetents could be run down as the health officer would have the right to see any case he suspected, which Dr. - or others might have. In the past, where diphtheria was suspected, there was no one in authority to go and diagnose suspected cases and, of course, the townspeople took sides in the matter.

I saw nearly all the parties you enumerated in your letter besides many others and I am sure the solution of avoiding further trouble there is to get the village to appoint one of these men I have spoken of as health officer under the conditions referred to. They have been too stingy and careless; let them appoint a good man, put the responsibilty on him and then if he does not fill the bill try the other man.

I will not write further for I think this covers all that is necessary so far as providing against further trouble. For the past,

I am convinced deaths occurred that could have been prevented and many cases of diphtheria occurred that ought not to have occurred, but it is past and I am making suggestions for the future. They did not seem to know that the state provided antitoxin at cost and I am afraid that it was used rather sparingly on account of the cost and the fact that there are so many people of small means. It seems that the village did not furnish free antitoxin, and in fact, did not want to pay for disinfection, but I understand they finally did.

## Edgar, Marathon County.

Scarlet fever epidemic. Investigated by Dr. L. E. Spencer.
The report made by the health officer showed that there were six cases of scarlet fever in the village and there was a division of opinion as to whether or not the school should be closed during the prevalence of the disease. The investigation showed that there were fourteen cases of scarlet fever in eight different families. So far as could be determined, everything possible was being done to prevent a spread of the disease. All homes where scarlet fever existed were properly quarantined and quarantine strictly maintained until after complete recovery and until patient and premises were properly disinfected. The health officer being a layman, a few cases where no physician was in attendance were not diagnosed and quarantined as promptly as should have been done. This probably accounts for the spread of the disease. The village board was opposed to closing the schocl, and on account of the way in which the epidemic was being handled, if was not deemed advisable to insist that the schools be closed unless more cases developed.

Boscobel, Grant County.
Scarlet fever diagnosis. Investigated by Dr. F. F. Bowman.
Visited infected house and made a thorough examination of patients and conditions leading up to the present condition. The facts appear to be that two weeks to two and one-half ago, a family returned to Boscobel from Spokane, Washington, having been on a visit. While away a little boy suffered a severe attack of scarlet fever. As soen as possible the family and boy returned to take up residence in Boscobel. A boy, in the family at present afflicted, assisted in unpacking and handling the
returning family's personal effects. About ten days later same boy was stricken and in a week died. A second child died after 76 hours apparent illness and a third after three or four days', illness, and at present three other members of the family are sick. One, I believe, to be suffering from scarlet fever, a second with a mild sore throat and a bad scare, having some years previously suffered a severe attack of scarlet fever. The third person was undoubtedly suffering from tonsilitis. All scarlet fever from which this family suffered has been particularly malignant. The clinical diagnosis is clear. The remaining case was distinctive. I am confident that the prevalence of the disease in this family was due to careless disinfection in Spokane, Washington, where the first child had the disease.

## Palmyra, Jefferson County.

Smallpox diagnosis. Investigated by Dr. C. A. Harper.
The presence of an eruptive disease in Palmyra and vicinity was reported to the State Board of Health and on account of a disagreement regarding the diagnosis of the disease, it was thought advisable to have a member of the Board make a thorough investigation. On account of the laxity of the health authorities in the village of Palmyra and also in the township of Palmyra in not quarantining cases of smallpox, the disease has spread to several neighboring towns and there was great danger of an epidemic. The investigation showed most marked cases of smallpox and there could be no doubt regarding the nature of the disease. The cases were of such a pronounced type that practically any layman who had ever seen typical smallpox eruptions could not fail to make a proper diagnosis. The failure on the part of the health authorities to diagnose the disease and provide proper quarantine was due to indifference and an entire disregard of the rights of the general public.

The village board was notified that unless an efficient health officer was appointed, and the quarantine rules for the prevention and control of smallpox were enforced promptly, the State Board of Health would send a representative of its own selection to the village to take charge of the epidemic.

Waupun, Fond du Lac County.
Polluted water supply. Investigated by Dr. C. A. Harper. The examination made at the State Hygienic Laboratory of
water from many private wells in the city of Waupun showed gross pollution. The investigation was requested for the purpose of determining whether or not the refuse from the canning factory and the dye works at the state prison were responsible for such pollution. After thoroughly examining all the possible factors which might contribute to the pollution of the water supply, the following recommendations were made:

That many wells in Waupun are polluted goes without saying. The eye bears witness to this and the analysis made in the laboratory shows much organic matter in the water. Well water has been polluted in Waupun before the establishment of a canning factory. The pollution has been along similar lines as was the pollution of the wells when examinations were made. An analysis of well water prior to the establishment of the canning factory verifies this statement. I believe, therefore, that the canning factory is not entirely responsible for the pollution of the water in the various wells throughout your city, although such a disposal of the refuse material from the canning factory might be a factor along with other things in so saturating the soil as to aid in the forces that are producing a pollution. The cesspools undoubtedly play an important part in the pollution of your water supply. This is found true from time to time in cities that have had the cesspool system for a considerable period of time, the time element being a factor in the saturation of the soil until seepage into the wells is almost a continuous and constant factor. Hence, we are safe to assume that a general pollution or saturation of the soil in the city of Waupun is now a fact and continued pollution of the wells and all ground water will be found until a complete change is made of disposing of the waste material. The lay of the land, the character of the soil all point to this. The geographical construction of the ground at Waupun could not be better for the establishment of a complete saturation of the soil producing seepage into a great many of the wells. The layers of limestone are so constructed as to allow a transportation, as it were, of the fluid soaking into the ground, seeking a lower level, hence draining into the wells. It appears that the rock layers are only some six to ten feet below the surface and this you readily see is a bed over which the surface material drains and through which it is difficult, except in artificial channels made through the rock, for the material to
reach a deeper level. We have no hesitancy, therefore, in saying that the well water of Waupun with the cesspool establishment as you now have it is certain of pollution until proper changes are made by your municipality. If you collect all the waste sewage into a sewerage system and dispose of it in some safe and selected point, you will eliminate to a marked degree the further pollution of the soil; but there is enough saturation of the soil now should the sewerage system be established to pollute the wells from time to time for many years to come.

In addition to this there is also a constant amount of waste material disposed upon the surface in spite of any system that you might establish and hence this amount would undoubtedly be sufficient to keep the well water impure and unsafe for domestic use. We do not believe that your officials and your citizens can afford to have the present condition in existence any longer. It is certainly true that nature has been unusually kind in not producing up to the present writing a severe epidemic of sickness from the existing conditions, but to contemplate remaining free from serious epidemics in the future should not be tolerated by anyone who values life highly.

We are confident that the city of Waupun is facing an immediate and positive proposition in the line of establishing or extending as it were a complete water supply system and at the same time building a sewerage system offering the sewer advantages to practically all of your citizens. A complete water system without a sewerage system in a soil similar to the soil at Waupun, is a dangerous proposition, because much more water will be used under a general water system and therefore more general will be the saturation of the soil from the pollution; and even if no wells were used for domestic uses, the soil would become so saturated that the low places on the surfaces would be sufficiently dangerous to sound the note of warning to all concerned. We advise, therefore, in the strongest terms that you consult some good sanitary engineer and have him outline a sewer system for the city which will take care of the refuse material from your city; at the same time have this sanitary engineer make provision for extending your water system so that a much larger percentage of your citizens can avail themselves of its security and privileges. The element of expense, when so many lives are at stake in the city of Waupun at the present
time should not be taken into consideration. Any expense that may be made will not only be economy as far as health is concerned but the sanitary improvement will be a life saving proposition.

We believe that the stream at the edge of your city should not 'be polluted as it is now. The emptying of certain private sewers and the sewers from the state institution at Waupun materially aid such pollution.

A system outlined by a sanitary engineer which will offer sewer conveniences for practically all of your citizens should be formulated. We would suggest, then, that you take this up with the knitting and dye company at the state institution and also with the state board of control and obtain as much aid as possible from these forces in establishing a complete system which will not only furnish proper sewer conveniences for your citizens, but also for the state institution located in your city.

I feel confident that the state, through its honorable board of control, will be in accord with these measures and will do what it can to render a proposition safe and serviceable for all concerned.

That the present method of disposing of your sewage is a most dangerous one cannot be questioned; that the well water used by many of your citizens is dangerous to anyone who may use it for domestic use cannot be questioned also. Therefore, in no city of the state is there a stronger need of a proper and scientific solution to certain questions confronting you than in the city of Waupun.

The limit of time has certainly been reached under your present system. We do not believe any of your citizens can object to any reasonable and satisfactory solution to this question from an expense standpoint. It would appear that some of your citizens have private sewers connecting with the state sewer emptying into the river. This convenience, however, is only temporary to them as the time is not far distant when the pollution of streams in this manner will be completely prohibited throughout the state and the advantages enjoyed by these citizens at the present time will soon be cut off. Therefore, all your citizens can consider themselves concerned with practically the same proposition confronting you. Its solution is easy if you get together and go at it determinedly. Something must be done
for the protection of the public health and should be done quickly.

We trust, therefore, that you will take up this proposition immediately with your honorable mayor and common council of your city and would advise that the first step you take is to obtain the services of some good sanitary engineer to give scien: tific advice upon the details of a proper sewerage system.

The State Board of Health stands ready at any time to give you any and all assistance within its power. We know that your present method is inadequate and dangerous and has to be changed. There is no other solution to the problem.

We recommend the sewerage system and an extension of your water system to eliminate the dangerous situation, as being the only sane and safe method to pursue.

Richland Center, Richland County.
Epidemic of Anterior Poliomyelitis or Infantile Paralysis. Investigated by Dr. C. A. Harper.
During the months of September and October, 1909, there were some fifty to sixty cases of anterior poliomyelitis at Richland Center and in the vicinity with six deaths reported from this disease. The investigation which was made disclosed nothing new regarding the nature of this terrible affliction, its origin in the community or the means by which the disease is spread. The health officers in all the districts where cases were found to exist were requested to quarantine the homes for at least three weeks from the beginning of the disease, and until patient and premises had been thoroughly fumigated and disinfected, as provided for by the State Board of Health in its rules and regulations for the prevention and control of this disease.

Warrens, Monroe County.
Typhoid fever epidemic. Investigated by Dr. C. A. Harper.
Complaints filed in the office of the State Board of Health by citizens of Warrens show that for a number of years outbreaks of typhoid fever occurred in the unincorporated village of Warrens. The village has a population of about 250 , no public water supply or sewerage system. The examinations of water from the private wells made by the laboratory show gross pollution in many cases. The wells are used in common by several fam-
ilies and undoubtedly many cases of typhoid fever are directly traceable to the polluted water supply.

The wells were found to be shallow, sunk in a gravely sandy soil. Cesspools and outhouses are located dangerously close to many of the wells and this unquestionably accounts for the polluted water supply. Public officials were advised of this situation and we recommend that a public water supply be provided for if possible. If this cannot be done, the suggestion was made that the wells be drilled deep enough to obtain pure water and that prompt action be taken to prevent further pollution from the sources mentioned.

## DISEASE OUTBREAKS NOT INVESTIGATED.

The prevalence in localities of dangerous communicable diseases not investigated by the State Board of Health are excluded from this report. In addition to the investigations reported, we receive at the state office about 1,000 complaints each year, regarding outbreaks of dangerous communicable diseases in the various townships, incorporated villages and cities. Most of the complaints are bona fide protests against the methods pursued in preventing the spread of disease in the locality. A few of the complaints each year are from citizens, who object to the restrictions placed upon them by the state law and the rules and regulations adopted by this board for the prevention and control of dangerous communicable diseases.

Whenever a complaint is received the local health officer is notified and requested to make a thorough investigation, and report to the State Board of Health at once regarding the exact condition of affairs and the measures taken to prevent and control the disease outbreak. The failure to take prompt action in these cases is due largely to an improper understanding of the public health laws, and the rules and regulations adopted and published by the State Board of Health. Usually as soon as the health officer has been told what must be done in each individual case we have no further complaint. Consequently most of the complaints and requests for investigations by the State Board of Health are satisfactorily adjusted by correspondence.

## NUISANCES.

Section 1414 of the statutes provides that, "Whenever any nuisance, source of filth or cause of sickness shall be found on private property, the board of health shall order the owner or occupant thereof to remove the same, at his own expense, within twenty-four hours, and if he shall refuse or neglect to comply, he shall forfeit not less than five nor more than fifty dollars; and said board may canse the same to be removed, and may recover all expense incurred thereby from the said owner or cccupant, or from such other person as shall have caused or permitted the same."

About 600 similar 'complaints are received at the office of the State Board of Health from citizens throughout the state, regarding nuisances and nuisance creating establishments.

There are six general classes of nuisances which are complained of.' They are as follows: creameries and cheese factories, slaughterhouses, cesspools, stockyards and pigpens, improper garbage disposal and pollution of streams.

With but few exceptions all complaints regarding the creation of nuisances are satisfactorily adjusted by correspondence. This is exceedingly difficult and often unsatisfactory. We believe that the State Board of Health should be provided with a sanitary inspector who could devote his entire time to an investigation of disease outbreaks and nuisances, which the local boards of health seem unable to handle satisfactorily.

The method of procedure in the abatement of a nuisance is fully outlined in the twenty-first report of the State Board of Health.

## WATER SUPPLIES AND SEWERAGE SYSTEMS.

PLANS EXAMINED.

During the biennial period covered by this report the plans and specifications for water supplies and sewerage systems in the following municipalities were approved by the State Board of Health as provided for by chapter 433, laws of 1905.

## Johnson Creek, Water Supply System.

Plans and specifications for a water supply system for the village of Johnson Creek, a copy of which is now on file in the office of the State Board of Health, were approved on the condition that the system be installed according to the specifications submitted.
.Algoma, Sewerage System.The plans and specifications showing the proposed seweragesystem and septic tank for district No. 1 in the city of Algomawere approved and authority given for the instalment of thesystem with the provision that the septic tank be kept in goodworking condition and with the reservation that if at any timeit is found necessary, in order to safeguard the public health,a filter plant shall be provided in addition to the septic tank.
The following information regarding the system at Algoma isprovided from the blanks furnished:
Name of city or town Algoma, Wis.
Population ..... 2,082
Population using sewerage system ..... 439
Volume of sewage per day ..... 15,365 gal.
Method of purification ..... Septic tank
Method of disposing liquids. ..... None
Drainage area ..... 12 blocks
Method of disposing of sludge Ahnapee river
Date of installation ..... Nov. 1, 1910
What method, if any, has been used in the past, for disposing of the sewerage product ..... None
$7-\mathrm{B} . \mathrm{H}$

Cedarburg, Sewerage System.
The plans submitted in this case were for a sewer system and septic tank for the Cedarburg high school. The plans, a copy of which are now on file in the office of the State Board of Health, were approved and authority granted for the installing of the system.

## Portage, Sewerage System.

The outline of the sewerage system for Portage provides for treating the sewage by the septic tank process before it is emptied into the nearby stream. When the plans and specifications were approved, the State Board of Health reserved the right at any time in the future, when the public health demanded it, to require the installation of filter beds for the further treatment of the sewage before it is finally disposed of.

## Stoughton, Sewerage System.

The system of sewage disposal for the city of Stoughton provides for sewer accommodation in districts Nos. 1 and 3. The system is also designed to take care of the sewage from district No. 2 whenever necessary. The sewage is purified by the septic tank process without filter beds. The tanks are built large enough to provide for a population of from five to six thousand people. About ninety per cent of the population will be compelled to use the public sewer in the localities where sewer connections are available. A gravity flow is provided and no storm water system is provided except what has already been established.

The water supply is obtained from artesian wells about 1,000 feet deep.

The plans were approved as submitted with the exception that slight alterations were required so as to provide at some future time for a filtration system, if this is found to be necessary.

## Washington Insane Asylum, Sewerage System.

The plans considered in this case were for treating the sewage from the Washington county insane asylum. A septic tank, located about 300 feet southeast of the asylum building is provided and all sewage from the institution is passed through the
tank before it is finally disposed of. The plans were approved as submitted.

West Bend, Sewerage System.
Prior to the establishment of the present system no public sewers were provided. The city has a population of about 2,500 and some eight hundred to one thousand persons will use the new system. It is estimated that there will be from sixteen to twenty thousand gallons of sewage per day. The plans provide that all sewage must be purified by being passed through disposal tanks before the liquid will be permitted to run into the Milwaukee river. The drainage area is about one mile square. The sludge is to be flushed out of the disposal tanks when the river is at high water.

The plans were approved as submitted, there being a provision for the instalment of filter beds when required.

The correspondence on file in the office of the State Board of Health shows many complaints regarding unsanitary water supply systems and sewage disposal plants. Several municipalities have provided a system of public water supply for fire protection only. The advantages of using the water for domestic use have prompted many of the citizens and business firms to use the public water supply. This is exceedingly dangerous for the reason that no effort is made to furnish pure water. Outbreaks of typhoid fever are frequent and there is just complaint of the quality of the water furnished. We, therefore, advise in all cases that when a public water supply is installed, ample provision be made for preventing any possible pollution.

The danger of this practice and also the necessity for providing a sewerage system when a public water supply is obtained is fully discussed under the heading of "Water Supplies and Sewerage Systems" in the twenty-second report of the State Board of Health.

## THE DISPOSAL OF HOUSEHOLD WASTES FROM ISOLATED DWELLINGS.

By W. G. Kirchoffer, Consulting Engineer, Madison, Wisconsin.
With the advance of civilization in all lines, and the increase in wealth generally, there is no reason why any family living beyond the reach of city sewage privileges should not have all modern conveniences and safeguard against disease.

It has been known for a long time and well understood by some that the disposal of sewage from isolated dwellings is not satisfactory, either from the standpoint of convenience or from the standpoint of sanitation. The modern means of sewage disposal are, the discharge of sewage into streams, cesspools, maceration tanks as they were once called, and the modern septic or bacterial tank. The relative merits of these different systems depend largely upon local conditions. Where the streams are large and the amount of sewage small, this is perhaps the most satisfactory means of sewage disposal, as it requires absolutely no attention after it is once put in. The well known cesspool is more or less successful for a few years, but sooner or later requires attention. The septic, or bacterial tanks, are the most modern and scientific and the safest of all from the standpoint of transmitting disease.

The principles of operation of these tanks are very simple. There are really three processes which take place in the tankthat of sedimentation, chemical transformation and bacterial. The latter two are intimately connected. The bacteria that are supposed to perform the work in these tanks are known as Aneraeobic, that is, those which work in the absence of light and air, but as a matter of fact, much work is also done by those that live in air.

The chemical process that takes place is the breaking down of solid organic matter into gases, liquids and salts. The sedimentation is the simple process, as you all know, of the settling out of the coarser materials in the water, the action being the same as that which takes place when a pailfull of muddy water is allowed to stand for any length of time. What really happens in these tanks is, the process of sedimentation starts in first, then the formation of gases due to chemical changes brings some of
the material which has fallen to the bottom of the tank to the surface. Here the gas is liberated and the material again falls to the bottom of the tank. This process is exceedingly slow and cannot be observed by a casual inspection of the tank. The result of these processes is, the effluent from the tank contains only a portion of the organic matter which went into the tank and thus a certain amount of purification has been effected, all due to the natural process.

The essential principles to be followed out in the construction and operation of one of these septic or bacterial tanks are these: the motion through the tank must be slow and as uniform as possible. The best results are obtained when the process takes place in the dark and without air. The inlet and outlet to the tank should preferably be below the surface of the water so as not to disturb the scum which forms on these tanks.

These tanks, when properly designed, will care for the ordinary sewage which would be discharged from a house having all the modern conveniences. They will not, however, care for storm water, such as would be discharged from the down spouts of a house or barn, overflows from cisterns, tanks or pumping plants. Neither will they digest the garbage or tin cans. If there is a laundry in connection with the house, the tank should be designed particularly to care for the water from such a plant, the idea being that laundries discharge large quantities of water in a short space of time and have a tendency to upset the process which takes place in the tank.

These tanks are practically automatic but not absolutely so. They will need cleaning out occasionally, depending on how close the design has been made to fit the actual conditions. Also the character of the sewage will have some effect upon the frequency of cleaning. These are all things which have to be estimated more or less when the tank is designed. Also the chemical contents of the water which is used in the kitchen, bathroom and laundry have a great effect upon the successful operation of the tank.

At Centerville, Iowa, where a deep well water is used containing large quantities of various salts, it has been almost impossible to secure satisfactory results with the septic tank.

If only a septic tank is used for the disposal of sewage, it will effect only a partial purification-that is to say, the water leav-
ing the septic tank contains a sufficient amount of organic matter which would putrify if left standing in a pool, or allowed to seep slowly over the surface of the ground. It must, therefore, be discharged into some stream or dry run, an open bottom cesspool or drain tile. In the summer time the effluent could be used for irrigation. As an illustration of the use of an open bettom cesspool, I will call your attention to the plans which I prepared for a sewage disposal plant for the Oregon high school.

Here the sewage from the school passes into the septic tank and the effluent from this passes into the cesspool which is juglike in shape and which has an open bottom, and the side walls laid up so that seepage can take place.

As an illustration of the use of drainage tile together with the septic tank, I will call your attention to the plans for Dr. Ely's residence in Madison. In this plant the sewage, after passing through the tanks, is collected in a syphon chamber. When this has filled up to the proper level, it automatically discharges into the drain tile. The reason for the use of this syphon is to make the saturation of the tile intermittent. As the process of purification, which goes on in the tile, is one of nitrification, requiring the presence of air, it is essential that the effluent from the tank which is discharged into it should be intermittent, or have some means of drawing air in at the same time. While the syphon is not absolutely necessary, its use will give the tile a longer life, that is, it will not clog up so soon.

In locations where it would be impossible to use any of the above mentioned methods in connection with the septic tank, it is possible to build small filter beds either on the surface or just beneath the surface. This plan was carried out in a little plant that I designed for Mr. Jockel for his residence in Lake Mills, Wisconsin. The plant consists of a septic tank and syphon chamber, a system of distributing tile and underdrains. At this location there was no suitable material so that the ordinary method of subsurface tile could be used, and they did not want to turn the sewage into the lake nearby. The ground which he had for a garden was filled in with coarse gravel and sand. During the process of filling, underdrains and distributing tile were put in place. Over the surface of the sand about the distributing tile was placed a layer of garden soil about one foot thick. The under drain was connected with a pipe which led to the lake.

This little plant has been in operation now for about two years and a half and has given perfect satisfaction. Mr. Jockel states that he has given it no attention whatever and there was no evidence of poor operation.
These septic tanks can be constructed of wood, concrete, or barrels. Scme very interesting little plants were built for some cottages on the grounds of the Shorewood Association at Sangatuck, Michigan. The septic tank consists of a water-tight oak barrel of about 60 gallons capacity. An ordinary vinegar or linseed oil barrel will answer the purpose. A septic tank is connected to a filter formed by another barrel laid on its side and filled with broken stone, tile or gravel. This filter is connected to the flush tank which is formed of a half barrel fitted with a three inch syphon. The discharge from the syphon runs into 100 feet of three inch farm drain tile. There should be at least one foot of tile laid for each gallon of water used daily from the flush tank. These tile are laid loosely from ten inches to sixteen inches below the surface of the ground and on a very slight down grade from the flush tank. A fall of $\frac{3}{8}$ of an inch to the rod would be sufficient. A greater fall would be permissible, but, if too great a fall is allowed, the water will all run to the lower end. The soil at this end will become over-charged and clog up, while the upper end will not be worked as hard as it ought to be. Therefore, if the tile is laid on a side hill, the lines of tile should be approximately perpendicular to the slope.

The cost of one of these little plants at Sangatuck has been estimated as follows:
3 barrels at 75c each ..... \$2.25
Automatic syphon ..... 14.00
100 feet of farm drain tile. ..... 3.00
Pipe and plank ..... 2.50
Labor and cement ..... 6.00
Total ..... \$27.75

If concrete is used for the construction of these tanks, it should be made of a mixture approximately one part cement, three parts of sand, and five parts of broken stone, or screened gravel. After the concrete has set, the inside of the tank should be plastered. with cement mortar consisting of one part cement and two parts
sand and this, when nearly dry, should be whitewashed with a thin mixture of cement and water. This is to make it waterproof. If it is impossible to use either concrete or barrels, a tank could be made of planks, or if you had an old creamery tank, or water tank about the right size, you could use this, but of course it might be comparatively short-lived as compared with the concrete or barrels. These tanks could be used for the drainage from the kitchen sinks and other house drainage, from the laundry, and from the cellar drainage without any other works being put in, except those for the sewage disposal; but, if waterclosets are to be used in the house, it would be necessary to have a supply of water under a sufficient pressure to reach the floor on which the fixtures are placed. If it was only desired to dispose of the water frem the kitchen sink, a much simpler plan could be used. Simply put in a grease trap, consisting of a large piece of drain tile or flask set on end. This is for the purpose of catching the greasy matter and soap. To this can be attached a line of drain tile running under the ground. Two years ago I arranged such a scheme on a farm in Blooming Grove, near Madison. The line of tile was only about 25 feet long and discharged into a pigpen. Much to my surprise very little, if any, water ever reached the pigpen. It was all absorbed by the ground along the line of the tile.

The location of a tank and sewage disposal plant depends largely upon the local conditions. To operate the syphon and to provide for a fall through the different parts of the plant, it is necessary that the sewage enter the septic tank at an elevation of from two to three feet above the level at which the tile are laid. It is not necessary that the tank should be a great distance from the house, especially if the main soil pipe is left open and runs up through the house to the roof to give good ventilation. The tile can be laid under the garden, or under any portion of the lawn, and as long as the plant is working properly, that is to say, as long as the tank is retaining its portion of the impurities and the tile is not clogging up, no disagreeable odors will be noticed. The location will also be affected by the slope of the ground and the nature of the soil in which the tile drains, or open bottom cesspool might be located. To guard against any possibility of contamination, it would be wise to have the plant located
at a considerable distance from the well, especially if the well is of the open dug type and draws its water from the surface layers of gravel and sand. If it is a deep drilled well, having a casing extending down 60 to 100 feet in solid rock or other hard materials, it will not be so important to get away from the well.

The size of these tanks should be designed proportionate to the number of persons in the family, and also according to the number of fixtures and different departments that are to discharge sewage into the tank. Where there is a family of eight to ten, living in a house having all modern conveniences, including laundry, I generally provide 30 gallons capacity in the tank for each person, and 30 feet of drain tile to each person. If the family is small and there is no laundry and the fixtures are few, as low as 12 gallons per person for the capacity of the tank may be used, and 20 feet of tile per person. The main thing to be guarded against is not to get the tank too small, nor enormously large. It is impossible to get the amount of drain tile, or other means of percolation, too large. The more the better. Especially is this true if the soil should be of a clayey nature.

It might be. of interest to mention here a little plant which was constructed some time ago, consisting of what we would ordinarily call the cesspool with just an overflow into a few feet of drain tile laid under the lawn. The lawn was terraced up quite high above the sidewalk, and the ground was of quite solid clay. From last reports, this plant was giving perfect service after having been in operation for eighteen months.

There are many of these little plants distributed all over the United States, but so far as I know, in this vicinity the greatest number of them are located in Zion City, Illinois, and in Elkhorn, Wisconsin. The effluent from the Zion City tanks is discharged into some drain tile which was laid for the purpose of draining the land before the city was located. The cost of one of these tanks is approximately as follows:

| Excavation | \$2.00 |
| :---: | :---: |
| Masonry | 30.00 |
| Cast iron cover and outlet trap | 6.00 |
| Total. | \$38.00 |

These tanks are usually designed for a family of eight or ten persons. They are three feet in diameter by three feet deep and have a capacity of 160 gallons.
at Elkhorn, Wisconsin, the writer was called in about two years ago to inspect some of the tanks there and to report upon the feasibility of allowing the overflow to pass into the storm sewer. These tanks are built very much like a cistern and are made water-tight with cement grout. The overflow from all of these tanks is into the storm sewer, except in one case where there is a gravel filter outside of the tank. This filter covers an area of about ten feet square by three feet deep. The process of filtration was continuous, and after two years of use, it was still found to be in good condition.

All of these tanks were located in the dooryard, some of them within a very few feet of the house. No objectionable odors were noticed, and very little sediment was found in any of the tanks.

At this same place the writer designed two septic tanks for hotels, which are shown on these plans. These tanks have a capacity of 2,170 gallons each and were designed for sixty persons at the hotel.

In conclusion, I will say that to secure the best results, every case should be studied out to meet the local conditions. The amount of sewage, its character, the condition of the soil, the cost of the materials to be used and the ultimate disposal of the water should be noted. It would, however, be possible for almost every person to use some barrel, concrete, or wooden tank for the reception of the crude sewage and then from this discharge it into the ordinary type of open cesspool, drainage tile, or nearby stream. If he did not get his tank the right size and constructed properly as to the trapping of the inlet and outlet, he probably would find it filling up, or he might find his drain tile filling up; but if he gets everything about right, it will be like a great many other things in this world, he will not know it exists.
I have given you a little data regarding the cost of some of these plants which have been put in, but I presume in a great many cases a person with a little ingenuity could put in one of these plants himself, and to do so he would only be to the expense of securing his materials, principally the drain tile, cement, the syphon and either a plank or iron cover for the tank.

I have not said anything about house plumbing as I. am not a plumber and do not know a great deal about the cost of such work, which would depend, of course, upon the amount of piping necessary to connect up the different fixtures, their number and quality. It is, however, safe to say that it is possible to install a complete sanitary sewage disposal plant with a single set of the ordinary plumbing fixtures for less than $\$ 200$.

## OPINIONS BY THE ATTORNEY-GENERAL REGARDING THE PROPER INTERPRETATION OF PUBLIC HEALTH LAWS.

Health Officer: Not required to give professional care to indigent persons suffering from contagious disease, if such services are given they are compensated for by salary of health offcers. Board of health not liable for compensation of attending physician of indigent persons suffering from contagious disease. Attending physician is one of the necessaries of life for such persons.

## Dear Sir:

Yours of July 1st was duly received and has had careful consideration. You have submitted to me for my official opinion the following questions:
"First: Is a health officer expected to take care of indigent people suffering from infectious and contagious diseases, without compensation from the town, when no specific agreement is entered into concerning such care, at the time of his appointment as health officer, when not specifically directed in each case by the local board of health; but the local board of health having knowledge that the physician as health officer was giving professional care to those afflicted?
"Second: When local boards of health are cognizant of the fact that certain indigent individuals are suffering from infectious and contagious diseases within their jurisdiction and such boards provide nurses, and necessaries of life for the accommodation, safety and relief of such infected persons, do such boards hold themselves liable for the compensation of the attending
physician, whether health officer or not, who gives such infected persons medical aid?
"Third: Is that part of section 1416, Wisconsin statutes of 1898, which says, 'and in either case they (the proper board of health) shall provide for him nurses and necessaries, which shall be charged to the person so taken care of, or any other person who may be liable for his support,' are physicians supposed to be one of the necessaries, whether the health officer of the locality is a physician or not?"

In answer to your first question I will say that the health officer of a town or village, under section 1411, is ex officio a member of the board of health and its executive officer. He is a public officer and performs such duties as are imposed upon him by law. Under section 1412 it is made the duty of every health officer:
"Upon the appearance of any dangerous contagious disease in the territory within the jurisdiction of the board of which he is a member to immediately investigate all the circumstances attendant upon the appearance of such disease, make a full report to such board and also to the state board of health; and it shall likewise be his duty at all times promptly to take such measures for the prevention, suppression and control of any such disease as may in his judgment be needful and proper, subject to the approval of the board of which he is a member."

In the case of Collier v. Scott, 124 Wis. 400, our supreme court said in reference to this provision:
"'The power to investigate and report is given to the health officer without limitation, but the power to take measures for the prevention, suppression, and control of the disease is vested in the board, and cannot be exercised by the health officer without approval of the board."

Under said section 1411 every health officer shall be, whenever practicable, a reputable physician. I do not believe that the duty imposed upon health officers "at all times promptly to take such measures for the prevention, suppression, and control of any (contagious) disease, subject to the approval of the board of health" could be so broadly construed as to make it the duty of the health officer to give professional care to those afflicted. This is especially apparent when one considers the fact that a health officer need not necessarily be a practicing physician.

It may be true that, in certain cases of emergency, where no medical aid can otherwise be had and the only way in which the health officer can perform his duty for the prevention, suppression and control of such contagious disease is by temporarily giving professional care, such may be his duty, but ordinarily, broadly speaking, I do not believe that it is the duty of the health officer to act as the attending physician to indigent people suffering from infectious or contagious diseases.

Under section 1411 it is made the duty of the board of health to fix the salary of the health officer. A salary is defined as "the per annum compensation to men in official or in some other positions."

Anderson's Law Dictionary, p. 914.
For the salary so fixed it is the duty of the health officer to perform all the duties of his office, and he is not expected to receive any additional compensation for any extra services performed by him when such services are a part of the duty imposed upon his office. It would be unlawful for the board of health to make a contract with a health officer, engaging him to perform professional services, as the health officer is a member of the board and the board would then be contracting with one of its members. Under section 4549 any officer who shall reserve or acquire any pecuniary interest, directly or indirectly, present or prospective, absolute or conditional, in any way or manner in any contract in relation to any public service is guilty of official malfeasance and may be punished by imprisonment or by fine.

I therefore conclude that professional care given by health officers to indigent people suffering from infectious or contagious disease is not to be compensated for by the town.

In answer to your second and third questions I will say that section 1416 of the statutes of 1898 provides:
"Whenever any person coming from abroad or residing in any town shall be infected or shall lately have been infected with the smallpox or other contagious disease dangerous to the public health the proper board of health may immediately cause him to be removed to a separate house, if it can be done without danger to his health; and if such person cannot be removed without danger to his health such board shall make provision for him in the house where he may be; and in such case they may cause the persons in the neighborhood to be removed and may take such
other measures as they may deem necessary for the safety of the inhabitants; and in either case they shall provide for him nurses and necessaries which shall be a charge to the person so taken care of or against any other person who may be liable for his support;

You will notice that, under this provision, nurses and necessaries provided for indigent individuals are made a charge to the person so taken care of or against any other person who may be liable for his support. If the person so cared for be an indigent person, the town may be liable, or the county, if the county system for the relief of the poor has been adopted. The word "person" under subdivision 12 , section 4971 , statutes 1898 , may extend in its application to bedies corporate, as well as to mdividuals. But the board of health is not liable for the nurses and necessaries of life which it furnishes to such indigent individuals, for it is acting on behalf of the public and within its jurisdiction, so that the board cannot be held liable. The same is true regarding the compensation of attending physicians, which attendance is certainly one of the necessaries of an individual suffering from an infectious or contagious disease. Of course, if such person already has an attending physician, before another is furnished by the board of health, in such a case it may not be said that an attending physician is necessary. Courts have universally held that an attending physician is one of the necessaries of life where a person is afflicted with a disease.

On the subject of liability of public officers, see Mechem on Public Officers, chapters 4, 5 and 6 .

It is well for you to bear in mind that, under the decision in Collier v. Scott, 124 Wis. 400, the health officer cannot bind the town for the professional services of a physician, but that such physician must be employed by the board of health.

Hoping that I have made clear the lines of responsibility in this matter, I am

> Yours respectfully, F. L. Gilbert, Attorney-General.

Public Health : Physician's report of contagious diseases.
Dear Sir: I am in receipt of your letter of the 10 th inst. in regard to the time in which a physician should make his report to the health commissioner of his city respecting contagious diseases.

By the terms of the statute, section 1461-1 (p. 311) laws of 1907, the report to which you refer is not required to be made to a health commissioner, but to the department of health. Of course that may be the health commissioner in your city or in particular cities, but that is the term used in the statute.

You will notice that this statute is but an amendment, or a continuation of chapter 57 of the statutes of 1898 and that, by the terms of section 1412a of the statutes, which is a part of the same, physicians are required to make report within twenty-fours after they obtain knowledge of such case of infectious disease. I think this section supplies the information you desire and that it is not within a reasonable time that such report should be made, but that it should be made within twenty-four hours.

> Yours truly, F. L. Gilbert, Attorney-General.

Health Officers: In indigent cases cared for by health officer in counties under county system the necessaries are a charge against the county. County physician is to care for indigent sick in such counties. Health officer's services are compensated for by his salary.

Dear Sir: Yours of February 7th has been received. You state that a question has arisen as to whether the county or the city is to pay the expenses incurred in the quarantining and the expense for necessary nurses, medical attention, etc., of persons quarantined pursuant to chapter 279 of the laws of 1909. You call attention to section 1416-17 of said chapter, which proviḍes :
"The expense for necessary nurses, medical attention, food and other articles needed for the comfort of the afflicted person or persons, shall be a charge to the person so taken care of, or against any other person who may be liable for his support. In-
digent cases shall be cared for at public expense upon the order of the local board of health. The expense of maintaining quarantine and disinfection of persons and premises after death or recovery shall be paid by the city, incorporated village, or town, upon the order of the local board of health. In all cases the disinfecting and cleansing, so as to effectually destroy the contagion, shall be done before quarantine is removed," etc.

You state that your county is operating under the county system in caring for paupers. You desire to know who must pay che expense of caring for indigent cases and who must pay the expense of maintaining quarantine.

Your second question is as to whether the county physician is to care for indigent persons and persons under quarantine, and your third question is as to whether the local health officer has the power to care for indigent cases under quarantine and charge the municipality for his services, or whether he must perform this service free of charge.

In answer to your question I will say that the statute quoted by you expressly provides that the expense of necessary nurses, medical attention, food and other articles needed for the comfort of the afflicted person or persons in indigent cases should be a public charge and be paid upon an order of the local board of health. In counties operating under the county system of caring for paupers, it seems to me that this is a proper county charge. You will nôtice that the statute uses the words "at public expense," not expressly stating the city, town or village or the county. It seems to me that this was done purposely, for the reason that in some cases the indigent person is a proper charge against the county, while in other cases occurring in counties operating under the township, the municipality is charged with such expense. The expense of maintaining the quarantine and the disinfection of the persons and premises after death or recovery is expressly made a charge against the municipality, for the reason that this is not a part of the care of indigent persons, but, rather, a protection and safeguard for the public health.

I am therefore of the opinion that in your county the expense for necessary nurses, medical attention, food and other articles needed for the comfort of the afflicted indigent person or persons is a charge against the county.

In answer to your second question I will say that the care of a physician is certainly one of the necessities of life which an afflicted indigent needs. When the county is caring for the indigent person or persons it is for such county to provide for this necessity. In the case of Rider v. Ashland county, 87 Wis. 160, our supreme court held that the county board may employ a physician by the year, to attend persons confined in the jail and poor persons who are county charges. See also Weise v. the Board of Supervisors of Milwaukee county, 51 Wis. 564. It is for the county, and not the municipality, to provide medical care for the poor, in counties operating under the county system of caring for the poor.

In answer to your third question I will say that the health officer is a person who receives a salary as compensation for his services as such officer. The services rendered by him as such officer are compensated for by said salary and he is not entitled to any additional compensation. He cannot hire himself to perform services for the town or county and all the services rendered by him as health officer are compensated for by his regular salary.

I am therefore of the opinion that the health officer has no power to charge the municipality for his services in caring for quarantined persons.

Very truly yours,

> F. L. Gilbert, Attorney-General.

> State Veterinarian-Slaughtered Animals; Expense of $\quad$ burial thereof, who should pay.
> Town-Liability of for such expense.

Dear 'Sir: Yours of July 3d was duly received. You state that you would like to ascertain whose duty it is to bury stock afflicted with tuberculosis or glanders and that have been destroyed by your department. You relate a case where two glandered horses were found in one township and two in another. You state that the first two horses discovered were led over into the other town and all four were shot and ordered to be buried; that, after they were buried, the parties burying them attempted to collect fifteen dollars for burying the two animals that belonged in the adjoining town. You inquire who is to pay for burying the two from the other town.

In reply I will say that the statute makes no specific provision as to whose duty it is to bury slaughtered animals. I take it, however, that it was in the minds of the lawmakers that the owner of the animals was the one who should bury them or pay for the burial of the same, for section 1492b, laws of 1907 (subdivision 7) provides, page 330:
"The owner of slaughtered animals shall receive no compensation for the same unless said sanitary board is satisfied that the infected premises have been disinfected in such a manner as to prevent further spread of the disease."
To disinfect the premises where the animals were slaughtered would certainly include the burying of animals. Under section 1492a it is made the duty of the board of health to coöperate with the state veterinarian to prevent the spread of contagious and infectious diseases among animals and, under section 1414, statutes 1898, the board of health could order the owner of a slaughtered animal to bury or remove the same at his own expense, within twenty-four hours, on the ground that such slaughtered animal is a nuisance, a source of filth or cause of sickness. I do not think that the town could be held liable unless the animal had no owner, in which case the board of health would be authorized to have the same buried or removed at the cost of the town.

In the case in question, it is my opinion that the cost of burying the two animals that were led into the adjoining town and there buried should be charged to the owners of the animals and that, if it cannot be collected in that way, then the town from which the animals were removed is liable for their burial, if they were buried under the supervision of the board of health of the town from which they came. The burial should have been made under the direction of said board of health. On the other hand, if the animals were buried under the direction of the board of health of the town into which the animals were brought and buried, I believe that such town is liable for the same. It may be that the town from which the animals were brought is liable to the second town for the cost of such burial, but the town under the direction of whose board of health the burial was made is liable in the first instance, if the animals have no owner. See section 1221, Statutes 1898.

Respectfully yours, F. L. Gilbert, Attorney-General.

## REPORT

OF THE

## Bureau of Vital Statistics <br> OF THE

## STATE OF WISCONSIN

HOR THE PERIOD
From January 1, 1909, to December 31, 1910

## STATE BOARD OF HEALTH AND BUREAU OF VITAL STATISTICS.

STATE BOARD OF HEALTH AND BUREAU OF VITAL STATISTICS.
WM. F. Whyte, M. D., President Watertown.
C. H. SUTHERLAND, M. D ..... Janesville.
L. E. SPENCER, M. D. Wausau.
E. S. HAYES, M. D .Eau Claire.
H. A. MEILIKE, M. D. Clintonville.
L. P. MAYER, M. D. .Hudson.
C. A. HARPER, M. D., Secretary and Registrar of Vital Statistics. . . .Madison.
L. W. HUTCHCROFT, Chief Statistician Madison.

## LETTER OF TRANSMITTAL.

OFFICE OF THE
STATE BOARD OF HEALTH AND VITAL STATISTICS.
Madison, Wisconsin, January, 1911.
To his Excellency, Francis McGovern,
Governor of the State of Wisconsin.
SIR: In compliance with the requirements of law, I have the honor to submit to you a detailed abstract of the Births, Deaths, Marriages and Accidents that were registered in Wisconsin from January 1, 1909 to December 31, 1910. The report of Divorces covers the period from October 1, 1908 to September 30, 1910.

Very respectfully yours,
C. A. Harper,

State Registrar of Vital Statistics.
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## GENERAL SUMMARY.

## A SUMMARIZED STATEMENT OF BIRTHS, DEATHS, MARRIAGES AND ACCIDENTS. <br> Reported by the Local Registrars of the Various Townships, Incorporated Villages and Cities From January 1, 1909 to December 31, 1910 and Divorce Statistics, Reported by the Clerks of the Courts having Jurisdiction in Divorce Actions for the Period From October 1, 1908 to September 30, 1910.

## BIRTHS REPORTED DURING CALENDAR YEAR 1909.

Sex: $\quad \therefore \quad \therefore \quad \vdots \quad \vdots: 1$
Males . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 26,395
Females . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 24,750

Total births reported including stillbirths. ............................... 52,212
Earentage:
Both parents native born. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 30,094
Father native and mother foreign................................... 3, 119
Father foreign and mother native. . . . . . . . . . . . . . . . . . . . . . . . . . . . 6,450
Both parents foreign born. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 10, 10 .
Birthplace of one, or both parents unknown. . . . . . . . . . . . . . . . . . . . . 679
Total . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 51,212
Stillbirths:
Males . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 516
Females . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 355
Sex not stated....................... . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 27
Total . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 898
Twin Births:
Males
561
Females . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 517 517
Sex not stated. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\quad . \quad 2$
Total . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1,080


Sex not stated.................................................................................... 6
Total . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 526
104 Report of the Bureau of Vital Statistics.
BIRTHS REPORTED DURING CALENDAR YEAR 1910.
Sex :
Males ..... 26,978
Females ..... 25,191
Sex not stated ..... 92
Total births reported including stillbirths ..... 52,261
Annual birth rate per one thousand estimated population ..... 22.3
Parentage :
Both parents native born ..... 31,157
Father native and mother foreign. ..... 2,949
Father foreign and mother native ..... 6,519
Both parents foreign born ..... 10,934
Birthplace of one, or both parents unknown ..... 702
Total ..... 52,261
Stillibirths:
Males ..... 458
Females ..... 338
Sex not stated ..... 30
Total ..... 826
Twin Births:
Males ..... 569
Females ..... 555
Sex not stated ..... 2
Total ..... 1,126
[llegitimate Births :
Males ..... 397
Females ..... 371
Sex not stated ..... 5
Total ..... 773
Triplets ..... 18
DEATHS REPORTED DURING CALENDAR YEAR OF 1909.
(Exclusive of stillbirths)
Sex :
Males ..... 15,089
Females ..... 12,276
Sex not stated ..... 15
Total ..... 27,380
Male excess ..... 2,813
Annual death rate per one thousand estimated population. ..... 11.1
Total stillbirths reported as deaths. ..... 1,409
Color :
White ..... 27,219
Black ..... 55
Indian ..... 100
Unknown ..... 6
Total ..... 27,380
Report of the Bureau of Vital Statistics. ..... 105
Conjugal Relation :
Single ..... 12, 332
Married ..... 9,360
Widowed ..... 5,196
Divorced ..... 197
Not stated or unknown ..... 295
Total ..... 27,380
DEATHS REPORTED DURING CALENDAR YEAR OF 1910.
(Exclusive of stillbirths)
Bex:
Males ..... 15,759
Females ..... 12,445
Sex not stated ..... 9
Total ..... 28,213
Male excess ..... 3,314
Annual death rate per one thousand estimated population ..... 12
Total stillbirths reported as deaths ..... 1,414
Color :
White ..... 27,995
Black ..... 47
Indian ..... 122
Unknown ..... 49
Total ..... 28,213
Conjugal Relation :
Single ..... 12,759
Married ..... 9,660
Widowed ..... 5,292
Divorced ..... 205
Not stated or unknown ..... 287
Total ..... 28,213
Nativity of Deceased for 1909 and 1910 :
Wisconsin ..... 27,024
Other United States ..... 7,467
German ..... 9,792
Irish ..... 1,661
Great Britain ..... 1,388
Norwegian ..... 2,287
Swedish ..... 584
Polish ..... 620
Welsh ..... 35
Danish ..... 428
Italian ..... 125
French ..... 67
Canadian ..... 985
Bohemian ..... 426
Russian ..... 233
Austrian ..... 450
Other foreign countries ..... 1,220
Unknown ..... 801
Total ..... 55,593
Vativity of Father :
Wisconsin ..... 9,427
Other United States ..... 7,283
Foreign born ..... 33,069
Birthplace unknown or not stated. ..... 5,814
Total 55,593
Nativity of Mother :
Wisconsin ..... 11,612
Other United States ..... 7,015
Foreign born ..... 30,108
Birthplace unknown or not stated. ..... 6,858
Total ..... 55,593
MARRIAGES REPORTED DURING CALENDAR YEAR OF 1909.
Both parties native born ..... 12,790
Groom native, bride foreign ..... 884
Groom foreign, bride native ..... 1,991
Both parties foreign born ..... 1,921
Birthplace of one or both unknown. ..... 130
-Total marriages ..... 17,716
Annual marriage rate per one thousand estimated gross population. ..... 14.9
Marriag'es by Age Groups :
Brides :
Under 15 years. ..... 2
15 to 19 years ..... 3,832
20 to 24 years. ..... 8,314
25 to 29 years ..... 3,163
30 to 34 years. ..... 1,082
35 to 39 years ..... 510
40 to 44 years. ..... 305
45 to 49 years ..... 172
50 to 54 years. ..... 114
55 to 59 years. ..... 49
60 to 79 years. ..... 62
Age not stated. ..... 111
1: Total ..... 17,716
Grooms:
Under 15 years. ..... None
15 to 19 years. ..... 299
20 to 24 years. ..... 6,766
25 to 29 years. ..... 5,862
30 to 34 years. ..... 2,291
35 to 39 years. ..... 1,042
40 to 44 -years. ..... 535
45 to 49 years. ..... 335
50 to 54 years. ..... 226
55 to 59 years. ..... 119
60 to 79 years. ..... 169
80 years of age or over ..... 1
Age not stated. ..... 71
Total ..... 17,716
Report of the Bureau of Vital Statistics. ..... 107
MARRIAGES REPORTED DURING CALENDAR YEAR OF 1910.
Both parties native born ..... 13,225
Groom native, bride foreign ..... 886
Groom foreign, bride native ..... 2,083
Both parties foreign born. ..... 2,219
Birthplace of one or both unknown ..... 115
Total marriages ..... 18,528
Annual marriage rate per one thousand estimated gross population
Annual marriage rate per one thousand estimated gross population ..... 15.8 ..... 15.8
Marriages by Age Groups :
Brides :
Under 15 years ..... 7
15 to 19 years ..... 4,151
20 to 24 years ..... 8,508
25 to 29 years ..... 3,317
30 to 34 years ..... 1,067
35 to 39 years ..... 540
40 to 44 years ..... 317
45 to 49 years ..... 219
50 to 54 years ..... 137
55 to 59 years ..... 59
60 to 70 years ..... 69
70 to 80 years ..... 11
Age not stated ..... 126
Total ..... 18,528
Grooms:
Under 15 years ..... None
15 to 19 years ..... 305
20 to 24 years ..... 7,151
25 to 29 years ..... 6,090
30 to 34 years ..... 2,278
35 to 39 years ..... 1,087
40 to 44 years ..... 534
45 to 49 years ..... 381
50 to 54 years ..... 249
55 to 59 years ..... 136
60 to 70 years ..... 175
70 to 80 years ..... 44
80 years of age or over ..... 2
Age not stated ..... 96
Total ..... 18,528
ACCIDENTS REPORTED DURING CALENDAR YEAR OF 1909.
Sex :
Males ..... 9,030
Females ..... 1,030
Total accidents ..... 10,331
Conjugal Relation :
Single ..... 5,572
Married ..... 4,654
Not stated ..... 105
Total10,331
108 Report of the Bureau of Vital Statistics.
Total fatal accidents ..... 431
Accidents resulting in temporary disablement ..... 8,841
Accidents resulting in permanent disablement ..... 1,490
ACCIDENTS REPORTED DURING CALENDAR YEAR OF 1910.
Sex:
Males ..... 10,590
Females ..... 1,376
Total accidents ..... 11,966
Conjugal Relation :
Single ..... 6,352
Married ..... 5,474
Not stated ..... 140
Total ..... 11,966
Total fatal accidents ..... 438
Accidents resulting in temporary disablement ..... 10,760
Accidents resulting in permanent disablement. ..... 1,206
DIVORCES.
Total divorces from Oct. 1, 1908 to Sept. 30, 1909 ..... 1,462
Annual divorce rate per one thousand marriages ..... 82.5
Divorces granted to husband ..... 335
Divorces granted to wife ..... 1,127
By Causes:
Drunkenness ..... 86
Adultery ..... 48
Cruelty ..... 727
Desertion ..... 458
Neglect to provide ..... 88
Total divorces from Oct. 1, 1909 to Sept. 30, 1910 ..... 1,189
Annual divorce rate per one thousand marriages ..... 64.1
Divorces granted to husband ..... 286
Divorces granted to wife ..... 903
By Causes:
Drunkenness ..... 107
Adultery ..... 56
Cruelty ..... 557
Desertion ..... 352
Neglect to provide ..... 71

TABLE NO. 1.-SHOWING DEATHS FROM SEVERAL IMPORTANT CAUSES BY OALENDAR YEARS STNOE 1908.

| Name of disease. | 1908 | 1909 | 1910 |
| :---: | :---: | :---: | :---: |
| Tuberculosis | 2,509 | 2,476 | 2,404 |
| Heart disease | 2,427 | 1,851 | 1,916 |
| Pneumonia | 2,054 | 2,321 | 2,253 |
| Diarrhea and enteritis. | 1,845 | 1,233 | 1,503 |
| Oancer . . . . . | 1,513 | 1,491 | 1,539 |
| Bright's disease | 1,198 | 1,241 | 1,337 |
| Apoplexy ...... | 1,182 | 1,203 | 1,351 |
| Bronchitis | 555 | 572 | +526 |
| Influenza | 543 | 219 | 187 |
| Meningitis | 465 | 499 | 478 |
| Diphtheria | 345 | 411 | 429 |
| Typhoid fever | 322 | 352 | 558 |
| Paralysis | 311 | 396 | 377 |
| Appendicitis .. | 310 | 266 | 241 |
| Diabetes ... | 303 | 249 | 276 |
| Suicides | 291 | 278 | 318 |
| Accidental drowning | 238 | 190 | 216 |
| Whooping cough | 192 | 197 | 200 |
| Scarlet fever | 133 | 352 | 304 |
| Rheumatism | 184 | 186 | 221 |
| Peritonitis | 164 | 162 | 124 |
| Measles | 96 | 120 | 158 |
| Insanity | 76 | 98 | 132 |

TABLE NO. 2.-SHOWING DEATHS CLASSIFIED AGCORDING TO THE PART OF THE BODY, SYSTEM OR SPECIAL ORGANS AFFECTED BY DISEASE INOLUDING DEATHS FROM EXTERNAL CAUSES AND STILLBIRTHS.

| Disease group. | Year. |  |  |
| :---: | :---: | :---: | :---: |
|  | 1908 | 1909 | 1910 |
| General diseases | 6,870 | 6,950 | 7,287 |
| Diseases of nervous system..... | 3,140 | 3,303 | 3,424 |
| Diseases of circulatory system. | 2,929 | 2,574 | 2,634 |
| Diseases of respiratory system. | 2,925 | 3,344 | 3,199 |
| Diseases of digestive system.. | 3,580 | 3,362 | 3,567 |
| Diseases of genito-urinary system. | 1,538 | 1,506 | 1,608 |
| Diseases of skin. | 116 | 175 | 255 |
| Diseases of locomotor system. | 57 | 45 | 168 |
| Malformations .... | 268 | 156 | 118 |
| Diseases of early infancy. | 1,408 | 1,542 | 1,883 |
| Old age. | 1,079 | 1,712 | 1,791 |
| Violence ......... | 1,946 | 1,655 | 1,762 |
| Ill-deffned causes | 782 | 822 | 473 |
| Total death | 20,960 | 27,377 | 28,213 |
| Stillbirths... | 1,489 | 1,409 | 1,414 |

TABLE NO. 3.-SHOWING TOTAL BIRIHS', DEATHS, MARRIAGES, ACICIDENT' AND DIVOROES REPORTED DURING THE CALENDAR YEAR OF 1909.

| County. |  | Births. |  | Deaths. |  |  | Marriages. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total births. |  |  |  |  |  |  |  |  |
| Adams | 9,002 | 201 | 22.0 | 77 | 8.4 | 8 | 46 | 10.1 | 5 |  |
| Ashland | 26,943 | 499 | 18.5 | 376 | 13.9 | 14 | 156 | 11.5 | 239 | 11 |
| Barron | 32,136 | 673 | 20.9 | 288 | 8.9 | 24 | 206 | 12.8 | 81 | 2 |
| Bayfield | 17,112 | 298 | 17.4 | 135 | 7.8 | 9 | 66 | 7.7 | 24 | 9 |
| Brown | 56,558 | 1,367 | 24.1 | 801 | 14.1 | 37 | 418 | 14.7 | 756 | 52 |
| Buffalo | 16,523 | 289 | 17.4 | 150 | 9.0 | 11 | 90 | 10.8 | 25 | 4 |
| Burnett | 10,689 | 173 | 16.1 | 94 | 8.7 | 1 | 45 | 8.4 | 51 | 4 |
| Calumet | 16,889 | 396 | 23.4 | 178 | 10.5 | 4 | 105 | 12.4 | 71 | 6 |
| Chippewa | 36,644 | 555 | 15.1 | 436 | 11.8 | 7 | 238 | 12.9 | 26 | 3 |
| Clark | 32,140 | 725 | 22.5 | 273 | 8.4 | 21 | 188 | 11.6 | 56 | 1 |
| Columbia | 31,248 | 573 | 18.3 | 367 | 11.1 | 13 | 246 | 15.7 | 70 | 9 |
| Orawford | 16,926 | 370 | 21.8 | 201 | 11.8 | 16 | 135 | 15.9 | 49 | 9 |
| Dane | 80,273 | 1,436 | 17.8 | 868 | 10.8 | 35 | 529 | 13.1 | 116 | 39 |
| Dodge | 45,773 | 1,950 | 20.7 | 466 | 10.1 | 15 | 299 | 13.0 | 146 | 21 |
| Door | 21,271 | 459 | 21.5 | 186 | 8.7 | 6 | 115 | 10.8 | 52 |  |
| Douglas | 49,231 | 922 | 20.7 | 461 | 9.3 | 26 | 285 | 11.5 | 83 | 42 |
| Dunn | 26,898 | 498 | 18.5 | 264 | 9.8 | 15 | 186 | 13.8 | 31 | 9 |
| Eau Claire | 34,9791 | 541 | 15.4 | 371 | 10.6 | 20 | 302 | 17.2 | 93 | 31 |
| Florence .... | 3,782 | - 57 | 15.0 | 24 | 6.3 | 1 | 20 | 10.5 | 2 |  |
| Fond du Lac. | 53,413 | 1,063 | 19.9 | 635 | 11.8 | 28 | 371 | 13.8 | 804 | 43 |
| Forest | 9,624 | 188 | 19.5 | 55 | 5.7 | 5 | 37 | 7.6 | 80 | 1 |
| Grant | 40, 229 | 835 | 20.7 | 435 | 10.8 | 16 | 250 | 12.4 | 126 | 23 |
| Green . | 23,390 | 451 | 19.2 | 224 | 9.5 | 8 | 153 | 13.0 | 76 | 15 |
| Green Lake | 15,870 | 311 | 19.5 | 198 | 12.4 | 5 | 120 | 15.1 | 21 | . |
| Iowa | 22,971 | 387 | 16.8 | 243 | 10.5 | 14 | 158 | 13.7 | 107 | 5 |
| Iron | 6,559 | 181 | 27.5 | 113 | 17.2 | 2 | 65 | 19.8 | 129 | 7 |
| Jackson | 17.621 | 326 | 18.5 | 200 | 11.3 | 7 | 103 | 11.6 | 129 37 | 12 |
| Jefferson | 34,293 | 568 | 16.5 | 377 | 10.9 | 9 | 281 | 16.3 | 84 | 19 |
| Juneau . | 20,863 | 342 | 16.3 | 236 | 11.3 | 5 | 148 | 14.1 | 28 | 73 |
| Kenosha | 31,912 | 903 | 28.2 | 348 | 10.9 | 24 | 347 | 21.6 | 182 | 12 |
| Kewaunee | 17,003 | 462 | 27.1 | 211 | 12.4 | 8 | 126 | 14.8 | 1.5 | 1 |
| La Crosse | 42,850 | 889 | 20.7 | 509 | 11.8 | 29 | 400 | 18.6 | 102 | 53 |
| Lafayette | 20,277 | 432 | 21.3 | 226 | 11.1 | 6 | 130 | 12.8 | 103 | 2 |
| Langlade | 18,286 | 432 | 23.6 | 136 | 7.4 | 12 | 137 | 14.9 | 271 | 16 |
| Lincoln | 21,409 | 450 | 21.0 | 230 | 10.7 | 13 | 120 | 11.2 | 35 | 13 |
| Manitowoc | 46,824 | 1,101 | 23.5 | 507 | 10.8 | 30 | 373 | 15.9 | 354 | 11 |
| Marathon | 55,845 | 1,517 | 27.1 | 567 | 10.1 | 40 | 417 | 14.0 | 97 | 33 |
| Marinette | 36,058 | 1,794 | 22.0 | 391 | 10.8 | 20 | 170 | 9.4 | 252 | 4 |
| Marquette | 11,346 | 190 | 16.7 | 123 | 10.8 | 3 | 94 | 16.5 | 8 | 2 |
| Milwaukee | 390,685 | 10,520 | 26.9 | 6,134 | 15.7 | 372 | 4,178 | 21.3 | 3,128 | 400 |
| Monroe | 30,191 | 580 | 19.2 | 298 | 9.8 | 16 | 201 | 13.3 | 48 | 23 |
| Oconto | 27,544 | 643 | 23.3 | 263 | 9.5 | 12 | 123 | 8.9 | 40 | 17 |
| Oneida | 13,122 | 194 | 14.7 | 127 | 9.6 | 2 | 81 | 12.3 | 29 |  |
| Outagamie | 51,231 | 1,183 | 23.0 | 534 | 10.4 | 27 | 335 | - 13.0 | 179 | 35 |
| Ozaukee .. | 18,368 | 339 | 18.4 | 197 | 10.7 | 6 | 117 | 12.7 | 23 | 7 |
| Pepin | 7,569 | 140 | 18.4 | 67 | 8.8 | 5 | 46 | 12.1 | 4 | 4 |
| Pierce | 23,433 | 444 | 18.9 | 234 | 9.9 | 7 | 108 | 9.2 | 52 | 8 |
| Polk | 23,353 | 451 | 19.3 | 196 | 8.3 | 15 | 110 | 9.4 | 31 | 11 |
| Portage | 31,965 | 741 | 23.4 | 372 | 11.6 | 16 | 227 | 11.0 | 117 | 17 |
| Price . | 14,949 | 238 | 15.9 | 79 | 5.2 | 6 | 56 | 7.4 | 7 | 7 |
| Racine | 53,896. | 1,211 | 22.4 | 658 | 14.0 | 35 | 414 | 15.3 | 361 | 48 |
| Richland | 19,345 | 435 | 22.3 | 222 | 11.4 | 14 | 154 | 15.9 | 35 | 18 |
| Rock | 55,593 | 1,112 | 20.0 | 684 | 12.3 | 31 | 363 | 13.0 | 285 | 68 |
| Rusk .... | 12,073 | 208 | 17.2 | 96 | 7.9 | 7 | 68 | 11.2 | 9 | 6 |
| St. 'Croix | 26,716 | 474 | 17.7 | 269 | 10.0 | 12 | 268 | 19.9 | 48 | 5 |
| Sauk | 32,825 | 665 | 20.2 | 391 | 11.9 | 24 | 254 | 15.4 | 104 | 25 |
| Sawyer . . . . | 6,204 | 128 | 20.6 | 66 | 10.6 | 8 | 24 | 7.7 | 76 |  |

TABLE NO. 3. - SHOWING TOTAL BIRTHS, DEATHS, MARRIAGES, ACCIDENTS AND DIVOROES REPORTED DURING THE CALENDAR YEARI OF 1909.-O"ont'd.


TABLE NO. 4.-SHOWING TOTAL BIRTHS, DEATHS, MARRIAGES, ACGCIDENTS AND DIVORCES REPORTED DURING CALENDAR YEAR OF 1910.

| County. |  | Births. |  | Deaths. |  |  | Ma'rriages. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |
| Adams | 8,604 | 173 | 20.0 | 90 | 10.4 | 1 | 46 |  |  |  |
| Ashland | 21,965 | 488 | 22.2 | 355 | 16.1 | 15 | 137 | 12.6 | 280 | 1 |
| Barron | 29,114 | 725 | 24.9 | 316 | 10.8 | 12 | 194 | 13.2 | 109 | 8 |
| Bayfield | 15,987 | 325 | 20.3 | 169 | 10.5 | 13 | 58 | ${ }_{7} 1.2$ | 17 | 13 |
| Brown | 54,008 | 1,492 | 27.5 | 789 | 14.5 | 35 | 408 | 15.0 | 784 | ${ }_{1}$ |
| Buff alo | 16,006 | 324 | 20.2 | 158 | 9.8. | 7 | 961 | 10.6 | 12 | 1 |
| Burnett ${ }_{\text {Calumet }}$. | 9,026 | 187 | 20.7 | 89 | 9.8 | 4 | 51 | 11.2 | 30 |  |
| Chippewa. | 16,701 32,103 | 382 | 22.2 | 162 | 9.7 | 5 | 97 | 11.6 | 85 | 7 |
| Clark ... | 30,074 | 653 | ${ }_{21.7}^{18.2}$ | 436 | $\begin{array}{r}13.5 \\ 8.6 \\ \hline\end{array}$ | ${ }^{6}$ | 259 | 16.0 12.0 | 10 43 | 11 |
| Columbia. | 31,129 | 610 | 19.5 | 395 | 12.6 | 2 | 224 | 14.2 | 43 67 | 3 |
| Crawford | 16,288 | 312 | 19.1 | 190 | 11.6 | 9 | 123 | 15.0 | 38 | 7 |
| Dane | 77,435 | 1,550 | 20.0 | 935 | 12. | 22 | 512 | 13.2 | 142 | 44 |
| Dodge | 47,436 | 1,003 | 21.1 | 522 | 11. | 26 | 352 | 14.8 | $2 ¢ 3$ |  |
| Door | 18,711 | 517 | 27.0 | 186 | 9.9 | 8 | 152 | 16.2 | 39 | 1 |
| Douglas | 47,422 | 816 | 17.2 | 518 | 10.9 | 28 | 302 | 13.4 | 125 | 41 |
| Dunn | 25,260 | 490 | 19.3 | 249 | 9.8 | 13 | 150 | 15.0 | 125 37 | 4 |
| Flou Claire. | 32,721 3,381 | 590 | 18.0 | 400 | 12.2 | 14 | 293 | 17.8 | 95 | 30 |
| Flord du Lace | 3,381 51,610 | 64 1,126 | 18.9 | 26 | 7.6 |  | 27 | 15.8 | 2 |  |
| Forest .... | 51,610 6,782 | 1,126 | 21.8 23.8 | ${ }_{6}^{615}$ | 10.1 9.2 | 21 | 380 | 14.6 | 892 | 31 |
| Grant | 39,007 | 846 | 21.0 | 436 | 11.1 | 17 | 259 | 11.4 | $\stackrel{67}{87}$ | ${ }_{7}^{5}$ |
| Green | 21,641 | 407 | 18.8 | 214 | 9.8 | 3 | 184 | 16.8 | 88 | 3 |
| Green Lake. | 15,491 | 324 | 20.9 | 172 | 11.1 | 4 | 129 | 16.6 | 26 |  |
| Iowa | 22,497 | 444 | 19.7 | 233 | 10.3 | 6 | 163 | 14.4 | 75 | 8 |
| Iron | 8,306 | 188 | 22.6 | 80 | 9.6 | 6 | 59 | 14.2 | 149 | ${ }_{2}^{8}$ |
| Jackson | 17,075 | 292 | 17.1 | 167 | 9.7 | 5 | 85 | 9.8 | 49 | 13 |
| Jefferson | 34,306 | 576 | 16.7 | 400 | 11.6 | 15 | 245 | 14.2 | 57 | 17 |
| Juneau | 19,569 | 329 | 16.7 | 239 | 12.2 | 8 | 132 | 13.4 | 31 | 8 |
| Kenosha ... | 32,929 | 959 | 29.0 | 381 | 11.5 | 29 | 328 | 19.8 | 212 | \&2 |
| Kewaunee.. | 16,784 | 413 | 24.6 | 189 | 11.2 | 5 | 121 | 14.4 | 34 |  |
| La Crosse.. | 43,996 | 944 | 21.4 | 594 | 13.2 | 25 | 365 | 16.4 | 88 | 46 |
| Lafayette... | 20,075 | 408 | 20.3 | 198 | 9.8 | 5 | 113 | 11.2 | 84 | 5 |
| Langlade | 17,062 | 451 | 26.4 | 161 | 9.4 | 11 | 121 | 14.0 | 233 | 6 |
| Lincoln .... | 19,064 | 461 | 24.2 | 217 | 11.3 | 10 | 141 | 14.6 | 43 | 16 |
| Manitowoc. ${ }_{\text {Marathon.. }}$ | 44,978 | 1,074 | 23.8 | 479 | 10.6 | 30 | 374 | 16.6 | 362 | 10 |
| Marathon. | 55,054 | 1,535 | 27.8 | 686 | 12.2 | 44 | 399 | 14.4 | 151 |  |
| Marinette | 33,812 | 724 | 21.4 | 356 | 10.5 | 23 | 152 | 8.8 | 178 | 4 |
| Marquette. | 10,741 | 204 | 18.9 | 135 | 12.5 | 11 | 80 | 14.8 |  |  |
| Milwaukee... | 433,187 | 11,033 | 25.4 | 6,570 | 12.8 | 396 | 4,689 | 21.6 | 4,385 | 361 |
| Monroe | 28,881 | 587 | 20.3 | 366 | 12.6 | 10 | 216 | 14.2 | ${ }^{1} 9$ | 19 |
| Oconto Oneida | 25,657 11,433 | 609 | 23.7 | 254 | 9.9 | 13 | 153 | 11.8 | 36 | 13 |
| Oneida | 11,433 49,102 | 208 1,262 | 18.1 25.7 | 112 | 9.7 | 3 | 88 | 15.2 | 12 | 9 |
| Ozaukee ... | -17,123 | $\begin{array}{r}1,262 \\ 338 \\ \hline\end{array}$ | 25.7 | 601 | $\begin{array}{r}12.2 \\ 8.8 \\ \hline\end{array}$ | 25 8 | 359 89 | 14.6 | $12^{7}$ | 36 |
| Pepin | 7,577 | 152 | 20.0 | 151 73 | 8.8 9.6 | 8 | 89 | 10.2 | 5 6 | 9 |
| Pierce | 22,079 | 438 | 19.8 | 250 | 11.3. | 5 | 112 | 1.5 .4 10.0 | 26 |  |
| Polk Portage | 21,367 | $\times 73$ | 22.1 | 185 | 8.6 | 12 | 121 | 11.2 | $\stackrel{26}{37}$ | 6 |
| Portage Price | 30,945 | 796 | 22.1 | 375 | 12.1 | 26 | 235 | 15.0 | ${ }_{6} 6$ | 22 |
| Price Racine | 13,795 | 289 | 20.9 | 99 | 7.1 | 10 | 49 | 7.0 | 1 | 12 |
| Racine ${ }^{\text {Rachand }}$ | 137,424 18,809 | 1,285 459 | 22.3 | 756 | 13.1 | 53 | 505 | 17.4 | 55 | 5 |
| Rock | 55,538 | 1,043 | 18.7 | 182 | 9.6 12.0 | 14 29 | 168 | 17.8 | 51 | 18 |
| Rusk St .... | 11,160 | 226 | 20.1 | 98 | 8.7 | 2 | 80 | 14.2 | 3311 75 | 62 |
| St. Croix. Sauk | 25,910 | 518 | 19.9 | 278 | 10.7 | 11 | 274 | 21.0 | 66 | 5 |
| Sauk Sawyer | 32,869 6,227 | 608 128 | 18.4 20.5 | 371 70 | 11.2 11.2 | 18 | 268 | 16.2 | 111 | 16 |

TABLE NO. 4-SHOWING TOTAL BIRTHS, DEATHS, MARRIAGES, ACCIDENTS AND' DIVORCES REPORTED DURING CALENDAR'YEAR OF 1910.-Cont'd.

| County. | $\dot{\sim}$ | Births. |  | Deaths. |  |  | Marriages. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \stackrel{2}{3} \\ & \stackrel{5}{2} \\ & 0 \\ & 0 \end{aligned}$ |  |  |  |  |  |  |  |  |
| Shawano. | 31,884 | 802 | 22.0 | 310 | 9.7 | 17 | 270 | 16.8 | 109 |  |
| Sheboygan.. | 54,888 | 1,294 | 23.5 | $6: 0$ | 11.8 | 38 | 472 | 17.0 | 146 |  |
| Taylor ..... | 13,641 | 348 | 25.6 | 113 | 8.2 | 9 | 84 | 12.2 | 14 | $\stackrel{0}{5}$ |
| Trempealeau | 22,928 | 525 | 22.8 | 229 | 9.9 | 13 | 157 | 13.6 | 26 | 4 |
| Vernon ..... | 28,116 6,019 | 551 | 19.5 | 310 | 11. | 16 | 172 | 12.2 | 17 | 13 |
| Walworth... | 6,019 29,614 | 115 419 | 19.1 | 37 362 | ${ }_{6}^{6.1}$ | ${ }^{2}$ | 17 | 5.6 | 9 | $\stackrel{1}{2}$ |
| W ashburn.. | 8,196 | 192 | 23.4 | 362 84 | 12.2 10.2 | 11 | 162 50 | 10.8 | 34 | 17 |
| Washington | 23,784 | 496 | 20.8 | 243 | 10.2 | 13 | ${ }^{5} 76$ | 12.6 14.6 | 5i | 7 |
| Waukesha.. | 37,100 | 651 | 17.5 | 507 | 13.6 | 22 | 295 | 15.8 | -88 | 1 |
| Waupaca .. | 32,782 | 759 | 23.1 | 407 | 12.4 | 28 | 261 | 15.8 | 8.5 | - |
| Waushara.. | 18,886 | 483 | 25.5 | 178 | 9.4 | 11 | 162 | 17.0 | 34 | $\overline{8}$ |
| Winnebago. | 62,116 | 1,212 | 19.5 | 782 | 12.5 | 30 | 1:35 | 17.2 | 159 | 5 |
| Wood .. | 30,583 | 809 | 26.4 | 277 | 9. | 18 | 263 | 17.2 | 5 | 10 |
| Total. | 2,333,860 | 52,261 | 22.3 | 28,213 | 12. | 1,414 | 18,528 | 15.8 | 11,966 | 1,180 |

$9-\mathrm{B} . \mathrm{H}$.

## BIRTHS.

For the calendar year ending December 31, 1909, 51,212 births inclusive of stillbirths were reported. This corresponds to an annual birth rate for the state of 21.6 per thousand gross estiamted population. The rate varies from 28.2 per thousand population in Kenosha county to 14.7 per thousand in Oneida and Walworth counties. A rate of 25 per gross population is, we believe, a conservative estimate of the aciual birth rate for the state as a whole. In several of the counties wiere the rate falls below this, we have reason to believe that quite complete reports are obtained, but in some of the counties the law whick requires that births be reported is not generally observed. For this condition of affairs the local registrars are at fault.

The law requires each local registrar to report to the state office, when he sends in his monthly returns, all births which have occurred in the district in the past month which have not been reported. As soon as this information is supplied, the state office writes to the attending physician, midwife or responsible head of the family, if there is no physician in attendance, and demands an explanation of the failure to file a certificate in this case. If a satisfactory explanation is not given or if there is a disposition to ignore the law, the facts are reported to the district attorney of the county with the request that a prosecution be started. We ask for the coobperation of the local registrars in our efforts to obtain a strict compliance with the law requiring that every birth occurring in the state must be reportcd.

Of the total births reported during 1909, 26,395 were males; 24,750 were females; and in 67 cases, the sex of the child was unknown or not stated. 898 stillbirths were reported as births; 826 illegitimate births were recorded; and 1,080 twin births.

Arranging the total births reported according to the nativity of the parents, it is shown that 30,094 were born of native parents; 3,119 were born of native fathers and foreign mothers; 6,450 were born of foreign fathers and native mothers; 10,870 were born of foreign parentage; and 679 were children where the nativity of one or both of the parents were unknown or not stated.

For a detailed list of birth rates by counties see table No. 3. Table No. 6 shows births reported by counties, according to sex and nativity of parents.

Table No. 7 shows stillbirths, twin births, and illegitmate births by counties, arranged according to sex. The classification of still-
births shows that 516 were males; 355 were females; and that in 27 cases, the sex was not stated.

Twin births arranged according to sex shows that 561 were males; 517 were females; and in 2 cases the sex was not stated.

In the case of illegitimate births, there were 430 males; 390 females; and 6 births where the sex was not stated.

During the calendar year ending December 31, 1910, 52,261 births, inclusive of stillbirths were reported. This represents an annual birth rate for the entire state of 22.3 per one thousand gross estimated population. As was shown in the statistical table for 1909, the birth rate is highest in Kenosha county where there were 29 births per thousand population. The rate for 1910, in Walworth county, is 14.1 per thousand. This is the lowest rate of any county of the state for that year.

26,978 of the births reported for 1910, were males; 25,191 were females; and 92 births were reported where the sex of the child was not stated. 826 stillbirths were reported as births; 1,127 twin births were recorded; 773 illegitimate births; and 18 triplets.

The nativity of parents for 1910 is as follows: Both parents n sive born 31,157; father native and mother foreign 2,949; father foreig end mother native 6,519; both parents foreign born 10,934 ; and i irthplace of one or both parents unknown or not stated 702.

Table No. 4 gives a detailed list of birth rates by counties, and table No. 8 shows births by counties, according to sex and nativity of parents.

Table No. 9 shows stillbirths, twin births, and illegitimate births, arranged according to sex. In the case of stillbirths, it is shown by this table that 458 were males; 330 females; and 30 where the sex was unknown or not stated.

Twin births, arranged according to sex, shows that 570 were males; 555 were females; and in 2 cases the sex was not stated.

In the case of illegitimate births, there were 397 males; 371 females: and 5 births where the sex was not stated.
' 'able No. 5 shows births reported in Wisconsin by calendar year for each county since 1903. The increased accuracy of registration is revealed from the fact that the number of births reported, for the state as a whole, has increased from 33,574 in 1903 to 52,261 in 1910 .

TABLE NO. 5.-SHOWING BIRTHS REPORTED IN WISCQNSIN BY UALENDAR YEARS FOR EACH COUNTY.

| Cousty | 1903 | 1904 | 1505 | 1906 | 1907 | 1908 | 1509 | 1910 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Adams | 115 | 137 | 123 | 142 | 154 | 197 | 201 | 173 |
| Ashland | 180 | 407 | 453 | 474 | 589 | 553 | 409 | 488 |
| Barron | 449 | 474 | 471 | 521 | 635 | 656 | 673 | 725 |
| Bayfield | 124 | 129 | 306 | 283 | 306 | 254 | 298 | 325 |
| Brown | 1,114 | 1,180 | 1,484 | 1,658 | 1,586 | 1,508 | 1,367 | 1,492 |
| Buffalo | 41 | 61 | 200 | 229 | 415 | 319 | 289 | 324 |
| Burnett | 103 | 98 | 129 | 148 | 166 | 207 | 173 | 187 |
| Calumet | 336 | 357 | 458 | 382 | 503 | $4 \geqslant 2$ | 896 | ¢82 |
| Chippewa | 398 | 402 | 553 | 540 | 515 | 583 | 555 | 585 |
| Clark | 415 | 461 | 440 | 493 | 599 | 850 | 725 | 653 |
| Columbia | 343 | 486 | 530 | 542 | 623 | 598 | 573 | 610 |
| Orawford | 157 | 150 | 225 | 241 | 201 | 399 | 370 | 312 |
| Dane | 744 | 790 | 1,113 | 1,095 | 1,384 | 1,384 | 1,436 | 1,550 |
| Dodge | 604 | 818 | 817 | 829 | 931 | 974 | 950 | 1,03 |
| Door | 416 | 467 | 480 | 453 | 385 | 519 | 459 | 517 |
| Douglas | 676 | 681 | 558 | 725 | 1,025 | 1,018 | 922 | 816 |
| Dunn | 319 | 363 | 452 | 410 | 493 | 500 | 498 | 490 |
| Eau Claire | 361 | 494 | 533 | 499 | 678 | 582 | 541 | 550 |
| Florence | 56 | 55 | 56 | 105 | 68 | 57 | 57 | 64 |
| Fond du | 556 | 907 | 1,000 | 897 | 1,254 | 1,216 | 1,063 | 1,126 |
| Forest | 48 | 65 | 100 | 111 | 168 | 229 | 188 | 162 |
| Grant | 535 | 550 | 655 | 723 | 903 | 906 | 835 | 846 |
| Green |  | 312 | 339 | 457 | 352 | 409 | 451 | 407 |
| Green Lake | 168 | 168 | 211 | 246 | 274 | 310 | 311 | 324 |
| Iowa | 164 | 245 | 318 | 341 | 470 | 451 | 387 | 444 |
| Iron | 109 | 193 | 173 | 267 | 220 | 208 | 181 | 188 |
| Jackson | 282 | 291 | 340 | 291 | 349 | 330 | 326 | 893 |
| Jefferson | 480 | 543 | 551 | 519 | 715 | 687 | 568 | 576 |
| Juneau |  | 387 | 346 | 301 | 330 | 342 | 342 | 329 |
| Kenosha | 536 | 611 | 624 | 702 | 710 | 867 | 903 | 959 |
| Kewaunee | 380 | 404 | 431 | 387 | 446 | 449 | 462 | 41.3 |
| La Crosse | 624 | 333 | 690 | 796 | 945 | 880 | 889 | 944 |
| Lafayette | 188 | 410 | 299 | 418 | 413 | 464 | 432 | 408 |
| Langlade | 286 | 289 | 378 | 389 | 345 | 455 | 432 | 451 |
| Lincoln | 237 | 156 | 430 | 495 | 507 | 527 | 450 | ${ }^{461}$ |
| Manitowoc | 880 | 1,035 | 1,024 | 1,117 | 1,334 | 1,160 | 1,101 | 1,074 |
| Marathon | 802 |  | 1,146 | 1,188 | 1,576 | 1,501 | 1,517 794 | 1,533 724 |
| Marinette |  | 997 | 980 | 853 | 813 | 762 189 | 794 190 | 724 204 |
| Marquette | 101 | 179 | 118 | ${ }^{146}$ | $\underset{9,193}{238}$ | 189 10,771 | 190 10,520 | 11,033 |
| Milwaukee | 9,329 | 8,925 | 8,905 | 8,863 | 9,193 | 10,771 | 10,520 | 11,583 |
| Monroe | 348 | 341 | 508 | 598 | ${ }_{653}^{551}$ | 626 | 580 | ${ }_{6}^{587}$ |
| Oconto | 430 | 550 | 532 | ${ }_{213}^{575}$ | 653 250 | 628 214 | 643 194 | 609 208 |
| Oneida | 152 | 167 | 137 | 213 | 250 | 214 1,134 | 1,183 | 1,262 |
| Outagamie | 1,172 | 1,152 | $\begin{array}{r}1,342 \\ 276 \\ \hline\end{array}$ | $\begin{array}{r}1,265 \\ 315 \\ \hline 15\end{array}$ | 1,334 364 | 1,134 383 | 1,183 339 | 1,268 338 |
| Ozaukee | 276 | 202 78 | 127 | 122 | 172 | 170 | 140 | 152 |
| Pepin | 86 205 | 219 | 253 | 301 | 330 | 442 | 444 | 438 |
| Pierce Polk | 259 | 280 | 355 | 353 | 392 | 496 | 451 | 473 |
| Polk .. | 259 329 | 525 | 547 | 571 | 837 | 720 | 741 | 796 |
| Portage | 329 188 | $\stackrel{525}{261}$ | 180 | 156 | 174 | 290 | 238 | 289 |
| Price | 998 | 1,133 | 1,013 | 1,060 | 1,347 | 1,299 | 1,211 | 1,285 |
| Richland | 193 | 269 | 360 | 350 | 451 | 487 | 435 | 459 |
| Rock | 666 | 726 | 939 | 952 | 1,148 | 1,172 | 1,112 | 1,043 |
| Rusk | 68 | 75 | 159 | 179 | 229 | 234 | 208 | 226 |
| St. Croix | 301 | 323 | 334 | 477 | 487 | 497 | 474 | 518 |
| Sauk |  | 500 | 469 | 499 | 611 | 601 | ${ }^{655}$ | 608 |
| Sawyer | ${ }_{610}^{62}$ | 87 | 59 | 139 | 120 679 | 133 830 | 128 | 128 |
| :Shawano | 410 | - 601 | 324 984 | 132 1,221 | 1,441 | 1,229 | 1,217 | 1,294 |
| Sheboygan | 700 | 1,183 | 222 | 1,223 | -242 | - 353 | $\stackrel{353}{ }$ | 348 |
| 'reylor ...... | 162 350 | 208 | 340 | $4{ }_{4} 8$ | 516 | 507 | 510 | 525 |
| Trempealeau |  | 377 357 | 343 | 331 | 439 | 610 | 601 | 551 |
| Vernon | 307 85 | 357 87 | $\stackrel{81}{81}$ | ${ }_{72}$ | 76 | 102 | 98 | 115 |
| Vilas .. | 820 320 | 507 | 484 | 356 | 443 | 50.2 | 463 | 419 |
| Walworth | 320 98 | 129 | 192 | 85 | 287 | 201 | 212 | 192 |
| Washburn | 283 | 446 | 490 | 526 | 60 | 515 | 494 | 486 |
| Waukesha . | 449 | 595 | 549 | 611 | 716 | 776 | 690 | ${ }_{7}^{651}$ |
| Waupaca | 403 | 552 | 642 | 658 | 720 | 700 | 736 | $7 \% 9$ |
| Waushara | 144 | ${ }^{231}$ | 316 1 | - 327 | $\begin{array}{r}422 \\ 1,275 \\ \hline 712\end{array}$ | $\begin{array}{r}447 \\ 1,238 \\ \hline\end{array}$ | 1, ${ }_{\text {416 }}$ | -1, ${ }^{48} \mathbf{2}$ |
| Winnebago | 1,036 398 | $\begin{array}{r}1,163 \\ \hline 428\end{array}$ | 1,115 520 | 1,471 | 1,275 | 1,238 780 | 1,332 | 1,809 |
| Wood |  |  |  |  |  |  |  |  |
| Total | 33,574 | 38,832 | 42,631 | 44,759 | 50,922 | 52,994 | 51,212 | 52,261 |

TABLE NO. 6.-SHOWING BIRTHS REPORTED FROM JAN. 1, 1909 'IO DEC. 31, 1909, CLASSIFIED BY COUNTIES, SEX, AND NATIONALITY OF PAREN'S'S.

| Counts. |  | Sex. |  |  |  |  | $\underset{\underset{E}{\dot{E}}}{\stackrel{\dot{x}}{E}}$ | Parentage. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Adams | 201 | 101 | 100 |  | 6 | 6 | 4 | 135 | 10 | 24 | 23 | 9 |
| Ashland | 499 | 265 | 234 |  | 9 | 13 | 4 | 171 | 36 | 91 | 194 | 7 |
| Barron | 673 | 326 | 347 |  | 20 | 7 | 20 | 355 | 54 | 97 | 160 | 7 |
| Bayfield. | 298 | 152 | 146 |  | 7 | 3 | 2 | 96 | - 25 | 49 | 123 | 5 |
| Brown | 1,367 | 702 | 663 |  | 18 | 83 | 22 | 1,000 | 48 | 132 | 103 | 84 |
| Buffalo | 289 | 144 | 145 |  | 2 | 3 | 14 | 220 | 11 | 37 | 21 |  |
| Burnett | 173 | 89 | 84 |  | 1 | 3 | 2 | 81 | 13 | 32 | 44 |  |
| Calumet .. | 396 | 195 | 201 |  | , |  | 16 | 342 | 8 | 27 | 19 |  |
| Chippewa.. | 555 | 292 | 263 |  | 7 | 4 | 8 | 339 | 40 | 74 | 9.5 | 7 |
| Clark .... | 725 | 362 | 363 |  | 14 |  | 24 | 419 | 37 | 105 | 155 | 9 |
| Columbia.. | 573 | 307 | 266 |  | 8 | 4 | 20 | 443 | 26 | 54 | 44 | 6 |
| Crawford. | 370 | 188 | 182 |  | 6 | 5 | 12 | 288 | 15 | 41 | 23 | 3 |
| Dane . | 1,436 | 761 | 672 | 3 | 19 | 6 | 26 | 968 | 92 | 163 | 198 | 15 |
| Dodge | 950 | 479 | 471 |  | 13 | 9 | 8 | 682 | 62 | 102 | 9 | 6. |
| Door | 459 | 232 | 227 |  | 5 | 6 | 4 | 316 | 21 | 78 | 89 | , |
| Douglas | 922 | 514 | 408 |  | 21 | 13 | 20 | 262 | 70 | 119 | 460 | 11 |
| Dunn .... | 498 | 239 | 255 | 4 | 7 | 3 | 14 | 333 | 37 | 68 | 59 | 1 |
| Eau Claire. | 541 | 258 | 282 |  | 10. | 6 | 8 | 354 | 31 | 73 | 76 | 7 |
| Florence . | 57 | 29 | 28 |  |  | 1 |  | 26 |  | 3 | 27 | 1 |
| $\begin{aligned} & \text { Fond du } \\ & \text { Lac } \ldots . . . \end{aligned}$ | 1,063\| | 558 | 504 | 1 | 14 | 10 | 12 | 815 | 40 | 91 | 105 | 12 |
| Forest | 188 | 111 | 76 | 1 | 7 | 1 | 2 | 128 | 10 | 26 | 22 | 2 |
| Grant | 835 | 428 | 405 | 2 | 17 | 8 | 18 | 743 | 19 | 41 | 24 | 8 |
| Green | 451 | 227 | 224 |  | 6 | 2 | 12 | 296 | 24 | 48 | 80 | 3 |
| Green Lake | 311 | 163 | 148 |  | 2 | 4 | 8 | 212 | 13 | 43 | 39 | 4 |
| Iowa . | 387 | 200 | 187 |  | 12 | 4 | 6 | 319 | 16 | 22 | 26 | 4 |
| Iron .. | 181 | 93 | 87 | 1 | 4 | 3 | 4 | 29 | 5 | 17 | 128 | 2 |
| Jackson | 326 | 185 | 139 | 2 | 4 | 3 | 8 | 212 | 26 | 47 | 40 | 1 |
| Jefferson | 568 | 305 | 263 |  | 5 | 5 | 10 | 399 | 36 | 65 | ${ }_{6}^{63}$ | 5 |
| Juneau..... | 342 | 182 | 159 | 1 | 3 | 5 | 14 | 250 | 16 | 36 | 39 | 1 |
| Kenosha... | 903 | 474 | 427 | 2 | 16 | 7 | 10 | 350 | 47 | 89 | 367 | 10 |
| Kewaunee.. | 462 | 248 | 212 | 2 | 5 | 2 | 20 | 362 | 22 | 43 | 31 | 4 |
| La Crosse.. | 889 | 457 | 432 |  | 20 | 27 | 26 | 596 | 65 | 106 | 106 | 16 |
| Lafayette.. | 432 | 216 | 213 | 3 | 5 | 7 | 10 | 333 | 21 | 35 | 37 | 6 |
| Langlade... | 432 | 219 | 213 |  | 6 | 5 | 8 | 281 | 36 | 55 | 54 | 6 |
| Lincoln .. | 450 | 211 | 239 |  | 7 | 5 | 14 | 240 | 31 | 74 | 102 | 3 |
| Manitowoc. ${ }^{\text {a }}$ | $\cdots, 101$ | 562 | 539 |  | 21 | 8 | 30 | 849 | 59 | 97 | 85 | 11 |
| Marathon.. | 1,517 | 788 | 728 | 1 | 27 | 19 | 32 | 827 | 121 | 257 | 298 | 14 |
| Marinette.. | 794 | 410 | 384 |  | 19 | 5 | 10 | 367 | 54 | 143 | 226 | 4 |
| Marquette. . | 190 | 93 | 97. |  | 2 | 1 | 10 | 145 | 8 | 18 | 16 | 3 |
| Milwaukee.. | 10,520 | 5,454 | 5,056 | 10 | 160 | 278 | 200 | 4,1<4 | 691 | 1,405 | 4,041 | 199 |
| Monroe . | 580 | 308 | 272 |  | 6 | 8 | 8 | 436 | 29 | 62 | 44 | 9 |
| Oconto . | 643 | 351 | 291 |  | 8 | 5 | 16 | 393 | 29 | 87 | 128 | 6 |
| Oneida | 194 | 103 | 90 |  | 3 | 1 | 2 | 99 | 15 | 39 | 37 | 4 |
| Outagamie. | 1,183 | 618 | 563 | 4 | 31 | 19 | 16 | 840 | 75 | 149 | 106 | 13 |
| Ozaukee ... | 339 | $18:$ | 154 |  | 4 | 2 | , | 259 | 18 | 26 | 35 | , |
| Pepin | 140 | 7 | 60 |  | 2 | 5 | 2 | 107 | 8 | 12 | 8 | 5 |
| Pierce | 444 | $22:$ | 219 |  | 10 | 12 | 4 | 304 | 29 | 58 | 44 | 9 |
| Polk ... | 451 | 23 | 218 |  | 13 | 3 | 10 | 211 | 33 | 89 | 116 | 2 |
| Portage | 741 | 391 | 350 |  | 17 | 14 | 16 | 440 | 49 | 112 | 127 | 13 |
| Price ... | 238 | 119 | 118 |  | 1 | 2 | 8 | 78 | 14 | 31 | 113 | 2 |
| Racine | 1,211 | 624 | 587 |  | 14 | 6 | 30 | 518 | 89 | 150 | 444 | 10 |
| Richland | 435 | 218 | 213 | 3 | 10 | 3 | 8 | 404 | 3 | 23 | 2 | 3 |
| Rock | 1,312 | $56{ }^{\circ}$ | 548 | 1 | 22 | 40 | 20 | 746 | 66 | 103 | 176 | 21 |
| Rusk ....... | 208 | 104 | 103 | 1 | 5 | 2 | 6 | 116 | 12 | 28 | 51 | 1 |
| St. Croix.. | 474 | 228 | 243 | 3 | 7 | 5 | 18 | 285 | 38 | 75 | 72 | 4 |
| Sauk . | 665 | 337 | 328 |  | 14 | 7 | 12 | 491 | 43 | 80 | 49 | 2 |
| Sawyer ..... | 128 | 73 | 54 |  | 7 | 3 | 8 | 67 | 2 | 12 | 44 | 3 |
| Shawano .. | 854 | 446 | 404 | , | 13 | 5 | 22 | 507 | 65] | 162 | 115 | 5 |

'IABLE NO. 6.-SHOWING BIRTHS REPORTED FROM JAN. 1, 1909 TO' DEC. 31, 1909, OLASSIFLED BY COUNTIES, SEX, AND NATIONALITY OF PARENTS.Cont'd.

| Counts. |  | Sex. |  |  |  |  | $\begin{aligned} & \dot{\hat{E}} \\ & \stackrel{y}{3} \\ & E \end{aligned}$ | Parentage. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\underset{\sim}{\underset{\sim}{\Xi}}$ |  | $\begin{aligned} & \text { वं } \\ & \text { di } \\ & \text { in } \\ & \text { n } \\ & 0 \\ & \text { Z } \end{aligned}$ |  |  |  |  |  |  |  |  |
| Sheboygan. | 1,217 | 637 | $57 \%$ | 3 | 31 | 11 | 32 | 713 | -67 | 132 | 299 | 6 |
| Taylor .... | ${ }^{1} 53$ | 184 | 169 |  | 5 | 6 | 10 | 145 | 34 | 64 | 107 | 3 |
| T'rempea- |  |  |  |  |  |  |  |  |  |  |  |  |
| leau ... | 510 | 278 | 232 |  | 5 | 5 | 10 | 329 | 43 | 81 | 53 | 4 |
| Vernon .... | 601 | 310 | 289 | 2 | 10 | 6 | 16 | 438 | 27 | 77 | 52 | 7 |
| Vilas ...... | 98 | 47 | 51 |  | 3 |  | 2 | 48 | 10 | 13 | 27 |  |
| Walworth.. | 466 | 228 | 238 |  | 7 | 4 | 12 | 317 | 35 | 52 | 61 | 1 |
| Washburn.. | 212 | 114 | 97 | 1 | 7 | 5 | 6 | 143 | 10 | 27 | 33 | 2 |
| Washington | 494 | 245 | 247 | 2 | 6 | 3 | 14 | 407 | 27 | - 33 | 27 |  |
| Waukesha.. | 690 | 326 | 364 |  | 12 | 6 | 20 | 463 | 46 | 78 | 98 | 5 |
| Waupaca... | 736 | 379 | 357 |  | 20 | 7 | 14 | 474 | 49 | 117 | 92 | 4 |
| Waushara.. | 416 | 207 | 209 |  | 4 | 4 | 8 | 295 | -14 | 51 | 53 | 3 |
| Winnebago. | 1,323 | 650 | 671 | 2 | 40 | 24 | 28 | 790 | - 92 | 173 | 247 | 21 |
| Wood ..... | 732 | 366 | 355 | 1 | 14 | 15 |  | 421 | 52 | 127 | 123 | 9 |
| Total | \|51,212| | 26,395 | 4,750 | 67 | 898 | 826 | 1,080 | 30,094 | 3,119 | 6,450 | 10,870 | 679 |

'T'ABLE NO. 7.-SHOWING STILLBIRTHS, TWIN BIRTHS AND ILLEGITIMATE BIRTHS REPORTELD FROM JAN. 1, 1909, TO DEC. 31, 1909, OLASSIFIED BY COUNTIES AND SEX.

| County. | Stillbirths. |  |  |  | Twin births. |  |  |  | Illegitimate births. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ज | $\underset{\text { ¢ }}{\substack{\text { ¢ }}}$ | 完 |  | $\begin{aligned} & \text { ञin } \\ & \text { Ĥ } \end{aligned}$ | $\stackrel{\Phi}{\underset{\sim}{g}}$ |  |  | $\begin{aligned} & \text { ञin } \\ & \stackrel{y}{0} \end{aligned}$ | $\stackrel{\oplus}{\underset{\sim}{m}}$ | 永 |  |
| Adams | 6 | 3 | 3 |  | 4 | 4 |  |  | 6 | 4 | 2 | $\ldots$ |
| Ashland | 9 | 7 | 2 |  | 4 | 2 | 2 |  | 13 | 5 | 8 |  |
| Barron | 20 | 13 | 7 |  | 20 | 8 | 12 |  | 7 | 3 | 4 | ... |
| Bayfleld | 7 | 2 | 5 | $\ldots$ | 2 | 2 |  |  | 3 | 1 | 2 | ...... |
| Brown | 18 | 12 | 5 | 1 | 22 | 7 | 15 |  | 83 | 41 | 42 | ...... |
| Buffalo | 2 | 1 | 1 |  | 14 | 7 | 7 |  | 3 | 1 | 2 | ...... |
| Burnett | 1 |  | 1 |  | 2 | 1 | 1 |  | 3 | 1 | 2 | $\ldots$ |
| Calumet | 4 | 2 | 2 |  | 16 | 11 | 5 |  |  |  |  |  |
| Chippewa | 7 | 4 | 3 |  | 8 | 4 | 4 |  | 4 | 2 | 2 | ..... |
| Clark ... | 14 | 10 | 4 |  | 24 | 11 | 13 |  | 4 | 2 | 2 | ...... |
| Columbia ... | 8 | 5 | 3 |  | 20 | 11 | 9 |  | 4 | 1 | 3 | ... |
| Crawford ... | 6 | 4 | 2 |  | 12 | 7 | 5 |  | 5 | 4 | 1 |  |
| Dane ........ | 19 | 8 | 9 | 2 | 26 | 20 | 6 |  | 6 | 1 | 5 |  |
| Dodge | 13 | 6 | 7 |  | 8 | 3 | 5 |  | 9 | 4 | 5 |  |
| Door | 5 | 4 | 1 |  | 4 | 2 | 2 |  | 6 | 1 | 5 | ...... |
| Douglas | 21 | 11 | 10 |  | 20 | 11 | 9 |  | 13 | 8 | 5 |  |
| Dunn | 7 | 2 | 3 | 2 | 14 | 3 | 9 | 2 | 3 | 2 | 1 |  |
| Eau Claire.. | 10 | 7 | 2 | 1 | 8 | 2 | 6 |  | 6 | 1 | 5 |  |
| Florence ..... |  |  |  |  |  |  |  |  | 1 |  | 1 |  |
| Fond du Lac | 14 | 7 | 7 |  | 12 | 7 | 5 |  | 10 | 6 | 4 | $\ldots .$. |
| Forest | 7 | 4 | 2 |  | 2 | 2 |  |  | 8 | 1 |  |  |
| Grant | 17 6 | 8 2 | 8 | 1 | 18 | 13 | 5 8 |  | 2 | 1 | 7 2 |  |

TABLE NO．7．－SHOWING SITLLBIRTHS，TWIN BIRTHS AND ILLEGITLMATE BIRTHS REPORIED FROM JAN．1，1909，＇O DEC．31，1909，CiLASSIFIED BY COUTNIES AND SEX－Cont＇d．

| County． | Still births． |  |  |  | Twin births． |  |  |  | Illegitimate births． |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { ञ゙ } \\ & \text { ָ̈ } \\ & \hline \end{aligned}$ | $\begin{gathered} \dot{\sim} \\ \stackrel{\sim}{\pi} \\ \underset{\sim}{\pi} \end{gathered}$ |  |  |  | $\stackrel{\dot{\Xi}}{\stackrel{\Sigma}{\Sigma}}$ |  | 家 | ¢ ¢ － |  | 边 | 姩 |
| Green Lake．． | 2 | i | 1 |  | 8 | 3 | 5 |  | 4 | 1 | 3 |  |
| Iowa ．．．．． | 12 | 9 | 3 |  | 6 | 5 | 1 |  | 4 | 4 |  |  |
| Iron ．．． | 4 | 2 | 1 | 1 | 4 | 3 | 1 |  | 3 | 2 | 1 |  |
| Jackson | 4 | 1 | 3 |  | 8 | 1 | 7 |  | 3 | 2 | 1 |  |
| Jefferson | 5 | 3 | 2 |  | 10 | 6 | 4 |  | 5 | 4 | 1 |  |
| Juneau | 3 | 2 |  | 1 | 14 | 4 | 10 |  | 5 | 3 | 2 |  |
| Kenosha | 16 | 9 | 6 | 1 | 10 | 5 | 5 |  | 7 | 5 | 2 |  |
| Kewaunee | 5 | 1 | 4 |  | 20 | 5 | 15 |  | 2 | 1 | 1 |  |
| La Crosse ．． | 20 | 11 | 9 |  | 26 | 12 | 14 |  | 27 | 17 | 10 |  |
| Lafayette ．．． | 5 | 4 | 1 |  | 10 | 2 | 8 |  | 7 | 3 | 3 | i |
| Langlade ．．．． | 6 | 2 | 4 |  | 8 | 4 | 4 |  | 5 | 2 | 3 |  |
| Lincoln ．．．．．． | 7 | 4 | 3 |  | 14 | 8 | 6 |  | 5 | 2 | 3 |  |
| Manitowoc ．． | 21 | 11 | 10 |  | 30 | 14 | 16 |  | 8 | 3 | 5 |  |
| Marathon ． | 27 | 18 | 9 |  | 32 | 18 | 14 |  | 19 | 10 | 9 |  |
| Marinette ． | 19 | 13 | 6 |  | 10 | 5 | 5 |  | 5 | 3 | 2 |  |
| Marquette ．．． | 2 | 2 |  |  | 10 | 9 | 1 |  | 1 | 1 |  |  |
| Milwaukee ．． | 166 | 103 | 56 | 7 | 200 | 114 | 86 |  | 278 | 148 | 127 | 3 |
| Monroe ． | 6 | 1 | 5 |  | 8 | 5 | $\stackrel{3}{7}$ |  | 8 | 5 | 3 |  |
| Oconto | 8 | 7 | 1 |  | 16 | 9 | 7 |  | 5 | 3 | 2 |  |
| Oneida． | 3 | 2 | 1 |  | 2 | 2 |  |  | 1 |  | 1 |  |
| Outagamie ．． | 31 | 21 | 8 | 2 | 16 | 9 |  | $\ldots$ | 19 | 12 | 7 |  |
| Ozaukee ．． | 4 | 3 | 1 |  | 6 | 2 | 4 |  | 2 |  | 2 |  |
| Pepin | 2 | 1 | 1 |  | 2 | 2 |  |  | 5 | 2 | 3 |  |
| Pierce | 10 | 4 | 6 |  | 4 | 3 | 1 |  | 12 | 5 | 7 |  |
| Polk | 13 | 7 | 6 |  | 10 | 5 | 5 |  | 3 | 3 |  |  |
| Portage | 17 | － | 8 |  | 16 | 7 | 9 |  | 14 | 7 | 7 |  |
| Price | 1 | 1 |  |  | 8 | 6 | 2 |  | 2 | 1 | 1 |  |
| Racine | 14 | 9 | 5 |  | 30 | 15 | 15 |  | 6 | 3 | 3 |  |
| Richland | 10 | 5 | 4 | 1 | 8 | 3 | 5 |  | 3 | 3 |  |  |
| Rock | 22 | 13 | 9 |  | 20 | 13 | 7 |  | 40 | 21 | 18 | 1 |
| Rusk | 5 | 4 | 1 |  | 6 | 6 |  |  | 2 | 1 | 1 |  |
| St．Croix | 7 | 3 | 4 |  | 18 | 8 | 10 |  | 5 | 3 | 2 |  |
| Sauk ． | 14 | 10 | 4 |  | 12 | 3 | ， |  | 7 | ， | 3 |  |
| Sawyer | 7 | 5 | 1 | 1 | 8 | 4 | 4 |  | 3 | 1 | 1 | 1 |
| Shawano | 13 | 3 | 6 | 4 | 22 | 8 | 14 |  | 5 | 3 | 2 |  |
| Sheboygan ．． | 31 | 17 | 14 |  | 32 | 17 | 15 |  | 11 | 7 | 4 |  |
| Taylor ．．．．．． | 5 | 3 | 2 |  | 10 | 5 | 5 |  | 6 | 4 | 2 |  |
| Trempealeau． | 5 | 3 | 2 |  | 10 | 4 | 6 |  | 5 | 3 | 2 |  |
| Vernon ．．．．．． | 10 | 5 | 5 |  | 16 | 13 | 3 |  | 6 | 4 | 2 | ．．．． |
| Vilas ． | 3 | 1 | 2 |  | 2 |  | 2 |  |  |  |  |  |
| Walworth ．．． | 9 | 6 | 3 |  | 12 | 5 | 7 |  | 4 | 2 | 2 |  |
| Washburn ．． | 7 | 3 | 4 |  | 6 | 5 | 1 |  | 5 | 4 | 1 |  |
| W ashington．． | 6 | 5 | 1 |  | 14 | 6 | 8 |  | 3 | 2 | ， |  |
| Waukesha ．． | 12 | 9 | 3 |  | 20 | 8 | 12 |  | 6 | 2 | 4 |  |
| Waupaca ．．．． | 20 | 5 | 15 |  | 14 | 9 | 5 |  | 7 | 5 | 2 |  |
| Waushara ．．． | 4 | 2 | 2 |  | 8 | 6 | 2 |  | 4 | 3 | 1 |  |
| Winnebago．．． | 40 | 23 | 16 | 1 | 28 | 10 | 18 |  | 24 | 10 | 14 |  |
| Wood | 14 | 8 | 6 |  | 4 | 3 | 1 |  | 15 | 6 | 9 |  |
| Total． | 898 | 516 | 355 | 27 | 1，0¢0 | 561 | 517 | 2 | 826 | 430 | 350 | 6 |

TABLE NO. 8.-SHOWING BIRTHS REPORTED FROM JAN. 1, 1910, TO DEC. 31, 1910, OLASSIFIED BY COUNTIES, SEX, AND NATIONALI'Y OF' PARENTS.


TABLE NO' 8.-SHOWING BIRTHS' REPORTED FROM JAN. 1, 1910, TO DEC. 31, 1910, CLASSIFIED' BY 'OOUNTIES, SEX AND NATIONALITY OF' PARENTSCont'd.

| County. |  | Sex. |  |  |  | $\begin{aligned} & \dot{B} \\ & \underset{E}{E} \\ & E \\ & E \end{aligned}$ | Illegitimate births. | Parentage. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\frac{\dot{9}}{\stackrel{\pi}{\pi}}$ |  |  |  |  |  |  |  |  |  |  |
| Taylor | 348 | 191 | 157 |  | 6 | 6 | 3 | 155 | 26 | $¢_{0}$ | 103 | 4 |
| Trempealeau | 525 | 273 | 252 |  | 3 | 16 | 2 | 355 | 26 | 90 | 53 | 1 |
| Vernon | 551 | 292 | 256 | 3 | 11 | 12 | 13 | 407 | 32 | 60 | 42 | 10 |
| Vilas | 115 | 61 | 53 | 1 |  | 6 |  | 55 | 10 | 11 | 38 | 1 |
| Walworth | 419 | 218 | 200 | 1 |  | 12 | 1 | 303 | 28 | 42 | 46 |  |
| Washburn . | 192 | 98 | 93 | 1 | 4 | 2 | 2 | 127 | 13 | 25 | 23 | 4 |
| W ashington | 496 | 261 | 235 |  | 7 | 14 | 4 | 413 | 17 | 35 | ¢8 | 3 |
| Waukesha | 651 | 344 | 307 |  | 12 | 26 | 19 | 425 | 46 | 74 | 92 | 14 |
| Waupaca | 7509 | 374 | 383 | 2 | 21 | 28 | 5 | 510 | 38 | 119 | 88 | 4 |
| Waushara | 483 | 249 | 232 | 2 | 5 | 12 | 2 | 335 | 13 | 55 | 77 | 3 |
| Winnebago | 1,212 | 620 | -89 | 3 | 12 | 26 | 16 | 733 | 88 | 161 | 219 | 11 |
| Wood ..... | 809 | 412 | 394 | 3 | 12 | 24 | 10. | 460 | 68. | 126 | 146 | 9 |
| Total | 52,261 | 26,978 | 25,191 |  | 826 | 1,127 | 773 | 31,157 | 2,949 | 3,519 | 10,934 | 702 |

TABLE NO, 9.-SHOWING STILLBIRTHS, TWIN BIRTHS AND ILLEGITTMATE BIRTHS REPORTED FROM JAN. 1, 1910 TO DEC. 31, 1910, CLASSIFIED BY COUNTIES AND SEX.

| County. | Stillbirths. |  |  |  | Twin Births. |  |  |  | Illegitimate Births. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\frac{\dot{\oplus}}{\underset{\sim}{\pi}}$ |  | $\begin{aligned} & \text { o } \\ & \stackrel{0}{0} \\ & 0 \\ & 0 \\ & \stackrel{0}{4} \\ & \mathbf{z} \end{aligned}$ |  |  |  |  | i் | $\stackrel{\text { ¢ }}{\text { ¢ }}$ |  |  |
| Adams | 5 | 2 | 3 |  | 4 |  | 4 |  |  |  |  |  |
| Ashland | 7 | 3 | 4 | $\ldots$ | 2 |  | 2 |  | 2 |  | 2 | $\ldots$ |
| Barron | 18 | 11 | 7 | $\ldots$ | 6 | 3 | 3 |  | 5 | 4 | 1 | $\ldots$ |
| Bayfield | 11 | 5 | 6 |  | 8 | 3 | 5 |  | 3 | 2 | 1 |  |
| Brown | 18 | 11 | 7 |  | 20 | 7 | 13 |  | 90 | 48 | 41 | 1 |
| Buff alo | 1 | 1 |  | . | 4 | 2 | 2 |  | 2 | 2 |  |  |
| Burnett | 3 | 2 | 1 | ..... | 2 | 1 | 1 |  | 2 | 1 | 1 | ... |
| Calumet | 4 | 1 | 3 |  | 8 | 4 | 4 |  | 2 | 2 |  |  |
| Chippewa | 4 | 3 | 1 | .... | 22 | 9 | 13 |  | 8 | 4 | 4 | $\cdots$ |
| Clark | 14 | 7 | 7 | .... | 16 | 13 | 3 |  | 4 | 2 | 2 | ... |
| Columbia | 9 | 8 | 1 |  | 16 | 7 | 9 |  | 6 | 3 | 3 | $\ldots$ |
| Crawford* | 10 | 5 | 5 |  | 8 | 3 | 5 |  | 5 | 4 | 1 |  |
| Dane | 18 | 10 | 7 | 1 | 28 | 16 | 12 |  | 9 | 3 | 6 |  |
| Dodge | 19 | 12 | 7 |  | 38 | 16 | 22 |  | 8 | 4 | 4 |  |
| Door | 10 | 6 | 4 |  | 8 | 3 | 5 |  | 6 | 3 | 3 |  |
| Douglas | 14 | 7 | 7 |  | 14 | 8 | 6 |  | 12 | 5 |  |  |
| Dunn | 2 | 1 | 1 |  | 12 | 7 | 5 |  | 4 | 2 | 2 |  |
| Eau Claire | 6 | 3 | 1 | 2 | 10 | 5 | 5 |  | 5 | 2 | 3 |  |
| Florence - ${ }^{\text {a }}$ |  |  |  |  | 6 | 2 | 4 |  | 1 | 1 |  |  |
| $\underset{\text { Forest }}{ }$ du Lac | 20 | 14 | 6 |  | 18 | 10 |  |  | 8 | , | 5 |  |
| Forest | ${ }^{6}$ | 2 | 1 | 3 | 2 |  | 1 | 1 | 1 |  |  | 1 |
| Grant | 13 | 7 | 5 | 1 | 8 | 4 | 4 |  | 13 | 4 | 9 |  |

TABLE NO. 9-SHOWING STILLBIRTHS TWIN BIRTHS AND ILLEGITIMATE BIRTHS REPORTED FROM JAN. 1, 1910, TO DEC. 31, 1910, CLASSIFIED BY COUNTIES AND SEX-Cont'd.

| Counts. | Stillbirths. |  |  |  | Twin Births. |  |  |  | Illegitimate Births. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { ָi } \\ & \text { Hi } \end{aligned}$ | $\underset{\underset{\sim}{\pi}}{\stackrel{\pi}{\pi}}$ |  |  | $\begin{gathered} \stackrel{\pi}{\pi} \\ \stackrel{0}{0} \end{gathered}$ | $\underset{\sim}{\sim}$ |  |  | $\begin{aligned} & \text { ञi } \\ & \stackrel{0}{\circ} \\ & \hline \end{aligned}$ |  |  |  |
| Green | 2 | 1 | 1 | $\ldots$ | 10 | 7 | 3 | $\ldots$ | 7 | 7 |  |  |
| Green Lake | 3 | 1 | 2 |  | 6 |  | 2 |  | 2 |  | 2 | .... |
| Iowa | 7 | 4 | 3 |  | 12 | 5 | 7 |  | 3 | 2 | 1 | $\ldots$ |
| Iront | 6 | 4 | 2 | .... | 4 | 2 | 2 |  | 4 | 3 | 1 |  |
| Jackson | 2 | 2 |  |  | 8 | 1 | 7 |  | 1 | 1 |  |  |
| Jefferson | 6 | 5 | 1 |  | 8 | 3 | 5 |  | 3 | 2 | 1 | .... |
| Juneau | 6 | 3 | 3 |  | 8 | 4 | 4 |  | 3 | 1 | 2 |  |
| Kenosha $\ddagger$ | 18 | 11 | 4 | 3 | 22 | 13 | 9 |  | 2 | 2 |  |  |
| Kewaunee | 5. | 3 | 21 |  | 8 | 3 | 5 |  | 1 | 1 |  |  |
| La Crosse | 7 | 7 |  |  | 18 | 7 | 11 |  | 12 | 1 | 8 |  |
| Lafayette | 4 | 4 |  |  | 4 | 3 | 1 |  | 1 | 1 |  |  |
| Langlade | 6 | 2 | 3 | 1 | 24 | 14 | 10 |  | 3 |  | 3 |  |
| Lincoln . | 4 | 2 | 1 | 1 | 10 | 8 | 2 |  | 8 | 4 | 4 |  |
| Manitowoc | 19 | 10 | 7 | 2 | 12 | 5 | 7 |  | 4 | 3 | 1 |  |
| Marathon | 20 | 14 | 6 |  | 33 | 13 | 25 |  | 9 | 6 | 3 |  |
| Marinette | 16 | 11 | 5 |  | 10 | 6 | 4 | $\ldots$ | 6 | 4 | 2 | .... |
| Marquette | 5 | 4 | 1 |  |  |  |  |  | 1 | 1 |  |  |
| Milwaukee $\ddagger$ | 192 | 103 | 81 | 8 | 232 | 122 | 110 |  | 309 | 154 | 154 | 1 |
| Monroe | 5 | 2 | 3 |  | ${ }^{6}$ |  | 6 |  | 12 | 6 | 6 |  |
| Oconto | 5 | 3 | 1 | 1 | 12 | 2 | 10 |  | 9 | 4 | 5 |  |
| Oneida | 1 |  | 1 |  | 6 | 4 | 2 |  | 1 |  | 1 |  |
| Outagamie | 17 | 7 | 10 | $\ldots$ | 28 | 14 | 14 |  | 9 | 5 | 4 |  |
| Ozaukee | 5 | 2 | 3 | ..... | 10 | 4 | 6 |  | 1 |  | 1 |  |
| Pepin | 1 | 1 |  |  | 4 | 3 | 1 |  | 3 | $\stackrel{2}{2}$ | 1 | .... |
| Pierce | 6 | 4 | 2 |  | 8 | 8 | 3 |  | 1 | 1 |  |  |
| Polk | 5 | 1 | 4 |  | 22 | 8 | 14 |  | , | 1 |  |  |
| Portage | 16 | 13 | 1 | 2 | 10 | 3 | 7 |  | 6 | 3 | 3 |  |
| Price | 6 | 5 | 1 |  | 8 | 3 | 5 |  | 4 | 2 | 2 |  |
| Racine | 25 | 11 | 13 | 1 | 22 | 11 | 11 |  | 6 | 2 | 4 |  |
| Richland | 8 | 3 | 5 |  | 10 | 6 | 4 |  | 3 | 2 | 1 |  |
| Rock | 19 | 11 | 8 |  | 28 | 17 | 11 |  | 34 | 14 | 20 |  |
| Rusk $\ddagger$ | 6 | 2 | 4 |  | 4 | 3 | 1. |  | 2 | 1 | 1 |  |
| St. Croi | 9 | 2 | 6 | 1 | 10 |  |  |  | 3 | 1 | 2 |  |
| Sauk | 18 | 10 | 8 |  | 14 | 10 | 1 |  | 4 | 4 |  |  |
| Sawyer | 5 | 4 | 1 |  | 2 | 1 | 1 |  | 3 | 1 | $\frac{2}{7}$ |  |
| Shawano | 14 | 10 | 4 |  | 22 | 18 | 4 |  | 14 |  | 7 |  |
| Sheboygan | 18 | 8 | 10 |  | 22 | 11 | 11 |  | 5 | 4 | 1 |  |
| Taylor | 6 | 1 | 5 |  | 6 | 2 | 4 |  | 3 | 1 | 2 |  |
| Trempealeau | 3 | -2 | 1 |  | 16 | 12 | 4 |  | 2 | 2 |  |  |
| Vernon | 11 | 6 | 4 | 1 | 12 | 5 | 6 | 1 | 13 | 7 | 4 | 2 |
| Vilas .... |  |  |  |  | ${ }^{6}$ | 4 | 2 |  |  |  |  |  |
| Walworth | 4 | 3 | 1. |  | 12 | 6 | 6 |  | 1 | 1 |  |  |
| Washburn | 4 | 2 | 2 |  | 2 | 2 |  |  | 2 | 1 | 1 |  |
| Washington | 7 | 4 | 3 |  | 14 | 7 |  |  | 4 | 3 | 1 |  |
| Waukesha | 12 | 4 | 8 |  | ¢6 | 14 | 12 |  | 19 | 14 | 5 |  |
| Waupaca | 21 | 10 | 10 | 1 | 28 | 14 | 14 |  | 5 | 2 | 3 |  |
| Waushara | 5 | 2 | 3 |  | 12 | 8 | 4 |  | 2 |  | 2 |  |
| Winnebago | 12 | 8 | 4 |  | ${ }^{26}$ | 35 | 11 |  | 16 | 7 | 9 |  |
| Wood* ... | 12 | 5 | 6 | 1 | 24 | 10 | 14 |  | 10 | 4 | 6 |  |
| Total | 826 | 458 | 338 | 30 | 1,127 | 570 | 555 | 2 | 773 | 397 | 371 | 5 |

[^20]
## MARRIAGES.

For the calendar year of $1909,17,716$ marriages, or 35,432 persons married, were reported to the State Bureau of Vital Statistics. This represents an annual marriage rate of 15 persons married, per one thousand gross population. The highest rate for 1909, as shown by table No. 3, is 22.6 for Kenosha county, and the lowest rate is 7.1 in Vilas county.

During the calendar year of $1910,18,528$ marriages, or 37,056 persons married, were recorded. This gives an annual marriage rate for the state, during 1910, of 15.8 persons married per thousand population. The highest marriage rate for 1910, as shown by table No. 12, is 21.6 for Milwaukee county, and the lowest is 5.6 in Vilas county.

By making a careful study of the marriages reported, as compared with the marriage licenses issued and the special dispensations granted for each county, it is proven that we are obtaining, under the present system, practically complete reports of all marriages which occur in the state at the present time. The Wisconsin system for recording marriages, which requires that a marriage certificate, more or less completely filled out, must be issued and sent out with the license or spcial dispensation, keeping a stub record of the proposed marriage, which can be used in checking the accuracy of the reports, is, we believe, the most practical solution of the problem. If sufficient clerical assistance were available in the state office so that the stub records could be called in each year and the marriages reported checked from this list, all failures to file certificates would be discovered and we would have an absolutely accurate report of every marriage which occurs in the state.

In the classification of marriages for each county by calendar years, given in table No. 10, it is shown that the total marriages recorded have increased from 16,315 in 1905 to 18,528 in 1910. The maximum number of marriages recorded is for 1907 , when there were 19,281 marriages.

It is shown by table No. 11, for 1909, in the classification of marriages according to the nativity of the bride and groom that there were 12,790 marriages where both parties were native born; 884 marriages where the groom was native and the bride foreign; 1,991 marriages where the groom was foreign and the bride native; 1,921 marriages where both parties were foreign born; and 130 marriages where the birthplace of one or both parties were unknown or not stated.

In the tabulations for 1910, acording to the nativity of the bride and groom, which is found in table No. 12, there were 13,225 marriages
where both parties were native born; 886 marriages where the groom was native and the bride foreign; 2.083 marriages where the groom was foreign and the bride native; 2,219 marriages where both parties were foreign born; and 115 marriages where the birthplace of one or both parties were unknown or not stated.

During the two years covered by this report out of a total of 36,244 marriages recorded, there were 2,550 marriages where the groom was widowed and 928 marriages where the groom was divorced.

Classifying the brides according to conjugal condition prior to marriage, i. e.-whether single, widowed or divorced-it is shown that out of a total of 36,244 brides, 1,937 of them were widowed and 1,089 were rivorced.

Based on the reports for these two years, it is shown that there is a greater tendency on the part of divorced women to remarry than there is for divorce men to remarry. Widowed men, however, remarry nearly twice as often as widowed women.

TABLE NO. 10.-SHOWING MARRIAGES REPORTED IN WISCONSIN BY CALENDAR YEARS FOR EACH OOUNI'Y.

| County | 1905 | 1906 | 1807 | 1908 | 1909 | 1910 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Adams | 66 | 62 | 94 | 50 | 46 | 46 |
| Ashland | 202 | 176 | 199 | 139 | 156 | 137 |
| Barron | 202 | 174 | 206 | 205 | 206 | 194 |
| Bayfield | 100 | 99 | 50 | 62 | 66 | 58 |
| Brown | 387 | 480 | 437 | 380 | 418 | 408 |
| Buffalo | 133 | 121 | 93 | S5 | 90 | 96 |
| Burnett | 54 | 54 | 60 | 54 | 45 | 51 |
| Calumet | 128 | 116 | 129 | 120 | 105 | 97 |
| Chippewa | 248 | 248 | 252 | 204 | 238 | 2\% |
| Clark | 194 | 196 | 214 | 2:8 | 188 | 183 |
| Columbia | 220 | 203 | 226 | 229 | 246 | 224 |
| Crawford | 135 | 141 | 107 | 107 | 135 | 123 |
| Dane | 398 | 499 | 540 | 514 | 529 | 512 |
| Dodge | 339 | 352 | 344 | 307 | 299 | 352 |
| Door | 136 | 122 | 154 | 129 | 115 | 152. |
| Douglas | 277 | 251 | 371 | 341 | 285 | 302 |
| Dunn ... | 195 | 179 | 185 | 200 | 186 | 190 |
| Eau Claire | 228 | 280 | 263 | 251 | 302 | 293 |
| Florence | 20 | 18 | 34 | 26 | 20 | 27 |
| Fond du Lac. | 399 | ¿S0 | 444 | 436 | 371 | 380 |
| Forest | 29 | 30 | 44 | 34 | 37 | 39 |
| Grant | 246 | 259 | 284 | 263 | 250 | 254 |
| Green | 189 | 166 | 188 | 156 | 153 | 184 |
| Green Lake | 116 | 95 | 115 | 167 | 120 | 129 |
| Iowa | 154 | 150 | 150 | 138 | 158 | 163 |
| Iron | 67 | 46 | 128 | 76 | 65 | 59 |
| Jackson | 116 | 104 | 137 | 103 | 103 | 85 |
| Jefferson | 264 | 253 | 310 | 254 | 281 | 245 |
| Juneau | 157 | 171 | 138 | 130 | 148 | 132 |
| Kenosha | 306 | 385 | 330 | 316 | 347 | 3\%s, |
| Kewaunce | 140 | 141 | 125 | 129 | 126 | 121 |
| La Crosse | 348 | 385 | 358 | 347 | 400 | 365 |
| Lafayette | 130 | 128 | 119 | 112 | 130 | 113 |
| Langlade | 111 | 99 | 138 | 117 | 137 | 121 |
| Lincoln | 136 | 163 | 175 | 135 | 120 | 141 |
| Manitowoc | 352 | 351 | 338 | 329 | 373 | 374 |
| Marathon | 366 | 410 | 395 | 377 | 417 | 369 |
| Marinette | 153 | 171 | 200 | 168 | 170 | 152 |
| Marquette | 80 | 77 | 103 | 84 | 94 | ع0* |
| Milwaukee | 3,027 | 3,512 | 4,675 | 3,747 | 4,178 | 4,689 |
| Monroe | 203 | 218 | 249 | 203 | 201 | 216 |
| Oconto | 155 | 146 | 148 | 107 | 123 | 153 |
| Oneida | 88 | 90 | 87 | 85 | 81 | 88 |
| Outagamie | 400 | 383 | 361 | 319 | 335 | 359 |
| Ozaukee | 120 | 127 | 113 | 115 | 117 | 89 |
| Pepin | 45 | 70 | 69 | 54 | 46 | 60 |
| Pierce | 130 | 111 | 129 | 100 | 108 | 112 |
| Polk | 157 | 132 | 126 | 111 | 110 | 121 |
| Portage | 230 | 241 | 303 | 239 | 227 | 23 à |
| Price. | 75 | 68 | 71 | 57 | 56 | 49: |
| Racine | 364 | 388 | 467 | 447 | 414 | 505 |
| Richland | 172 | 185 | 152 | 150 | 154 | 168: |
| Rock | 262 | 333 | 371 | 391 | 363 | 383: |
| Rusk | 62 | 73 | 103 | 67 | 68 | 80. |
| St. Croix | 228 | 277 | 301 | 259 | 266 | 274. |
| Sauk | 266 | 280 | 295 | 270 | 254 | 268 : |
| Sawyer | 25 | 40 | 39 | 44 | 24 | 32 |
| Shawano | 177 | 198 | 250 | 283 | 253 | 270 |
| Sheboygan | 405 | 413 | 459 | 430 | 428 | 472 |
| Taylor | 72 | 86 | 100 | 95 | 83 | 84. |
| Trenipealeau | 150 | 170 | 141 | 186 | 172 | $157^{\circ}$ |
| Verıon | 205 | 205 | 230 | 207 | 181 | 172 |
| Vinas | 22 | 20 | 23 | 26 | 21 | 17 |
| Walworth | 209 | 206 | 188 | 1.67 | 177 | 162 |
| Washburn | 56 | 62 | 74 | 60 | 43 | 52 |
| Washington | 168 | 161 | 170 | 142 | 162 | 176; |
| Waukesha | 255 | 284 | 264 | 243 | 255 | 295. |
| Waupaca | 271 | 253 | 306 | 266 | 260 | 261. |
| Waushara | 109 | 143 | 131 | 102 | 146 | 162. |
| Winnebago | 465 | 472 | 463 | 439 | 499 | 535 ; |
| Wood | 223 | 227 | 255 | 229 | 236 | 265. |
| Total | 16,315 | 17,319 | 19,281 | 17,122 | 17,716 | 18,528. |

TABLE NO. 11--SHOWING MARRIAGES REPORTED TO THE STATE BUREAU OF VITAL STATISTICS FROM JAN. 1, 1909 TO DEO. 31, 1909, CLASSIFIED BY COUNTIES AND PLACE OF BIRTH.

| County, |  | Groom. |  | Bride. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{aligned} & \dot{\square} \\ & \stackrel{0}{0} \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  | $\begin{aligned} & \text { 『ं } \\ & 0.0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  |  |
| Adams | 46 | 5 | 1 | 3 |  | 30 | 2 | 7 |
| Ashland | 156 | 9 | 2 | 12 | 3 | 82 | 2 | 37 |
| Barron | 206 | 25 | 2 | 21 | 8 | 129 | 13 | 27 |
| Bayfleld | 66 | 8 | 3 | 7 | 2 | 38 | 4 | 13 |
| Brown . | 418 | 23 | 6 | 21 | 8 | 344 | 13 | 33 |
| Buffalo | 90 | 6 |  | 1 | 3 | 77 | 1 | 9 |
| Burnett | 45 | 3 | 2 | 3 | 1 | 29 | 3 | 9 |
| Calumet | 105 | 6 | 1 | 5 | 1 | 97 | 1 | 4 |
| Chippewa | 238 | 19 | 6 | 13 | 7 | 14.3 | 16 | 37 |
| Clark ... | 188 | 15 | 5 | 10 | 6 | 149 | ${ }^{6}$ | 19 |
| Columbia | 246 | 13 | 4 | 10 | 3 | 203 | 11 | 22 |
| Crawford | 135 | 7 | 7 | 8 | 7 | 124 | 1 | 6 |
| Dane .... | 529 | 35 | 11 | 20 | 19 | 395 | 29 | 63 |
| Dodge | 259 | 22 | 5 | 15 | 7 | 254 | 14 | 20 |
| Door | 115 | 6 | 1 | 5 | 1 | 97 | 1 | 14 |
| Douglas | 235 | 23 | 12 | 23 | 16 | 122 | 22 | 45 |
| Dunn | 186 | 15 | 2 | 7 | 5 | 144 | 9 | 24 |
| Eau Olaire | 302 | 28 | 5 | 12 | 11 | 239 | 14 | 29 |
| Florence | 20 | 4 | 1 | 1 | 2 | 10 | 4 | 3 |
| Fond du Lac. | 371 | 23 | 13 | 15 | 9 | 303 | 12 | 33 |
| Forest | 37 | 2 | 3 | 2 | 1 | 20 | 1 | 5 |
| Grant . | 2 O | 11 | 6 | 13 | 4 | 231 | 2 | 11 |
| Green | 153 | 12 |  | 7 | 4 | 120 | 5 | 12 |
| Green Lake | 120 | 8 |  | 4 | 1 | 89 | 7 | 18 |
| Iowa | 158 | 12 | 1 | 7 | 1 | 140 | 1 | 12 |
| Iron | 65 | ${ }_{6}^{6}$ | 1 | 8 | 1 | 10 | 4 | 7 |
| Jackson | 103 | 12 | 2 | 12 |  | 80 | 5 | 11 |
| Jefferson | 281 | 25 | 2 | 11 | 3 | 222 | 18 | 24 |
| Juneau | 148 | 14 | 12 | 12 | 3 | 123 | 9 | 8 |
| Kenosha | 347 | 36 | 19 | 24 | 26 | 175 | 17 | 34 |
| Kewaunee | 126 | 3 |  | 4 |  | 119 | 1 | 2 |
| 1a Crosse | 400 | 44 | 16 | 36 | 15 | 305 | 27 | 38 |
| Lafayette | 130 | 8 | 2 | 2 |  | 117 | 2 | 8 |
| Langlade | 137 | 5 | 4 | 6 | 2 | 100 | 6 | 20 |
| Lincoln . | 1*0 | 11 | 2 | 4 | 4 | 83 | 8 | 16 |
| Manitowoc | 373 | 21 | 3 | 9 |  | 329 | 6 | 36 |
| Marathon | 417 | 28 | 4 | 22 | 9 | 32 | 16 | 50 |
| Marinette | 170 | 18 | 2 | 15 | 3 | 107 | 13 | 31 |
| Marquette | 94 | 7 |  | 2 | 1 | 81 | 3 | 7 |
| Milwauke | 4,178 | 285 |  | 27.3 |  | 2,480 | 272 | 577 |
| Monroe | 201 | 23 | 5 | 10 | 6 | 162 | 6 | 20 |
| Oconto | 123 | $\varepsilon$ | 3 | $\delta$ | 1 | 76 | 11 | 24 |
| Oneida | 81 | 7 |  | 5 |  | 5 | 4 | 7 |
| Outagamie | 335 | 20 |  | 20 |  | 288 | 14 | 29 |
| Ozaukee .. | 117 | 2 | 1 | 3 | 2 | $\bigcirc$ | 4 | 10 |
| Pepin . | 46 | 2 |  | 2 |  | 38 | 3 | 5 |
| Pierce | 108 | 10 | 4 | $\stackrel{\square}{8}$ | 5 | 89 | 4 | 8 |
| Polk ... | 110 | 12 | 2 | 8 |  | 66 | 7 | 20 |
| Portage | 227 | 16 | 4 | 8 | 7 | 180 | 11 | 30 |
| Price . | 56 | 4 |  | 3 |  | 35 | 5 | 10 |
| Racine | 414 | 43 | 15 | 37 | 15 | 244 | 23 | $6)$ |
| Richland | 154 | 20 | 7 | 9 | 7 | 149 | 1 | 1 |
| Rock | 363 | 30 | 13 | 20 | 11 | 288 | 21 | 31 |
| Rusk | 68 | 2 | 3 | 2 | 4 | 56 | 4 | 2 |
| St. Croix | 266 | 25 | 29 | 13 | 42 | 198 | 16 | 35 |
| Sauk .... | 254 | 15 | 7 | 11 |  | 216 | 12 | 18 |
| Sawyer | 24 | 2 |  | 2 | 1 | 13 | 1 | 3 |
| Shawano | 253 | 23 | 9 | 12 | 13 | 197 | 11 | 36 |
| Sheboygan | 428 | 22 | 2 | 14 | 6 | 325 | 16 | 32 |
| Taylor .... | 83 | 9 | 3 | 7 | 3 | 50 | 4 | 16 |
| Trempealeau | 172 | 6 | $\stackrel{2}{2}$ | 3 |  | 133 | 15 | 18 |
| Vernon | 181 | 9 | 3 | 5 | 4 | 150 | 6 | 14 |
| Vilas | 21 |  |  | 1 | 1 | 14 | 2 | 1 |
| Walworth | 177 | 8 | 8 | 13 | 3 | 141 | 5 | 17 |
| Washburn | 43 | 2 | 2 | 5 |  | 29 | 2 | 9 |
| Washington | 162 | 10 | 2 | 5 | 2 | 141 | 6 | 12 |
| Waukesha | 255 | 18 | 12 | 16 | 4 | ¢08 | 9 | ¢1 |
| Waunaca | 260 | 18 | 10 | 9 | 11 | 200 | 15 | 33 |
| Waushara | 146 | 15 | ${ }^{2}$ | ${ }^{6}$ | 3 | $1{ }^{17} 0$ | 4 | 15 |
| Winnebago | 499 | 43 | 16 | 21 | 18 | 379 | 31 | 51 |
| Wood .... | 236 | 13 | 2 | 12 | 6 | 150 | 10 | 23 |
| Total | 17,716 | 1.300 | 486 | 976 | 536 | 12.7:0 | 884 | 1,991 |

TABLE NO. 11.-SHOWING MARRIAGES REPORTED TO THE STATE BUREAU OF VI'I'AL S'I'ATIS'IICS FROM JAN. 1, 1909 TO DEC. 31, 1909, CLLASSIFIED BY COUNTIES AND PLACE: OF BIRTH.-Cont.


TABLE NO. 12.-SHOWING MARRIAGES REPORTED FROM JAN. 1, 1910 TO DEC. 31, 1910, CLASSIFIED BY COUNTTES AND PLACE OF BIRTH.


TABLE NO. 12.-SHOWING MARRIAGES REPORTED FROM JAN. 1, 1910 TO DEC. 31, 1910, CLASSIFIED BY COUNTIES AND PLACE OF BIRT'H.-Cont.

| County. |  |  | Native born. |  | Foreign born. |  | Unknown. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\frac{\dot{\sim}}{\underset{\sim}{\pi}}$ |  | $\stackrel{\text { ® }}{\stackrel{\pi}{\pi}}$ |  |  | 守 |
| Adams | 1 | - 1 | 38 | 41 | I | 4 | 1 | 1 |
| Ashrron | 24 18 | 4 | 146 | 105 | 54 44 | 32 |  |  |
| Bayfield | 8 |  | 38 | 42 | 20 | 16 | 4 | 4 |
| Brown | 20 | 7 | 335 | 365 | 66 | 36 | 7 | \% |
| Buffalo |  |  | 89 | 93 | 7 | 16 3 | 7 | , |
| Burnett | 4 |  | 38 | 46 | 13 | 5 |  |  |
| Calumet | 3 |  | 85 | 92 | 12 | 5 |  |  |
| Chippewa | 16 | 1 | 202 | 223 | 56 | 35 | 1 | i |
| Clark ... | 5 | 3 | 153 | 161 | 26 | 18 | 3 | 3 |
| Columbia | 12 |  | 197 | 207 | 27 | 17 |  |  |
| Drawford | 1 | ${ }_{2}^{2}$ | 117 | 119 | 4 | 2 | 2 | $\ddot{2}$ |
| Dane .. | 47 | 2 | 412 | 441 | 98 | 69 | 2 | 2 |
| Dodge | 15 | 2 | 306 | 324 | 44 | 26 | 2 | 2 |
| Door . | 6 |  | 129 | 141 | 23 | 11 |  |  |
| Douglas | 121 |  | 119 | 160 | 183 | 142 |  |  |
| Dunn | 11 | 2 | 156 | 172 | 32 | 16 | $\ddot{2}$ | 2 |
| Eau Claire | 14 | 2 | 246 | 259 | 45 | 32 | 2 | 2 |
| Florence ..... |  | 2 | 21 | 22 | 4 | 3 | 2 | 2 |
| Fond du Lac | 12 |  | 327 | 349 | 53 | 31 |  | . |
| Forest | 1 | 1 | 32 | 34 | 6 | 4 | i | 1 |
| Grant | 3 | 2 | 238 | 244 | 14 | 8 | 2 | 2 |
| Green ..... | 28 |  | 140 | 148 | 44 | 36 |  |  |
| Green Lake | 6 |  | 113 | 121 | 16 | 8 |  |  |
| Iowa | 5 | 1 | 145 | 156 | 17 | 6 | i | 1 |
| Sawyer | 34 |  | 18 | 22 | 41 | 37 |  |  |
| Jackson | 5 |  | 74 | 77 | 11 | 8 |  |  |
| Jefferson | 7 |  | 217 | 226 | 28 | 19 |  |  |
| Juneau | 5 | 1 | 108 | 122 | 23 | 9 | 1 | i |
| Kenosha | 110 | 1 | 184 | 203 | 143 | 124 | 1 | 1 |
| Kewaunee | 3 |  | 114 | 118 | 7 | 3 |  |  |
| La Crosse | 14 | 8 | 309 | 327 | 48 | 30 | 8 | 8 |
| Lafayette | 3 | 2 | 101 | 105 | 10 | 6 | 2 | $\stackrel{1}{2}$ |
| Langlade | 6 | 1 | 98 | 110 | - 22 | 10 | 1 | 1 |
| Lincoln .. | 10 | 1 | 109 | 121 | 31 | 19 | 1 | 1 |
| Manitowoc | 11 | 3 | 328 | 348 | 43 | 23 | 3 | 3 |
| Marathon | 29 | 1 | 331 | 357 | 67 | 41 | 1 | 1. |
| Marinette | 19 | 2 | 106 | 124 | 44 | 26 | 2 | 2 |
| Marquette | 1 1,077 | 19 | 73 2,957 | 77 3,294 | 7 1,713 | $\begin{array}{r}3 \\ 1 \\ \hline 176\end{array}$ |  |  |
| Monroe .. | 1,077 | 19 11 | 2,957 180 | 3,294 192 | 1,713 25 | 1,376 13 | 19 11 | 19 11 |
| Oconto | 21 | 1 3 | 111 | 121 | 25 39 | 13 | 11 3 | 11 |
| Oneida | 12 | 4 | 56 | 67 | 28 | 17 | 3 4 | 4 |
| Outagamie | 18 | 4 | 313 | 319 | 42 | 36 | 4 | 4 |
| Ozaukee | 9 |  | 75 | 79 | 14 | 10 |  | . |
| Pepin | 1 | 1 | 54 | 58 | 5 | 1 | 1 | i |
| Pierce | 5 |  | 98 | 107 | 14 | 5 |  |  |
| Polk ... | 10 | 4 | co | 99 | 27 | 18 | 4 | 4 |
| Portage | 11 | 1 | 187 | 214 | 47 | 20 | 1 | 1 |
| Price | 12 | 1 | 32 | 32 | 16 | 16 |  | 1 |
| Racine | 124 | 2 | 325 | 356 | 178 | 147 | 2 | 2 |
| Richland | $\stackrel{2}{24}$ | 3 | 159 319 | 163 339 | 9 61 | 5 41 |  |  |
| Rusk | $\begin{array}{r}24 \\ 3 \\ \hline\end{array}$ | 3 | 319 73 | 339 74 | 61 7 | 41 6 | 3 | 3 |
| St. Croix | 22 | 2 | 216 | 225 | 56 | 47 | 2 | 2 |
| Sauk | 8 |  | 236 | 256 | 32 | 12 |  |  |
| Iron | 2 |  | 27 | 28 | 5 | 4 |  |  |
| Shawano | 11 | 1 | 227 | 249 | 42 | 20 | 1 | 1 |
| Sheboygan | 70 |  | 347 | 332 | 125 | 80 |  |  |
| Taylor | 18 |  | 50 | 56 | 34 | 28 |  |  |
| Trempealeau | 5 |  | 131 | 143 | 26 | 14 |  |  |
| Vernon | 3 | 2 | 158 | 161 | 12 | 9 | 2 | 2 |
| Vilas .... | 4 |  | 11 | 12 | 6 | 5 |  |  |
| Washburn | 7 3 | 1 | 143 | 149 | 19 | 13 |  |  |
| Washington | 1 | 1 | 160 | 174 | 16 | 8 | 1 | 1 |
| Waukesha | 21 |  | 248 | 261 | 47 | 34 |  |  |
| Waupaca | 13 | 1 | 216 | 228 | 44 | 32 | 1 | 1 |
| Waushara | 12 |  | 139 | 145 | 23 | 17 |  |  |
| Winnebago | 33 | 2 | 453 | 471 | 80 | 62 | 2 | $\stackrel{\square}{2}$ |
| Wood . | 14 | 1 | 201 | 236 | 63 | 28 | 1 | 1 |
| Total | 2,219 | 115 | 14,111 | 15,308 | 4,302 | 3,105 | 115 | 115 |

TABLE NO. 13.-SHOWING MARRIAGES REPORTED FROM JAN. 1, 1909 TO DEC. 31, 1900, ARRANGEDI ACOOORDING TO AGE GROUPS.
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TABLE NO. 13.-SHOWING MARRIAGES REPORTED FROM JAN. 1, 1909, TO DEC. 31, 1909, ARRANGED ACCOORDING TO AGE GROUPS.-Continued.
 31 1909, ARRANGED' ACCORDING 'IV AGE GROUPS.-Continued.


TABLE NO. 14.-SHOWING MARRIAGES REPORTED FROM JAN. 1, 1910 TO DEC. 31, 1910, ARRANGED ACOORDING TO AGE GROUPS.


TABLE NO. 14.-SHOWING MARRIAGES REPORTED FROM JAN. 1, 1910 TO DEO. 31. 1910, ARRANGED A.CCORDING TO AGE GROUPS.-Continued.


TABLE NO' 14.-SHOWING MARRIAGES REPORTED FROM JAN. 1, 1910, TO DEC. 31, 1910, ARRANGED AOCORDING TO AGE GROUPS.-Continued.

ACCIDENTS.During the calendar year of $1909,10,381$ accidental injuries, incapaci-tating the person injured for at least two weeks or more, were reportedto the Bureau of Vital Statistics. 9,030 of the total were accidents tomales, and 1,301 were accidents to females.Considering the total accidents by conjugal condition, it is shownby table No. 15 that 5,572 were single; 4,654 were married; and in 105cases the conjugal relation was unknown or not stated.
The age grouping of the persons injured is shown as follows:
Under 10 years ..... 844
From 10 to 19 years ..... 1, 723
From 20 to 29 years ..... 2,821
From 30 to 39 years ..... 1,921
From 40 to 49 years. ..... 1,380
From 50 to 59 years ..... $79^{-}$
From 60 to 69 years ..... 420
70 years of, age or over ..... 227
Age not stated ..... 200
Arranging the accidents with reference to the nature of the injury, it is shown by table No. 15 that 431 were fatal accidents; 834 were classed as severe; and 1,459 as slight. 8,841 accidents resulted in some temporary disability and 1,490 resulted in permanent disablement. 677 of the permanent disabilities resulted in the loss of a part of a hand or fingers; 41 in the loss of an entire hand or arm; 49 in the loss of part of the foot; 39 in the loss of an entire foot or leg; 22 in the loss of one eye; 135 resulted in a severe injury to one or both eyes; 226 resulted in some internal injury; and 301 were other permanent disabilities.
The causes of temporary disability with the number of cases is given as follows:
Hands or fingers, lacerated or bruised. . . . . . . . . . . . . . . . . . . . . . . . . . . . 1, 854
Foot lacerated or bruised........................................................ . . . . 590
Other lacerations or bruises...................................................... 1, 748
Fracture of arm. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1, 124
Fracture of leg........................................................................... 811
Other fractures . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1,065
Sprains or dislocations. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 929

Others . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 253
The following is a summary of accidents reported according to the duration of the injury:
Fatal soon after injury......................................................... . . 353
Fourteen days' duration. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2,651
'Twenty-one days’ duration. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1, 766
'One month's duration. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3, 358

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Two months' duration ..... 1,330
Three months' duration ..... 359
Four months' duration ..... 86.
Over four months' duration ..... 105
Duration not stated. ..... 323
Arranging the accidents reported for 1909, according to the cause ofthe accident the following results are shown:
Gearings, shafts, belts, or set screws ..... 125
Emery wheels, reamers and riveters. ..... 60
Press machines ..... 160.
Band and circular saws ..... 423
Planers, lathes, and other wood carving machines. ..... 153
Corn shredders and other farm machinery ..... 180
Other accidents due to the use of machinery ..... (:5ั)
Transportation service ..... 310
Other railroad employment ..... 408
Passengers ..... 51
Trespassers and other non-employees. ..... 108
Railroad crossings ..... 31
Street cars ..... 167
Horse vehicles and horses. ..... 788
Automobiles ..... 105
Hand tools ..... 518
Firearms and explosions ..... 342.
Hot water, acids and fire. ..... 282
Football and other athletic games. ..... 131
Falling objects, dropping or handling materials ..... 1,360
Fall on defective or slippery sidewalk. ..... 327
Fall on stairs ..... 244
Fall from high places. ..... 448
Other falls ..... , 475
Bites from horses and dogs ..... 68
Other causes ..... 1,412
The 1,412 accidents due to other causes may be tabulated in part as follows: Wrestling and fighting, 137; cut hand with glass, 130; falls on ice, 112; stepped on nail, 93 ; falls from stepladder, 87 ; splinter in finger, hand or foot, 58 ; drowning, 53 ; elevators, 45 ; falls from chair, 44 ; falls from bicycle, 43; other foreign substances in eye, 33 ; nail scratch on hand, 31 ; steel in eye, 30 ; gasoline engines, 30 ; stepped on or kicked by cow, 30 ; coasting, 26 ; caught finger in door, 26 ; bank caved in, 23; electric shock, 23; fire'crackers, 23 ; roller skates, 23; other fireworks, 22 ; freezing, 20; falls from bridge, 19 ; suffocation, 17; falls from swing, 15; stepped on glass, 13 ; needle in finger or hand, 13; cut hand with lawn mower, 12; emery in eye, 11; gored by bull, 11; motorcycle, 10; washing machine, 10 ; finger caught in clothes wringer, 10 ; ran wire in finger on hand, 8 ; cinders in eye, 8 ; falls. from hammock, 7; burned with gas, 7; accidentally drank carbolic acid, 6; injured with pitchfork, 6; bitten by cat, 5 ; needle or pin scratch on finger or hand, 4; fishhool: in finger, 3; and merry-gorounds, 2.

During the calendar year of 1910, 11,966 accidental injuries, incapacitating the person injured for at least two weeks or more, were reported to the Bureau of Vital Statistics. 10,590 of the total were accidents to males, and 1,376 were accidents to females.

Considering the total accidents by conjugal condition, it is shown by table No. 17 , that 6,352 were single; 5,474 were married; and in 140 cases the conjugal relation was unknown or not stated.

The age grouping of the persons injured is shown as follows:
Under 10 years. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 804
From 10 to 19 years................................................................ . . 1, 849
From 20 to 29 years................................................................... 3,656
From 30 to 39 years.............................................................. . . 2,214
From 40 to 49 years................................................................ . . 1,577
From 50 to 59 years................................................................ . . . 928

70 years of age or over. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 241

Arranging the accidents with reference to the nature of the injury, it is shown by table No. 17 that 438 were fatal accidents; 9,373 were classed as severe; 1,852 were slight; and in 303 cases the nature of the injury was not stated. 10,760 accidents resulted in some temporary disability and 1,206 resulted in perm rent disablement. 560 of the permanent disabilities resulted in the loss of a part of a hand or fingers; 53 in the loss of an entire hand or arm; 48 in the loss of part of the foot; 48 in the loss of an entire foot or leg; 104 in the loss of one eye; 73 resulted in severe injury to one or both eyes; 181 resulted in some internal injury; and 139 were other permanent disabilities.

The causes of temporary disability with the number of cases is given as follows:
Hands or fingers lacerated or bruised..................................... 2,528
Foot lacerated or bruised....................................................... 686
Other lacerations or bruises................................................... 1,671
Fracture of arm.................................................................... 935
Fracture of leg.................................................................. 725
Other fractures ................................................................ 1,416
Sprains or dislocations....................................................... 1,183
Burns and scalds................................................................... 631
Others ............................................................................... 985
The following is a summary of accidents reported according to the duration of the injury:
Fatal soon after injury.......................................................... 395

Twenty-one days' duration..................................................... . 2,144
One month's duration........................................................... 2,973
Two months' duration.......................................................... 1,847
Three months' duration.......................................................... 458
Four months' duration. ......................................................... . . . 106
Over four months' duration................................................... . . . 120
Duration not stated................................................................ 345
Arranging the accidents reported for 1910, according to the causeof the accident the following results are shown:
Gearings, shafts, belts or setscrews ..... 208
Emery wheels, reamers and riveters ..... 96
Press machines ..... 164
Band and circular saws ..... 179
Planers, lathes, and other wood carving machines ..... 141
Corn shredders and other farm machinery ..... 113
Other accidents due to the use of machinery ..... 786
Transportation service ..... 109
Other railroad employment ..... 311
Passengers ..... 29
Trespassers and other non-employees ..... 114
Railroad crossings ..... ${ }^{*} 18$
Street cars ..... 87
Horse vehicles and horses ..... 586
Automobiles ..... 104
Hand tools ..... 681
Firearms and explosions ..... 368
Hot water, acids and fire ..... 459
Football and other athletic games ..... 129
Falling objects, dropping or handling materials ..... 1,965
Fall on defective or slippery sidewalk ..... 332
Fall on stairs ..... 234
Fall from high places. ..... 584
Other falls ..... 2,066
Bites from horses and dogs ..... 73
Other causes ..... 2,030

TABLE NO. 15.-SHOWING AGOIDENTS REPORTED FROM JANUARY 1, 1909 TO DECEMBER 31, 1909, ARRANGED BY COUNTIES ACICORDING TO SEX, CONJUGAL CONDITTON' AGE, NATURE OF AOCIDENT, RESULT OF INJURY AND DURATION OF INJURY.

| County, | Total accidents. | Sex. |  | Ccnjugal condition. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Male. | Female. | Single. | Married. | Not stated. |
| Adams | 5 | 5 |  | 4 | 1 |  |
| Ashland | 239 | 230 | 9 | 143 | 72 | 24 |
| Barron .. | 84 | 80 | 4 | 46 | 37 | 1 |
| Bayfield | 24 | 24 | ... | 16 | 7 | 1 |
| Brown | 756 | 642 | 114 | 394 | 3.77 | 5 |
| Buffalo | 25 | 19 | 6 | 13 | 11 | 1 |
| Burnett | 51 | 36 | 15 | 32 | 19 |  |
| Calumet | 71 | 53 | 18 | 36 | 34 | 1 |
| Chippewa | 26 | 21 | 5 | 16 | 10 |  |
| Clark ... | 56 | 43 | 13 | 30 | 26 |  |
| Columbia | 70 | 53 | 17 | 37 | 33 | .......... |
| Orawford | 49 | 40 | 9 | 33 | 16 |  |
| Dane .. | 116 | 85 | 31 | 65 | 51 |  |
| Dodge | 146 | 116 | 30 | 77 | 68 | i |
| Door .. | 52 | 41 | 11 | 31 | 21 |  |
| Douglas | 93 | 92 | 1 | 56 | 37 |  |
| Dunn ... | 31 | 19 | 12 | 22 | 9 |  |
| Eau Claire | 93 | 75 | 18 | 54 | 35 | 4 |
| Florence ${ }^{\text {Fond }}$ dac | \% 2 | $\stackrel{2}{7}$ |  | 1 | 1 379 | 3 |
| Fond du Lac. | 804 80 | 722 79 | 82 | 422 46 | 379 34 | 3 |
| Grant | 126 | 102 | 24 | 62 | 61 | 3 |
| Green .......... | 76 | 62 | 14 | 48 | 28 |  |

TABLE NO. 15.-Continued.

| County. | Total accidents | Sex. |  | Conjugal condition. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Male. | Female. | Single. | Married. | $\begin{aligned} & \text { Not } \\ & \text { stated. } \end{aligned}$ |
| Green Lake | 21 | 20 | 1 | 8 | 13 | .......... |
| Lowa. | 107 | 93 | 14 | 62 | 45 | ......... |
| Iron | 129 | 126 | 3 | 83 | 46 | ......... |
| Jackson | 37 | 31 | 6 | 25 | 11 | 1 |
| Jafferson | 84 | 66 | 18 | 48 | 33 | .......... |
| Juneau | 28 | 27 | 1 | 15 | 13 | .......... |
| Kenosha | 182 | 1.63 | 19 | 108 | 71 | 3 |
| Kewaunce .. | 15 | 11 | 4 | 9 | 6 | , |
| La Crosse | 102 | 87 | 15 | 34 | 63 | 2 |
| Lafayette . | 103 | $\varepsilon 3$ | 20 | 61 | 42 |  |
| Langlade | 271 | 223 | 48 | 164 | 104 | 3 |
| Lincoln .. | 35 | 33 | 2 | 24 | 11 |  |
| Manitowoc | 354 | 310 | 44 | 187 | 163 | 4 |
| Marathon | 97 | 85 | 12 | 51 | 46 |  |
| Marinette | 250 | 228 | 24 | 150 | 99 | 3 |
| Marquette | 8 | 8 |  | 1 | 7 | ......... |
| Milwaukee | 3,128 | 2,826 | 302 | 1,600 | 1,502 | 26 |
| Monroe | 48 | 34 | 14 | 26 | 20 | 2 |
| Oconto | 40 | 33 | 4 | 23 | 17 | ........... |
| Oneida | 29 | 28 | 1 | 18 | 11 | ... |
| Outagamie | 179 | 161 | 18 | 91 | 87 | 1 |
| Ozaukee | 23 | 19 | 4 | 14 | 9 | ........... |
| Pepin .. | 4 | 4 |  | 2 | 2 | .......... |
| Pierce | 53 | 49 | 4 | 32 | 21 | ........... |
| Polk . | 31 | 26 | 5 | 23 | 8 | ........... |
| Portage | 117 | 95 | 22 | 64 | 53 |  |
| price . | 7 | 6 | 1 | 3 | 4 |  |
| Racine | 361 | 343 | 18 | 199 | 160 | 2 |
| Richland | 35 | 32 | 3 | 18 | 17 |  |
| Rock | 285 | 241 | 44 | 143 | 134 | 8 |
| Rusk . | 9 | 7 | 2 | 7 | 2 | .......... |
| St. Croix | 48 | 39 | 9 | 26 | 22 | ............ |
| Sauk | 104 | 85 | 19 | 53 | 51 | ........... |
| Sawyer | 16 | 15 | 1 | 14 | 2 | ........... |
| Shawano | 76 | 67 | 9 | 39 | 37 | ........... |
| Sheboygan | 131 | 103 | 28 | 71 | 59 | 1 |
| Taylor ... | 11 | 10 | 1 | 10 | 1 | ........... |
| Trempealeau | 30 | 25 | 5 | 19 | 11 | ........... |
| vernon | 30 | 27 | 3 | 14 | 16 | ........... |
| Vilas ..... | 8 | 8 |  | 6 | 2 |  |
| Walworth | 34 | 25 | 9 | 14 | 19 | 1 |
| Washburn | 49 | 40 | 9 | 28 | 21 |  |
| Washington | 150 | 123 | 27 | 86 | 63 | 1 |
| Waukesha | 53 | 40 | 13 | 27 | 25 | 1 |
| Waupaca | 65 | 56 | 9 | 37 | 27 | 1 |
| Waushara | 31 | 26 | 5 | 13 | 18 |  |
| Winnebago | 186 | 145 | 41 | 99 | 86 | 1 |
| Wood ..... | 60 | 54 | 6 | 39 | 21 |  |
| Total | 10,331 | 9,030 | 1,301 | 5,572 | 4,654 | 105 |

TABLE NO. 15.-Continued.

| County. | Age Grouping. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Under } \\ \text { years. } \end{gathered}$ | 10-19 | 20-29 | 30-39 | 40-49 | 50-59 | 60-69 | $70+$ | $\begin{gathered} \text { Age } \\ \text { not } \\ \text { stated. } \end{gathered}$ |
| Adams . | 1 | 1 | 1 | 1 |  |  |  |  | 1 |
| Ashland | 8 | 21 | 68 | 38 | 45 | 26 | 8 | 1 | 24 |
| Barron | 10 | 13 | 19 | 16 | 11 | 8 | 3 | 2 | 2 |
| Bayfield | 4 | 6 | 7 | 5 | 1 | 1 |  |  |  |
| Brown . | 83 | 113 | 206 | 148 | 104 | 51 | 28 | 7 | 16 |
| Buffalo .. | 5 | 4 | 5 | 4 | 2 | 1 | 4 |  |  |
| Burnett | 9 | 13 | 6 | 7 | 5 | 5 | 4 | 1 | 1 |
| Calumet | 10 | 12 | 12 | 9 | 7 | 9 | 8 | 3 | 1 |
| Chippewa . | 5 | 8 | 2 | 3 | 3 | 2 | 1 | 1 | $\stackrel{2}{2}$ |
| Clark ..... | 9 | 9 | 18 | 5 | 7 | 4 | 1 | 1 | 2 |
| Columbia | 4 | 11 | 13 | 10 | 10 | 11 | 3 | 3 | 5 |
| Crawford | 7 | 19 | 4 | 8 | 4 | 5 | 1 | 1 |  |
| Dane | 16 | 18 | 29 | 21 | 12 | 7 | 8 | 4 | 1 |
| Dodge | 23 | 19 | 34 | 28 | 17 | 5 | 11 | 7 | $\stackrel{2}{2}$ |
| Door ... | 7 | 11 | 10 | 6 | 5 | 7 | 2 | 2 | \% |
| Douglas | 2 | 9 | 30 | 27 | 17 | 5 | '1 | 1 | 1 |
| Dunn .... | 8 | 7 | 5 | 4 |  | 2 | 2 |  | 3 |
| Eau Claire | 11 | 22 | 18 | 18 | 8 | 4 | 4 | 4 | 4 |
| Florence ...... |  | 1 |  |  | 1 |  |  |  |  |
| Fond du Lac. | 41 | 90 | 360 | 180 | 96 | 44 | 27 | 16 | 10 |
| Forest | 3 | 15 | 22 | 17 | 9 | 7 | 2 |  | 5 |
| Grant . | 19 | 22 | 19 | 21 | 14 | 14 | 9 | 4 | 4 |
| Green . | 18 | 12 | 17 | 13 | 3 | 8 | 3 | 2 | ........ |
| Green Lake | 2 | 2 | 5 | 5 | 1 | 4 | 1 | 1 |  |
| Iowa | 11 | 18 | 26 | 21 | 12 | 10 | 7 | 1 | 1 |
| Iron . | 1 | 11 | 76 | 23 | 13 | 4 |  |  | 1 |
| Jackson | 2 | 10 | 6 | 7 | 5 | 4 | 2 | 1 | i |
| Jefferson | 12 | 18 | 15 | 9 | 13 | 7 | 3 | 6 | 1 |
| Juneau . | 8 | 5 | 3 |  | 4. | 2 | 3 | 3 |  |
| Kenosha | 18 | 35 | 66 | 30 | 20 | 4 | ${ }^{6}$ | 2 | 1 |
| Kewaunce | 4 | 3 | 18 | 1 | ${ }_{3}^{3}$ | 2 | 1 | 9 | 8 |
| La Crosse | 6 | 9 | 18 | 19 | 22 | 14 | 4 | 2 | 8 |
| Lafayette | 18 | 15 | 18. | 16 | 17 | 9 | 5 | 4 | 1 |
| Langlade | 42 | 61 | $76^{*}$ | 37 | 30 | 15 | 5 | 2 | 3 |
| Lincoln | 3 | 12 | 10 | 6 | 3 | 1 |  |  |  |
| Manitowoc | 28 | 68 | 103 | 51 | 51 | 27 | 14 | 9 | 3 |
| Marathon | 9 | 21 | 21 | 18 | 14 | 7 | 4 | $\stackrel{1}{7}$ | Z |
| Marinette | 23 | 56 | 59 | 44 | 27 | 15 | 6 | 7 | 15 |
| Marquette |  |  | 3 | $\stackrel{2}{2}$ | 2 |  | 1 |  |  |
| Milwaukee | 134 | 468 | 968 | 652 | 485 | 242 | ¢0 | 52 | 37 |
| Monroe | 5 | 9 | 12 | 4 | 9 | 4 | 4 | i | 1 |
| Oconto . | 6 | 6 | 9 | 6 | 2 | 5 | 4 | 1 | 1 |
| Oneida ... | 1 | 8 | 6 | 3 | 3 | 4 | 4 |  |  |
| Outagamie | 17 | 33 | 37 | 27 | 26 | 19 | 12 | 5 | 3 |
| Ozaukee .. | 4 | 4 | 4 | 6 | 1 | 1 | 2 |  | 1 |
| Pepin .. | 1 | 1 |  | 1 | 6 | 1 | 1 |  |  |
| Pierce . | 8 | 12 | 11 | 7 | 6 | 7 | 1 | 1 | ........ |
| Polk | 4 | 10 | 7 | 1 | 3 | 1 | 5 |  | 1 |
| Portage | 13 | 27 | 29 | 15 | 12 | 13 | 4 | 3 | 1 |
| Price ... | 14 14 | 60 | - | 92 | 1 38 | $\begin{array}{r}2 \\ 30 \\ \hline\end{array}$ | 9 | 5 | $\cdots$ |
| Richland | 8 | 4 | 5 | 6 | 6 | 4 | 2 |  |  |
| Rock | 19 | 49 | 58 | 60 | 85 | 28 | 15 | 10 | 11 |
| Rusk | 2 | 1 | 3 | 3 |  |  |  |  |  |
| St. Croix | 6 | 9 | 9 | 10 | 3 | 4 | 5 | 2 | \% |
| Sauk | 11 | 21 | 17 | 23 | 9 | 10 | 9 | 5 | 2 |
| Sawyer | 1 | 4 | ${ }^{3}$ | 3 | $\stackrel{2}{9}$ | 1 | 2 | 3 | ........ |
| Shawano | 8 | 15 | 20 | 15 | 9 | ${ }_{2}^{2}$ | 4 |  | ; |
| Sheboygan | 13 | 30 | 31 | 16 | 21 | 10 | 4 | 5 | ) |
| Taylor | 1 | 3 | 4 | 2 | 1 |  | ….... |  |  |
| Vernon <br> Vilas | 4 | 4 | 8 <br> 2 | 3 2 2 | 3 <br> 2 | 1 | 5 1 5 | 2 | . $\ldots$....... |
| Walworth | 1 | 8 | 1 | 4 | 7 | 4 | 5 |  | ... |
| W ashburn | . 7 | 13 | 6 | 8 | 7 | 3 | 10 | 3 | $\cdots$ |
| Washington | - 13 | 34 | 32 | 19 | 19 9 | 12 9 | 10 | 5 | ${ }_{6}^{6}$ |
| Waukesha .. | . $\begin{array}{r}9 \\ \hline 10\end{array}$ | 3 18 | 9 10 | 9 10 | $\stackrel{9}{5}$ | $\stackrel{9}{5}$ | 2 | 4 | 1 |

TABLE NO. 15.-C'ontinued.

| Counts. | Age Grouping. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Under 10 years. | 10-19 | 20-29 | 30-39 | 40-49 | 50-59 | 60-69 | $70+$ | $\begin{gathered} \text { Age } \\ \text { not } \\ \text { stated. } \end{gathered}$ |
| Waushara Winnebago Wood ...... | 3 13 6 | 7 44 14 | 5 35 17 | $\begin{array}{r}6 \\ 21 \\ 8 \\ \hline\end{array}$ | 4 24 8 | 2 17 1 | 2 21 3 | 2 <br> 8 <br> 2 | 3 1 |
| Total | 844 | 1,723 | 2,821 | 1,921 | 1,380 | 795 | 420 | 227 | 200 |

TABLE NO, 15.-Continued.


TABLE NO. 15.—Continued.

| County. | Nature of accident. |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Fatal. | Severe. | Slight. | Not stated. |
| Price .. |  | 7 |  |  |
| Racine | 6 | 238 | ${ }^{117}$ |  |
| Richland |  | 34 | 1 |  |
| Rock Rusk | 9 | 215 | 59 | $\cdots$ |
| St. Croix |  | 7 | 2 | ........ |
| Sauk .... | 3 | $\stackrel{40}{87}$ | $\begin{array}{r}8 \\ 14 \\ \hline\end{array}$ | ........... |
| Sawyer | ${ }_{2}^{3}$ | 13 | 14 | .......... |
| Shawano | 1 | ${ }_{67}^{13}$ | 8 |  |
| Sheboygan | 9 | 107 | 14 | 1 |
| Taylor ${ }_{\text {Trempealeau }}$ | 1 | 10 |  |  |
| Trempealeau | 2 <br> 3 | 24 | 4 |  |
| Vilas. | 3 | 27 6 | 2 | . .......... |
| Walworth | 4 | 26 | 2 | . |
| Washburn ... | 1 | 39 | 9 |  |
| Washington | 2 | 133 | 15 | ......... |
| Waukesha | 6 | 46 | 1 | .......... |
| Waushara ${ }^{\text {Waupa }}$ | 2 | 48 | 15 | ......... |
| Winnebago | 1 | 29 153 | ${ }_{2}^{1}$ |  |
| Wood ..... | 5 | 50 | 24 5 |  |
| Total | 431 | 8,340 | 1,457 | 103 |

TABLE NO. 15. Continued.

| County. | Result of Injury. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Temporary disablement. |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | ¢ $\stackrel{y y}{*}$ $\stackrel{0}{0}$ |
| Adams | 1 | 1 |  |  |  |  |  |  |  |
| Ashland | 29 | 29 | 55 | 16 | 32 | 15 | 12 | 9 | 6 |
| Barron. | 15 | 1 | 14 | 9 | 1 | 15 | 10 |  | ${ }_{2}^{6}$ |
| Bayfield | 2 | 1 | $\stackrel{3}{5}$ | 3 |  | 1 | 4 | $\stackrel{3}{2}$ | 3 |
| Brown Buffalo | 147 | 40 | 185 | 57 | 40 | 66 | 90 | 43 | 26 |
| Burnett | 6 | 1 | 2 5 5 | 4 | 8 | 4 |  |  |  |
| Calumet ... | 10 | 1 | 5 <br> 3 | 10 | 1 | 5 | 8 | 2 | 2 |
| Chippewa.. | 1 |  | 4 | 15 | 8 4 | 11 1 | 4 | 4 | 4 |
| Clark ..... | 10 |  | 2 | 11 | 11 | 4 | 2 | $\cdots$ | 3 |
| Columbia | 2 | 2 | 6 | 20 | 10 | , $\quad 13$ | 5 | 2 | 4 |
| Crawford | 7 |  | 4 | 14 | 6 | + 3 | 1 |  | 4 |
| Dane . | 7 | 2 | 17 | 20 | 17 | 10 | 12 | $\ddot{4}$ | 6 |
| Dodge | 20 | 10 | 20 | 29 | 11 | 8 | 7 | 15 | 9 |
| Door | 9 | 2 | 5 | 13 | 4 | 6 | 3 | 1 | 4 |
| Douglas | 10 | 10 | 23 | 3 | 8 | 4 | 14 | 4 | 2 |
| Dunn ....... | 3 |  | 2 17 | 8 | 3 | 4 | $\ldots .$. | 1 | 2 |
| Eau Claire Florence | 16 | 1 | 17 | 9 | 8 | 13 | 7 | 6 | 5 |
| Fond du Lac | 183 | 68 | 180 | 44 | 22 | $\cdots$ | 129 | 39 | 19 |
| Forest ... | 7 |  | 15 | , | , | 13 | 8 |  | ${ }_{2}$ |

TABLE NO．15：－Continued．

| County． | Result of Injury． |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Temporary disablement． |  |  |  |  |  |  |  |  |
|  |  EO －すi <br> 苗莫 |  |  |  |  |  |  |  | $\dot{\sim}$ $\stackrel{\sim}{3}$ $\stackrel{3}{0}$ |
| Grant | 8 | 11 | 26 | 25 | 13 | 15 | 10 | 3 | 2 |
| Green ．． | 10 | 3 | 9 | 11 | 10 | 11 | 5 | 2 | 6 |
| Green Lake | 2 |  | 2 | 5 | 3 | 5 | 1 |  |  |
| Iowa ．．．．．． | 13 | 10 | 14 | 10 | 13 | 13 | 10 9 | ${ }^{6}$ |  |
| Iron ．．． | 38 | 19 | $\stackrel{36}{6}$ | 11 | 6 1 | 5 10 | 9 | 1 |  |
| Jackson | 1 | 4 | 6 9 | 11 17 | 1 9 | 13 |  | 2 |  |
| Jefferson | 9 | $\stackrel{4}{2}$ | 9 2 | 17 9 | ${ }_{3}^{9}$ | 4 | 1 | 2 | 1 |
| Kenosha | 59 | 7 | 32 | 14 | 8 | 21 | 12 | 8 | 3 |
| Kewaunee | 2 | 2 | 3 | 2 | 3 | 1 | 1 |  |  |
| La Orosse | 19 | 7 | 8 | 15 | 11 | 9 | 12 | 1 | 1 |
| Lafayette | 10 | 4 | 10 | 15 | 14 | 16 | 8 | ${ }^{6}$ | 3 7 |
| Langlade | 47 | 22 | 51 | 27 | 18 | 44 | 9 | 13 | 7 |
| Lincoln | 12 | $\stackrel{3}{3}$ | 4 | 2 40 |  | ＋381 |  |  |  |
| Manitowoc | 107 | 13 | $\stackrel{46}{9}$ | 40 | 28 | 42 9 | 18 | 5 <br> 3 | 5 |
| Marathon | 14 | ${ }_{2}^{6}$ | 9 56 | 16 26 | 14 22 | 9 30 | 6 15 | ＋${ }_{12}$ | $\stackrel{5}{7}$ |
| Marinette | 30 | 20 1 | 56 2 | 26 1 | 22 | 30 2 | 15 | 12 | 7 |
| Marquette |  | 1 198 | 2 543 | 23 |  | 315 | 292 | 169 | $4{ }^{\circ}$ |
| Milwatkee | 663 | 198 | 543 2 | 232 16 | 168 | 15 7 | 4 | 1 | 1 |
| Monroe | 6 | 2 | 3 | 17 | ${ }_{3}$ | 6 | 3 | 1 | 1 |
| Oneida ． | 4 |  | 1 | 4 | 6 | 4 | 3 | 2 | ．．． |
| Outagamie | 43 | 7 | 35 | 12 | 13 | 10 | 20 | 7 | 2 |
| Ozaukee ． | 3 | 1 | 1 | 5 | 4 | 2 | 3 |  | 1 |
| Pepin |  |  |  | $\stackrel{2}{3}$ | 1 |  |  |  |  |
| Pierce | 6 | 2 | 9 | 3 | 7 | 8 | 5 | 2 | 2 |
| Polk | 2 | 2 | 5 | 4 | 5 | ${ }_{11}$ | $\stackrel{3}{9}$ | 4 |  |
| Portage | 11 | 3 | 17 | 24 | 16 | 11 | 9 | 4 | 2 |
| Price ．． |  |  | 1 | 1 | 4 | 1 | 31 |  |  |
| Racine | 96 | 25 | 53 | 30 | 17 | 31 | 31 | 215 | 6 |
| Richland | 1 | 1 | 8 | 8 | 5 35 | 6 40 | 2 33 | 11 | 9 |
| Rock | 32 | 11 | 26 | 52 | 35 | 40 | 33 | 11 | 9 |
| Rusk | 1 |  |  | ${ }_{11}$ |  | 3 4 4 |  |  |  |
| St．Croix | 7 | 1 | ${ }^{7} 5$ | 11 27 | 3 12 | $\begin{array}{r}4 \\ 10 \\ \hline\end{array}$ | 4 | 4 | 1 |
| Sauk ．．．． | 3 2 2 | 1 | 15 1 | 27 1 | 12 1 | $\begin{array}{r}10 \\ 3 \\ \hline\end{array}$ | 1 | 4 | ．．．．．．．． |
| Sawyer ${ }_{\text {Shawano }}$ | $\begin{array}{r}2 \\ 14 \\ \hline\end{array}$ | 3 | ${ }_{12}$ | 1 | 14 | 8 | 5 | 3 | 1 |
| Sheboygan | 19 | 4 | 15 | 24 | 9 | 10 | 10 | 10 | 5 |
| Taylor ．．． |  |  |  |  | 8 | 1 | 1 |  |  |
| Trempealeau | 1 |  |  | 2 | 8 | 4 | 5 |  | 3 |
| Vernon ．． |  | 2 | 2 | 2 | 3 | 7 | 5 | 3 | 3 |
| Vilas | 4 |  | 1 |  | 1 | $\stackrel{2}{3}$ |  |  |  |
| Walworth ．． | 1 |  | 5 | 7 | 6 12 | 3 6 | 4 |  | 1 2 |
| Washburn ${ }_{\text {W ashington }}$ | $\begin{array}{r}5 \\ 14 \\ \hline\end{array}$ | 1 | 6 45 | r ${ }^{7}$ | 12 | ＋ 88 | 15 | －$\quad$2 | 2 |
| Washington Waukesha | $\begin{array}{r}14 \\ 3 \\ \hline\end{array}$ | ${ }^{6}$ | 45 6 | 11 | 11. | $\begin{array}{r}18 \\ 3 \\ \hline\end{array}$ | $\begin{array}{r}15 \\ 2 \\ \hline\end{array}$ |  <br> 3 | 2 |
| Waupaca | 3 9 | 4 | 5 | 10 | 10 | 9 | 4 | 3 |  |
| Waushara | 1 | 1 | 7 | 2 | 7 | 2 | $\stackrel{2}{8}$ | $\therefore . .$. | －$\stackrel{7}{6}$ |
| Winnebago | 24 | 5 | 28 | 34 | 18 | 19 | 18 | 4 | 1 |
| Wood ．．． | 10 | 1 | 2 | 13 | 6 | 6 | 3 | 1 | 1 |
| Total | 1，854 | 1，590 | 1，748 | 1，124 | 811 | 1，065 | 929 | 467 | $2 \omega$ |

'TABLE NO'. 15.-Continued.

| Count: | Result of Injury. |  |  |  |  |  |  |  | Infected injuries. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | - Permanent disablement. |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Adams | 1 |  | 1 |  |  |  |  | 1 |  |
| Ashland | 20 |  |  | 4 | 1 | 3 | 4 | 4 | 19 |
| Barron Bayfeld | 5 | 1 | 1 | 1 |  |  | 1 | 3 | 2 |
| Brown | 26 | 1 | 3 | 2 | 1 |  |  |  | \% |
| Buffalo | 1 |  | 1 |  |  |  | 1 | 18 | 19 |
| Burnett | 6 |  |  |  |  | 2 | 1 | 2 |  |
| Calumet | 6 | 1 |  |  |  | 2 |  | 2 |  |
| Chippewa | 1 | 1 | 1 |  |  |  | 3 | 4 |  |
| Clark. | 7 |  |  |  |  |  | 3 | 1 |  |
| Columbia | 2 |  | 1 |  |  |  | 3 | 1 |  |
| Crawford | 1 | 2 | 2 |  | 2 | 1 | 2 |  |  |
| Dane ... | 10 | 1 | 1 |  |  |  | 2 | 7 | 2 |
| Dodge | 8 | 1 |  |  | 1 | 3 |  | 4 | 2 |
| Door .. | 3 |  |  |  | 1 |  |  | 1 | 1 |
| Douglas | 7 | 1 |  | 2 |  | 2 |  | 3 | , |
| Dunn Claire | 5 |  |  |  | 1 |  |  | 2 |  |
| Eau Claire <br> Florence | 4 | 1 |  | 1 |  | 1 |  | 4 | 2 |
| Fond du Lac. | 20 | 1 |  | i |  | 34 | 1 | 9 | 15 |
| Forest | 10 | 1 | 1 | 1 |  |  | 1 | 3 |  |
| Grant | 7 |  |  |  | 1 |  | 2 | 3 | 3 |
| Green ...... | 3 |  | 1 |  |  | 1 | 1 | 3 | 2 |
| Green Lake | 1 |  |  |  |  |  | 1 | 1 |  |
| Iowa | 5 |  |  |  | 1 | 3 | 1 | 3 | 10 |
| Iron ${ }_{\text {Jackson }}$ | 5 |  |  |  |  | 2 | 2 | 3 | 6 |
| Jackson <br> Jefferson | 5 |  |  |  |  |  |  |  |  |
| Jefferson <br> Juneau | $\stackrel{5}{2}$ | 3 | 1 |  | 1 |  | 1 | 6 | 1 |
| Kenosha | 13 |  | 1 |  |  | 3 | 1 | 1 | 12 |
| Kewaunce | 1 |  |  |  |  |  |  |  |  |
| La Crosse | 8 |  | 1 | 1 |  |  | 1 | 8 | 3 |
| Lafayette | 2 | 1 | 1 |  |  | '1 | 3 | 9 | 2 |
| Lincoln . | 13 5 5 |  | 2 | 1 | 2 | 6 | 2 | 7 | 22 |
| Manitowoc | 37 |  | 2 |  | 1 | 1 | 3 |  | 9 |
| Marathon | 8 | 2 | 1 | 1 | 1 | 1 | $\stackrel{3}{2}$ | 1 | 9 |
| Marinette | 16 | 3 | 3 | 2 |  | 2 | 7 | 1 | 1 |
| Milwauke | 204 | 7 |  | 11 | 1 |  |  |  |  |
| Monroe . | 1 | 7 | 1 | 11 | 4 |  | 103 5 | 123 | 93 |
| Oconto . | 5 |  | 1 |  |  | 1 |  | 1 | 1 |
| Oneida .... | ${ }^{3}$ |  |  | 1 |  |  | 1 |  |  |
| Outagamie | 17 1 | 1 | 1 |  | 1 | 5 | 6 |  | 5 |
| Pepin . |  |  |  |  |  |  |  | 1 |  |
| Pierce | 5 |  |  |  |  | 2 | 1 |  | 4 |
| Polk.. |  |  | 2 |  | 1 | 1 | 2 | 1 | 4 |
| Prortage | 13 |  |  | 1 |  |  | 3 | 3 | 2 |
| Racine |  | 1 |  |  |  |  |  |  |  |
| Richland | 28 3 |  | 1 |  |  | 4 | 8 | 4 | 15 |
| Rock | 18 |  | 2 | 1 |  | 1 |  |  |  |
| Rusk | 2 | 1 |  | 1 |  | 1 | 9 | 5 | 5 |
| St. Croix | 4 | 1 |  |  |  | 1 |  |  |  |
| Sauk ... | 14 |  |  | 1 |  | 12 | 4 | 1 | 1 |
| Sawyer .. | 2 |  | 1 |  |  | 2 | 1 | $\stackrel{2}{2}$ | 1 |
| Shawano | 4 |  |  | 2 | 1 |  | 2 | 1 | 7 |
| Sheboygan | 11. | 2 |  |  |  |  | 5 | 6 | 1 |

$10-\mathrm{B} . \mathrm{H}$.

TABLE NO．15．- Continued．

| County． | Result of Ínjury． |  |  |  |  |  |  |  | Infected injuries． |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Permanent disablement． |  |  |  |  |  |  |  |  |
|  |  |  | $\stackrel{4}{0}$ <br>  <br> $\stackrel{4}{\circ}$ <br>  $\bigcirc$ |  | 0 0 0 0 0 0 0 0 0 0 |  |  |  |  |
| Trempealeau | 3 | 1 | 1 |  | ．．．．． |  | － 1 | 2 <br> 2 |  |
| Vernon ．．．．．． |  |  |  |  |  |  |  |  |  |
| Vilas ．．．．． |  | 1 |  | ．．．．．．．．． |  |  |  |  |  |
| Walworth | 3 |  | ． 1 |  |  |  | ．．．．．．．． |  | $\ldots 1$ |
| Washburn ． Washington | 63 | …....... | 1 |  |  | 1 | $\ldots$ | 4 <br> 4 <br> 1 <br> 4 |  |
| Washington <br> Waukesha |  |  | 1 | 2 |  |  | 2 |  | 12 |
| Waupaca ． | 9 | $\cdots$ |  |  | ．．．．．．． <br> …．．．． | ．．．．．． | 1 | \％ 4 | 12 |
| Waushara | 4 |  |  | $\begin{array}{r} \cdots \\ 1 \\ 1 \end{array}$ | …．．．．． <br> $\ldots . . .$. <br> $\ldots .$. |  | 1 <br> 3 <br> 3 <br> 3 | ＋1．．． <br> 9 <br> 4 |  |
| Winnebago | 179 |  |  |  |  |  |  |  | 4 |
| Wood |  |  |  |  |  |  |  |  |  |
| Total | 677 | 41 | 49 | 39 | 22 | 135 | 226 | 301 | 347 |

TABLEE NO．15．－Continued．

| County． | Duration of injury． |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \dot{\sim} \\ & \text { ®̀ } \\ & \text { 日 } \\ & \text { \# } \end{aligned}$ |  |  |  | $\begin{aligned} & \dot{n} \\ & \underset{\sim}{\tilde{n}} \\ & \underset{\sim}{0} \end{aligned}$ |  | O \＆ 4 0 0 0 |  |
| Adams | 1 |  |  | 3 | 1 |  |  |  |  |
| Ashland | 7 | 48 | 42 | 71 | 49 | 3 | 1 |  | 18 |
| Barron | 2 | 9 |  | 47 | 8 | 3 |  | ．．．．．．．．． | 3 |
| Bayfield |  |  |  | 20 | 1 |  |  |  | 1 |
| Brown | 16 | 205 | 187 | 262 | 55 | 10 | 6 | 6 | 9 |
| Buffalo | 2 | 1 | 1 | 10 | 7 | 1 | ．．．．．．．． | ． | 3 |
| Burnett |  | 1 | ． | 33 | 14 | 2 |  |  | 1 |
| Calumet | 1 | 9 | 5 | 37 | 15 | 3 |  |  | 1 |
| Ohippewa | 4 | 1 | 1 | 8 | 7 | 1 | ．．．．．．．．． | 2 | 2 |
| Clark ${ }_{\text {Columbia }}$ |  | 7 5 | 1 | 25 19 | 13 | 7 | 1 | $\ldots$ | ${ }_{5}^{2}$ |
| Columbia | 3 | 5 | 6 | 19 | 20 | 8 |  | 4 | 5 |
| Dane | 7 | 11 | 12 | 32 | 16 27 | 13 | 1 | 6 | $\stackrel{2}{7}$ |
| Dodge | 6 | 45 | 22 | 38 | 21 | 4 | 2 | 2 | 6 |
| Door |  | $3-$ | 12 | 27 | 7 | 2 |  | 1 |  |
| Douglas | 2 | 34 | 10 | 26 | 10 | 5 | 1 | 2 | 3 |
| Dunn ．． | 2 |  | 1 | 11 | 8 | 5 | ．．．．．．．． | 2 | 2 |
| Eau Claire | 3 | 10 | 11 | 40 | 14 | 8 |  | 1 | 6 |
| Florence ．．． |  |  |  |  |  | 2 |  |  |  |
| Fond du Lac． | 6 | 480 | 101 | 126 | 65 | 13 | 1 | 1 | 11 |
| Forest ．．．．．．． | 3 | 7 | 13 | 36 | 14 | 6 |  | 1 |  |
| Grant ． | 3 | 20 | 14 | 47 | 34 | 3 |  | 2 | 3 |
| Green ． | 1 | 3 | 3 | 35 | 16 | 6 | 1 | 3 | 8 |
| Green Lake |  | 2 | 3 | 7 | 6 | 1 |  |  | 2 |
| Iowa | 3 | 23 | 18 | 42 | 11 | 5 | 2 | 1 | 2 |
| Iron |  | 32 | 44 | 38 | 8 | 1 |  | ． 1 | 5 |
| Jackson | 1 | 4 | 6 | 7 | 10 | 6 |  | 1 | 2 |
| Jefferson | 6 | 12 | 10 | 35 | 13 | 4 |  | $\ldots$. | 4 |
| Juneau ． | 1 | 1 | ． | 18 | 4 | 3 | 1 | ． |  |
| Kenosha |  | 33 |  | 76 | 11 | 6 |  |  | 1 |
| Kewaunee |  | 2 | 3 | 5 | 3 | 1 | 1 | ．．．．．．．． |  |

TABLE NO. 15.-Continued

| County. | Duration of injury. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | 号 | $\begin{aligned} & \dot{0} \\ & \text { 日 } \\ & \text { O} \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |
| La Crosse | 6 | 5 | 24 | 49 | 11 | 4 |  |  | 3 |
| Lafayette | 12 | 12 | 10 | 39 | 16 | $\stackrel{4}{7}$ | 2 | 4 | 4 |
| Langlade | 1 | 35 | 64 | 114 | 38 | 7 | 1 | 1 | 10 |
| Lincoln ... |  | 13 | 9 | 9 | 4 |  |  |  |  |
| Manitowoc | 3 | 90 | 46 | 144 | 46 | 9 | 2 | 2 | 12 |
| Marathon | 1 | 9 | 19 | 34 | 23 | 6 |  | . | 5 |
| Marinette | 3 | 63 | 37 | 97 | 30 | 10 | 2 | 4 | 6 |
| Marquette |  | 1 | 2 | 3 | 2 |  |  |  |  |
| Milwaukee | 179 | 1,034 | 605 | 808 | 271 | 81 | 33 | 23 | 94 |
| Monroe . | 1 | 2 | 4 | 29 | 3 | 2 |  | 2 | 5 |
| Oconto | 2 | 3 | 11 | 18 | 3 | 1 |  |  | 2 |
| Oneida .. | 1 | 2 | 3 | 15 | 4 | 2 |  | 1 | 1 |
| Outagamie | 1 | 45 | 25 | 65 | 29 | 7 |  | 2 | 4 |
| Ozaukee . | 1 | 1 | 2 | 13 | ${ }_{3}$ |  | 1 | 1 | $\therefore 1$ |
| Pepin .. | 1 |  |  | 1 | $\stackrel{2}{2}$ |  |  |  |  |
| Pierce . |  | 4 | 8 | 9 | 19 | 5 | 3 | 1 | 4 |
| Polk | 2 | 2 | 2 | 12 | 10 | 1 |  |  |  |
| Portage | 6 | 6 | 14 | 56 | 23 | 6 |  | 2 | 4 |
| Price .. |  |  |  | 1 | 2 |  |  | 1 |  |
| Racine | 4 | 124 | 98 | 88 | 34 | 9 |  |  | 4 |
| Richland |  | 1 | 2 | 16 | 7 | 4 |  | 2 | ....... |
| Rock | 6 | 63 | 46 | 95 | 49 | 10 | 3 | 2 | 11 |
| Rusk ... |  | 2 |  | 5 |  | 2 |  |  |  |
| St. Oroix |  | 9 | 6 | 20 | 6 | 3 | . | 1 | 3 |
| Sauk .. | 3 | 14 | 2 | 43 | 25 | 6 |  | 5 | 2 |
| Sawyer .. | 1 | 2 | 1 | 7 | 3 |  | ........ | 1 | 1 |
| Shawano | 1 | 16 | 4 | 33 | 11 | 5 | 1 | 3 | 2 |
| Sheboygan | 8 | 12 | 24 | 52 | 18 | 3 |  | 4 | 8 |
| Taylor ....... |  |  |  | 4 | 2 | 3 |  |  | 1 |
| Trempealeau | 2 |  | 1 | 15 | 8 | 1 | 1 | 2 |  |
| Vernon | 3 | 2 |  | 16 | 7 | 1 |  |  | 1 |
| Vilas |  | 2 |  | 5 |  |  |  |  | 1 |
| Walworth | 4 | 2 |  | 6 | 12 | 5 |  | 2 | 2 |
| W ashburn | 1 | 8 | 5 | 17 | 10 | 5 |  |  | 3 |
| Washington | 1 | 13 | 48 | 54 | 28 | 3 | 1 |  | 2 |
| Waukesha | 5 | …… ${ }^{\text {r }}$ | 6 | 14 | 24 | 3 |  |  | 1 |
| Waupaca | 2 |  | 9 | 29 | 12 | 4 |  |  | 2 |
| Waushara | 1 | 2 | 4 | 9 | 6 | 6 |  |  | 1 |
| Winnebago | 6 | 33 | 22 | 85 | 23 | 4 |  | 1 | 11 |
| Wood ..... | 5 | 3 | 4 | 26 | 18 | 1 |  | 1 | 2 |
| Total | 353 | 2,651 | 1,765 | 3,358 | 1,330 | 359 | $\varepsilon 6$ | 103 | 333 |

$c$
-1.

TABLE NO. 16.-SHOWING ACCIDENTS REPORTED FROM JANUARY 1, 1909, TO DECEMBER 31, 1909, ARRANGED COUN'TIES ACCORDING TO CAUSE OF INJURY.


TABLE NO. 16.-Continued.

| County. | Injured by Machinery. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
| Taylor | 2 |  |  | 3 |  |  | 1 |
| Trempealeau |  |  |  | 2 |  | 1 | 2 |
| Vernon |  |  |  | 1 |  |  | 2 |
| Vilas ..... | 1 |  |  | 1 |  |  |  |
| Walworth |  |  |  | 1 |  | 3 |  |
| Washburn . |  | 1 |  | 7 |  |  |  |
| Washington | 2 |  |  | 4 | 1 | 9 | 4 |
| Waukesha |  |  |  |  |  | 2 | 1 |
| Waupaca .. Waushara | 1 |  |  | 5 | 2 | 4 | 2 |
| Waushara <br> Winnebago |  |  |  | 1 |  | 3 |  |
| Wood | 2 2 |  | 2 1 | 10 | 5 |  | 15 |
| Total | 125 |  |  |  |  |  |  |
|  |  | 60 |  |  | 153 | 180 | 655 |

TABLE NO. 16.-Continued.

| County. | Steam Railmoads. |  |  |  |  |  | Horse vehicles and horses. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{aligned} & \dot{n} \\ & \text { in } \\ & \text { on } \\ & 0 \\ & 0,0 \\ & 0 \\ & 0 \end{aligned}$ |  |  |  |  |  |  |
| Adams |  |  |  |  |  |  |  |  |  |
| Ashland |  | 4 |  | 4 |  | 1 | 14 | 1 | 26 |
| Barron | 2 |  |  |  |  |  | 12 |  | 6 |
| Bayfield |  |  |  | 1 |  |  |  |  | 3 |
| Brown | 56 | 22 |  | 6 |  | 8 | 31 | 6 | 38 |
| Buffialo |  |  | 1 |  |  |  | 3 |  | 1 |
| Calumet |  | 1 |  | ...... |  |  | 5 |  | 5 |
| Chippewa |  | 1 |  | 1 | 2 |  | $\begin{array}{r}10 \\ 3 \\ \hline\end{array}$ | 2 | 1 |
| Clark ... | 1 |  |  | 2 |  |  | $\stackrel{3}{7}$ |  |  |
| Columbia |  |  |  | 1 | 1 |  | 16 |  | i |
| Crawford |  |  |  |  |  |  | 4 |  | 5 |
| Dane .. | 3 | 2 |  | $\because 1$ | 7 |  | 11 |  | 3 |
| Dodge | 1 |  |  | 2 | 1 |  | 13 | 1 | 2 |
| Door |  |  |  |  |  |  | 5 | 1 | 3 |
| Douglas | 6 | 15 | 1 | 1 |  | 2 |  |  | 3 |
| Dunn <br> Eau Claire |  | 1 |  |  |  |  | 4 |  | , |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

TABLE NO. 16.-Continued.

| County. | Steam Railroads. |  |  |  |  |  | Horse vehicles and horses. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |
| Jackson |  | 2 |  |  |  |  | 4 | 1 |  |
| Jefferson | $\stackrel{\square}{2}$ | 1 | $\ddot{2}$ | i |  |  | 14 | 2 | 5 |
| Juneau . |  | 1 |  |  |  |  | 2 |  | 2 |
| Kenosha |  | 3 |  | 2 | .... | 1 | 7 | 7 | 11 |
| Kewaunee |  |  |  |  |  |  | 3 |  | 1 |
| La Crosse | 10 | 4 | 2 |  |  | 3 | 1 | 1 | 8 |
| Lafayette | 1 | 1 | 1 | 2 |  |  | 24 | 1 | 2 |
| Langlade | 4 | 6 |  | 1 |  |  | 25 | 1 | 29 |
| Lincoln . |  |  |  |  |  |  | 2 |  | 2 |
| Manitowoc | 1 |  | 1 | 2 |  | 2 | 20 | 3 | 7 |
| Marathon . | 2 | ${ }_{11}^{2}$ | 2 |  |  | 2 | 11 |  | 7 |
| Marinette Marquette |  | 11 | 1 |  |  |  | 19 | 1 | 17 |
| Milwaukee | 65 | 126 | 4 | 45 | 8 | 115 | 152 | 51 | 139 |
| Monroe | 1 |  |  |  |  |  | 11 | 2 | 2 |
| Oconto | 1 |  | 7 |  |  |  | 4 |  | 2 |
| Oneida . |  |  |  | 1 |  |  | 1 |  |  |
| Outagamie | 9 | 16 | 1 | 1 | 1 | $\ldots$ | 15 | 1 | 10 |
| Ozaukee .. |  |  |  | 1 |  |  | 3 |  | 3 |
| Pepin |  |  |  |  |  |  |  |  |  |
| Pierce |  |  |  |  |  |  | 13 | 1 | 2 |
| Polk ... |  |  | 1 |  |  |  | 2 | 1 | 5 |
| Portage | 2 |  |  |  | 3 |  | 20 |  | 4 |
| Racine | $\ddot{8}$ | 13 | 1 | 7 | 1 | 1 | 21 | 2 | 15 |
| Richland |  |  |  |  |  |  | 10 |  | ${ }_{3}$ |
| Rock ${ }^{\text {. }}$. | 26 | 22 | 1 | 6 | 2 | 2 | 24 | 1 |  |
| Rusk |  | 1 |  |  |  |  | 1 |  |  |
| St. Croix |  | 3 | 1 | 1 |  |  | 6 |  | 4 |
| Sauk . | 5 | 4 | 1 | 1 | .... |  | 16 | 1 | 2 |
| Sawyer ${ }_{\text {Shawano }}$ |  | 1 |  | 1 | .... |  |  |  |  |
| Sheboygan | 5 | 1 | 9 | 1 |  |  | 10 |  | 11 |
| Taylor ... | 5 |  |  | 2 |  |  | 18 |  | 4 |
| Trempealeau |  |  |  | 1 |  |  | 1 |  |  |
| Vernon |  |  |  |  |  |  | 8 |  | 1 |
| Vilas .... |  |  |  | 1 |  |  |  |  | 1 |
| Walworth |  |  |  |  |  |  | 8 | 2 |  |
| Washburn |  | 3 |  |  |  |  | 3 |  | $\stackrel{\square}{2}$ |
| W ashington | 1 | 2 |  | 1 |  |  | 29 | 2 | 5 |
| Waukesha | 1 | 1 |  |  | 1 |  | 5 | 1 | 1 |
| Waupaca. |  |  |  |  |  |  | 8 |  | 5 |
| Waushara |  |  |  |  | 1 |  | 5 | 2 |  |
| Winnebago | 1 | 2 | 2 |  |  | 22 | 13 | 3 | 5 |
| Wood . | 2 |  | 2 |  |  |  | 4 |  | 3 |
| Total | 310 | 408 | 51 | 108 | 31 | 167 | 788 | 105 | 518 |

TABLE NO. 16.-Continued.

| County. |  | suotisolaxa pue suriead! |  |  | Fails. |  |  |  |  | Bites from horses and dogs |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Adams |  | 2 |  |  |  |  |  |  |  |  |  |
| Ashland |  | 22 | 6 | 2 | 64 | 4 | 2 | 10 | 15 |  | 32 |
| Barron |  | 1 | 3 | 1 | 4 |  | 5 | 4 | 16 | 1 | 4 |
| Bayfleld |  | 2 | 2 | 1 | 2 |  |  |  | 5 |  | 1 |
| Brown |  | 20 | 36 | 11 | 82 | 41 | 25 | 37 | 116 | 14 | 127 |
| Buffialo |  | 3 |  |  | 2 |  | 1 | 1 | 7 |  | $\stackrel{3}{3}$ |
| Burnett |  | 2 | 2 |  | 1 |  | 2 | 6 | 10 |  | 9 |
| Calumet |  | 4 | 1 | 2 | 3 | 6 | 2 | 2 | 13 |  | 5 |
| Chippewa |  | 3 |  | 2 | 4 |  | 1 | 1 | 4 |  | 3 |
| Clark ... |  | 2 | 2 | 2 | 2 |  | 2 | 7 | 8 |  | 7 |
| Columbia |  | 2 |  | 1 | 3 | 5 | ${ }_{6}$ | 5 | 13 |  | 6 |
| Crawiord |  | 7 |  | 1 | 1 | 1 | 2 | 4 | 10 |  | 5 |
| vane |  | 4 | 3 | 4 | 2 | 8 | 4 | 8 | 24 |  | 12 |
| Dodge |  | 15 | 4 | 2 | 14 | 3 | 9 | 10 | 21 | 1 | 17 |
| loor |  | 3 |  | 1 | 3 | 7 |  | 3 | 11 |  | 4 |
| Douglas |  | 2 | 1 | 1 | 14 |  |  | 2 | 10 |  | 24 |
| Dunn |  | 4 | 1 | 1 | 1 |  | 1 | 3 | 4 |  | 2 |
| Eau Claire |  | 7 | , | 4 | 6 | 2 |  | 4 | 13 | 1 | 14 |
| F'iorence .... |  |  |  |  |  |  | 1 |  |  |  |  |
| Fond du Lac |  | 7 | 20 | 4 | 118 | 24 | 6 | 18 | 73 | 3 | 122 |
| F'orest .... |  | 6 | 2 | 1 | 9 | 1 |  | 5 | 9 |  | 4 |
| Grant |  | 1 | 3 | 1 | 12 | 6 | 5 | 6 | 34 | 3 | 15 |
| Green |  | 2 | 1 |  | 6 | 2 | 3 | 12 | 6 | 1 | 15 |
| Green Lake |  |  |  |  | 17 |  |  |  | 6 |  | 9. |
| lowa |  | 4 | 2 | 1 | 17 | 1 | 2 | 5 4 4 | 14 9 | 1 |  |
| Iron |  |  |  |  | 70 |  | 1 |  | 5 |  | 21 4 |
| Jackson |  | $\stackrel{3}{2}$ | 1 | 3 <br> 2 | $\cdots$ | $\stackrel{4}{2}$ | 3 | 4 | 10 | 1 | 4 |
| Juneau . |  | 2 |  |  | 1 | 2 |  | 4 | 10 |  |  |
| Kenosha |  | 1 | 7 | 2 | 24 | 8 | 6 | 9 | 14 | 5 | $19^{*}$ |
| Kewaunee |  |  |  |  |  |  |  | 2 | 4 |  |  |
| La Crosse |  | 2 | 1 |  | 8 | 5 |  | 7 | 21 | 2 | 3 |
| Lafayette |  | 5 | 6 |  | 7 | 3 | 4 | 14 | 12 |  | 5 |
| Langlade |  | 13 | 7 | 6 | 36 | 5 | 8 | 7 | 37 | 10 | 53 |
| Lincoln ... |  |  |  | 1 | 7 |  |  |  | 1 |  | 1 |
| Manitowoc |  |  | 4 | 3 | 31 | 12 | 9 | 15 | 63 | 2 | 49 |
| Marathon |  | 4 | 3 | 2 | 8 | 2 | 2 | 3 | 14 | 1 | 7 |
| Marinette |  | 11 | 7 | 8 | 39 | 7 | 5 | 12 | 30 |  | 30 |
| Marquette |  |  | 1 |  |  |  |  | 2 | 1 |  | 2 |
| Milwauke |  | 72 | 106 | 20 | 487 | 101 | 82 | 115 | 380 | 18 | 508 |
| Monroe |  | 1 | 1 | 2 | 4 | 1 | . | 3 | 13 |  | 3 |
| Oconto |  | 2 | 1 | 1 | 5 | 2 | 1 | 1 | 3 |  | $\stackrel{2}{2}$ |
| Oneida |  | 1 | 1 |  | 7 |  |  |  | 8 |  | 5 |
| Outagamie |  | 9 | 2 | 1 | 17 | 3 | 1 | 6 | 24 |  | 18 |
| Ozaukee .. |  |  |  |  |  | 2 |  | 5 | 4 |  | 1 |
| Pepin ... |  |  |  |  |  |  |  |  | 1 |  | 1 |
| Pierce |  | 5 |  | 1 | 5 |  |  | . | 9 |  | 6 |
| Polk |  | 1 |  |  | 1 |  |  | 3. | 9 |  | 5 |
| Portage |  | 13 | 2 | 3 | 7 |  | 3 | 8 | 21 | 2 | 7 |
| Price |  |  |  |  | 3 |  | 1 |  |  |  | 2 |
| Racine |  | 4 | 11 | 2 | 108 | 5 |  | 4 | 42 |  | 52 |
| Richland |  |  |  |  | 4 |  |  |  | 8 |  | 4 |
| Rock |  | 7 | 6 | 7 | 25 | 13 | 10 | 15 | 50 |  | 36 |
| Rusk |  |  |  | - 1 |  |  |  |  | 1 |  | 1 |
| St. Croix |  |  | 1 |  | 4 | 1 | 1 | 2 | 10 |  | 6 |
| Sauk |  | 6 | 2 | 1 | 8 | 6 | 1 | 9 | 18 |  | 5 |
| Sawyer ... |  |  |  |  | 5 |  |  |  | $\stackrel{2}{2}$ |  | $\stackrel{3}{11}$ |
| Shawano |  | 2 3 | 1 | $\stackrel{2}{2}$ | 8 | 10 | 3 7 | 4 | 10 |  | 11 |
| Taylor ... |  | 1 |  |  | 1 |  |  |  | 1 |  | 1 |
| Trempealeau |  | 1 |  |  | 2 | 1 | 1 | 1 | 11 |  | 3 |
| Vernon .. |  | 3 | 2 | 2 | 1 |  | 1 | 1 | 5 | ... | 3 |

TABLE NO. 16.-Continued.


IABLE NO. 17-SHOWING ACCIDENTS REPORTEI FROM JANCARY 1, 1910, 'TO DECEMBER 31, 1910, ARRANGED BY COUNTIES ACCORDING TO SEX, CONJUGAL CONDITION, AGE, NATURE OF ACCIDEN', RESUL'I' OF INJURY AND DURA'IION OF INJURY.

| County. | Total accidents | Sex. |  | Conjugal condition. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Male. | Female. | Single. | Married. | Not stated |
| Adams ........ | 2 | 2 |  | 1 | 1 |  |
| Ashland ${ }_{\text {Barron }}$ | 280 | 275 | $\stackrel{.}{5}$ | 188 | $\underline{69}$ | 23 |
| Barron . | -09 |  | 10 | 69 | 40 |  |
| Bayfield .... | 17 | 16 | 1 | 12 | 5 |  |
| Brown Buflalo. a | 784 12 | 637 | 147 | 375 | 406 | 3 |
| Burnett | 32 | 101 | 2 | 5 | 7 |  |
| Calumet | 80 | $66{ }^{23}$ | 7 19 | 17 | 13 | , |
| Chippewa | 10 | ${ }_{9}$ | 19 | $\stackrel{43}{8}$ | 42 | ........... |
| Clark .. | 43 | 38 | 5 | $\stackrel{8}{24}$ | ${ }_{19}^{2}$ |  |
| Columbia | 67 | 54 | 13 | 42 | 19 |  |
| Crawford | 38 | 32 | ${ }_{6}$ | 26 | 12 |  |
| Dane . | 142 | - 108 | 34 | 69 | 72 | $\cdots{ }_{1}$ |
| Dodge | 263 | 234 | 29 | 146 | 115 | $\stackrel{1}{2}$ |
| Door ... | 39 | 31 | 8 | 145 | 115 |  |
| Douglas . | 325 | 124 | 1 | 56 | 66 | 3 |
| Dunn Cau claire | 37 | 29 | 8 | 23 | 14 |  |
| Eau Claire <br> Florence | ${ }_{5}$ | $\stackrel{76}{ }$ | 19 | 52 | 32 | $11{ }^{\text {a }}$ |
| Fond du Lac. | 892 | 821 |  | 1 481 | 1 | + |
| Forest ........ | 67 | $\stackrel{81}{62}$ | 71 1 | 481 29 | 407 35 | $\stackrel{4}{3}$ |
| Grant . | 87 | 70 | 17 | 29 38 | 35 47 | 3 2 |
| Green | 88 | 61 | 27 | 48 | 39 | 1 |
| Green Lake | \% 6 | $\stackrel{20}{63}$ | ${ }_{6}^{6}$ | 15 | 11 |  |
| Irona ...... | 75 149 | 63 147 | 12 2 | 43 | 31 | 1 |
| Jackson | 49 | 147 39 | ${ }_{10}^{2}$ | 93 | 55 15 | 1 |
| Jefferson | 57 | 45 | 12 | 34 30 | 15 |  |
| Juneau . | 31 | 26 | 5 | 18 | 13 |  |
| Kenosha .. | 212 | 196 | 16 | 117 | 93 | 2 |
| Kewaunee | $\stackrel{84}{88}$ | 30 | 4 | 14 | 20 |  |
| Lafayette. | 88 84 | 77 | 111 | 46 | 41 40 | 1 |
| Langlade ...... | 233 | 195 | 38 | ${ }_{142}$ | 89 | $\stackrel{2}{2}$ |

TABLE NO. 17.-Continued.

| County. | Total accidents | Sex. |  | Conjugal condition. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Male. | Female. | Single. | Married. | Not stated |
| Iincoln ... | 43 | 43 |  | 30 | 13 |  |
| Manitowoc | 362 | 320 | 42 | 166 | 190 | 6 |
| Marathon . | 151 | 132 | 19 | 79 | 70 | $\stackrel{2}{2}$ |
| Marinette . | 178 | 159 | 19 | 93 | 76 | 3 |
| Marquette | $\stackrel{4}{4,385}$ | 4 4,012 | 373 | $\begin{array}{r}4 \\ \hline 2,289\end{array}$ |  |  |
| Milwaukee . | 4,385 87 | 4,012 | 373 6 | 2,289 49 | 2,056 37 | 40 1 |
| Oconto | 30 | 27 | ${ }_{3}^{6}$ | 15 | 37 14 | 1 |
| Oneida | 12 | 11 | 1 | 7 | 5 |  |
| Outagamie | 127 | 110 | 17 | 63 | 64 |  |
| Ozaukee . |  | 4 | 1 | 2 | 3 |  |
| Pepin ... | 6 | 6 |  | 6 |  |  |
| Pierce | 26 | 24 | 2 | 17 | 9 |  |
| Polk .. | 37 | 32 | '5 | 21 | 16 |  |
| Prortage | 76 1 | 56 | 20 | 32 | 43 | 1 |
| Racine | 559 | 524 | 35 | 315 | 238 | G |
| Richland | 51 | 59 39 | 12 | 19 22 | 238 29 | ( |
| Rock | :30 | 265 | 65 | 169 | 150 | $11{ }^{\prime}$ |
| Rusk | 15 | 15 |  | 9 | 5 | 1 |
| St. Oroix | 66 | 58 | 8 | 30 | 36 |  |
| Sauk .. | 111 | 88 | 23 | 52 | 57 | 2 |
| Sawyer . | 27 | 23 | 4 | 18 | 8 | 1 |
| Shawano. | 109 | 91 | 18 | 64 | 45 |  |
| Sheboygan | 146 | 126 | 20 | 70 | 76 |  |
| Taylor ..... | 14 | 13 | 1 | 7 | 7 |  |
| Trempealeau | 26 | 14 | 12 | 10 | 16 |  |
| Vernon ..... | 17 | 12 | 5 | 13 | 3 | 1 |
| Vilas ...... | 9 | 9 |  | 5 | 4 |  |
| Walworth ... | 34 | 28 | 6 | 16 | 18 |  |
| Washburn ... | 57. | 53. | 4 | 38 | 19 |  |
| Washington | 155 | 129 | 26 | 81 | 73 | 1 |
| Waukesha .. | 28 | 24 | 4 | 13 | 15 |  |
| Waupaca. | 88 | 69 | 19 | 48 | 39 | 1 |
| Waushara | 34 | 27 | 7 | 21 | 13 | . |
| Winnebago | 153 | 122 | 31 | 72 | 81 |  |
| Wood .... | $5 \overline{0}$ | 50 | 5 | 37 | 18 |  |
| Total | 11,¢66 | 10,590 | 1,376 | 6,352 | 5,474 | 140 |

T'A'BLE NO. 17.-Continued.

| County. | Age grouping. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\text { Under }_{10}$ years. | 10-19 | 20-29 | 30-39 | 40-49 | 50-59 | 60-69 | $70+$ | $\begin{gathered} \text { Age } \\ \text { not } \\ \text { stated. } \end{gathered}$ |
| Adams |  | 1 |  |  |  |  | 1 |  |  |
| Ashland | 4 | 27 | 81 | \%2 | 55 | 27 | 6 | 1 | $\ddot{27}$ |
| Barron | 19 | 24 | 27 | 9 | 11 | 8 | 7 | 1 | 3 |
| Bayfield | 1 | ${ }^{6}$ | 1 | 6 | $\ldots$ | 1 | 1 | 1 |  |
| Brown | 69. | 125 | 229 | 166 | … 98 | 49 | 25 | 13 | 10 |
| Buffalo | 1 | 3 | 2 | 2 | 2 | 2 |  |  |  |
| Burnett | 4 | 7 | 3 | 3 | 6 | 4 | i | 2 |  |
| Calumet | 10 | 17 | 18 | 9 | 8 | 16 | 2 | 4 | 1 |
| Chippewa | 2 | 3 | 3 |  | 2 |  | 2 |  | $\pm$ |
| Clark ... | 6 | 7 | 9 | 10 | 5 | 4 | 1 | 1 |  |
| Columbia | 11 | 6 | 14 | 14 | 9 | 5 | 4 | 3 | 1 |
| Crawford | 8 | 11 | 5 | 6 | 5 | 1 |  | 2 |  |
| Dane | 14 | 25 | 29 | 22 | 22 | 11 | 9 | 8 | 2 |
| Dodge . | 13 | 48 | 87 | 60 | 24 | 17 | 2 | 4 | 8 |
| Door .. | 2 | 3 | 8 | 7 | 6 | 5 | 5 |  |  |
| Douglas | 2 6 | 10 | 40 | 32 | 25 | 11 | 2 |  | $\stackrel{3}{3}$ |
| Dunn ....... | 6 | 7 | 11 | 6 | 4 | 1 |  | 2 |  |


| County. | Age grouping. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Under } \\ \text { years. } \end{gathered}$ | 10-19 | 20-29 | 30-39 | 40-49 | 50-59 | 60-69 | $70+$ | $\begin{gathered} \text { Age } \\ \text { not } \\ \text { stated } \end{gathered}$ |
| Eau Claire | 19 | 16 | 16 | 5 | 13 | 11 | 10 | 5 |  |
| Florence ..... |  |  | 1 |  | 1 |  |  |  |  |
| Fond du Lac. | 36 | 95 | 383 | 171 | 94 | -53 | 40 | 12 | 8 |
| Forest ........ |  | 5 | 20 | 21 | 7 |  | 3 |  | 4 |
| Grant | 8 | 12 | 18 | 18 | 11 | ' 3 | 5 | 7 | 5 |
| Green | 12 | 8 | 25 | 21 | 6 | 5 | 4 | 5 | 2 |
| Green Lake | 1 | 8 | 5 | 4 | 5 |  | 2 | 1 |  |
| lowa .... | 11 | 13 | 17 | 14 | 8 | 7 | 2 | 2 | 1 |
| Iron ... | , 6 | 22 | 51 | 46 | 17 | 5 |  |  | 2 |
| Jackson | 4 | 17 | 6 | 2 | 6 | 8 | 1 | 1 | 4 |
| Jefferson. | 5 | 10 | 11 | 6 | 10 | 6 | 3 | 4 | 2 |
| Juneau .. | 5 | 5 | 5 | 2 | 4 | 5 | 3 | 1 | 1 |
| Kenosha . | 15 | 29 | 82 | 42 | 32 | 6 | 5 |  | 1 |
| Kewaunee | 4 |  | 11 | 3 | 8 | 1 | 3 | 2 | 2 |
| La Crosse | 6 | 6 | 30 | 14 | 21 | 6 | 1 | 3 | 1 |
| Lafayette .. | 13 | 14 | 15 | 10 | 16 | 9 | 4 | 2 | 1 |
| Langlade ... | 40 | 52 | 62 | 29 | 22 | 17 | 6 | 3 | 2 |
| Lincoln . |  | 17 | 12 | 7 | 6 |  | 1 |  |  |
| Manitowoc | 22 | 54 | 97 | 63 | 46 | 45 | 16 | 8 | 11 |
| Marathon | 11 | 26 | 43 | 25 | 19 | 12 | 7 | 6 | 2 |
| Marinette | 15 | 39 | 37 | 24 | 28 | 14 | 9 | 1 | 11 |
| Marquette |  |  | 3 |  | 1 |  |  |  |  |
| Milwaukee | 162 | 661 | 1,496 | 901 | 615 | 318 | 140 | 52 | 40 |
| Monroe . | 6 | 12 | 24 | 13 | 14 | 10 | 3 | 2 | 3 |
| Oconto . | 2 | 8 | 6 | 3 | 3 | 4 | 2 | 1 | 1 |
| Oneida ... | 2 | 4 | 1 | 1 | 1 | 3 |  |  |  |
| Outagamie | 19 | 21 | 26 | 17 | 17 | 11 | 7 | 7 | 2 |
| Ozaukee |  |  | 1 | 2 |  | 2 |  |  |  |
| Pepin | 1 | 3 | 2 |  |  |  |  |  |  |
| Pierce | 4 | 6 | 4 | 3 | 2 | 2 | 2 | 1 | 2 |
| Polk . | 6 | 4 | 10 | 4 | 4 | 5 | 1 | 2 | 1 |
| Portage | 11 | 15 | 11 | 12 | 9 | 9 | 4 | 3 | 2 |
| Price .. |  |  |  | 1 |  |  |  |  |  |
| Racine | 23 | 89 | 196 | 108 | 60 | 33 | 11 | 4 | 35 |
| Richland | 8 | 7 | 11 | 5 | 6 | 8 | 4 | 2 |  |
| Rock | 25 | 36 | 93 | 50 | 42 | 32 | 25 | 14 | 13 |
| Rusk |  | 3 | 6 | 3 | 3 |  |  |  |  |
| St. 'Croix | 7 | 13 | 8 | 12 | 12 | 5 | 5 | 2 | 2 |
| Sauk | 9 | 22 | 19 | 12 | 19 | 14 | 9 | 6 | 1 |
| Sawyer | 5 | 1 | 9 | 4 | 5 | 2 | . | 1 |  |
| Shawano | 27 | 14 | 32 | 16 | 6 | 6 | 3 |  |  |
| Sheboygan | 11 | 29 | 32 | 22 | 24 | 13 | 6 | 6 | 3 |
| Taylor ..... | 2 | 1 | 2 | 4 | 1 | 1 | 2 | 1 |  |
| T'rempealeau | 4 | 2 | 2 | 3 | 4 | 1 | 5 | 5 |  |
| Vernon | 6 | 3 | 3 |  | 2 | 1 | 1 | 1 |  |
| Vilas .. |  | 1 | 3 | 3 | 1 | 1 |  |  |  |
| Walworth | 5 | 3 | 4 | 3 | 7 | 4 | 2 | 5 | 1 |
| W ashburn | 12 | 10 | 20 | 4 | 3 | 3 | 4 |  | 1 |
| Washington | 19 | 23 | 36 | 19 | 17 | 19 | 12 | 8 | 2 |
| Waukesha | 1 | 6 | 5 | 4 | 4 | 3 | 1 | 1 | 3 |
| Waupaca .. | 7 | 15 | 27 | 16 | 8 | 11 | 2 | 1 | 1 |
| Waushara | 3 | 5 | 11 | 8 | 1 | 2 |  | 3 | 1 |
| Winnebago | 6 | 39 | 25 | 18 | 21 | 20 | 11 | 8 | 5 |
| Wood .... | 6 | 15 | 14 | 12 | 3 | 3 |  |  | 2 |
| Total | 804 | 1,849 | 3,656 | 2,214 | 1,577 | 928 | 453 | 241 | 244 |

R̈eport of the Bureau of Vital Statistics.


TABLEE NO. 17.-Continued.


TABLE NO. 17.-Continued.

| County. | Result of Injury. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Temporary disablement. |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | 边 |
| Adams |  |  |  |  |  |  |  |  |  |
| Ashland | 17 | 32 | 53 | 22 | 34 | 17 | 23 | 7 | [......2413$\ldots \ldots .$. |
| Barron | 11 | 4 | 5 | 14 | 14 | 13 | 17 |  |  |
| Bayfield | 4 | 2 | 2 | 2 | 1 | 1 | 2 | 1 |  |
| Brown | 162 | 34 | 152 | 46 | 21 | 80 | 127 | 40 | ......... ${ }^{64} \times$ |
| Buffalo |  |  |  | 3 | 2 | 2 | 1 | 1 |  |
| Burnett |  | 2 | ${ }_{6}^{6}$ | 4 | 3 | 5 | 7 |  |  |
| Calumet | 10 | 5 | 7 | 19 | 8 | 14 | 9 | 3 |  |
| Chippewa Clark | 1 |  |  | ${ }_{9}^{2}$ | 4 | 2 |  |  |  |
| Columbia | 1 6 6 | 1 | $\begin{array}{r}2 \\ 7 \\ \hline\end{array}$ | ${ }^{9}$ | ${ }_{6}^{6}$ | 6 | 2 |  | +........ |
| Crawford | 4 | 2 | 9 | 10 | 9 8 | 12 | 14 | 4 |  |
| Dane | 18 | 1 | 25 | 28 | 13 | 21 | 18 | 4 |  |
| Dodge | 50 | 10 | 45 | 30 | 9 | 13 | 17 | 49 | $\cdots \cdots$ |
| Door . | 1 | 1 | 3 | 6 | 6 | 8 | 3 | 2 | 1 |
| Douglas | 30 | 9 | 28 | 4 | 11 | 7 | 14 | 3 | $\stackrel{1}{8}$ |
| Dunn ..... | 4 | 1 | 1 | 7 | 8 | 5 | 2 | 6 | $\xrightarrow[1]{1}$ |
| Fau Claire | 13 | 2 | 7 | 16 | 13 | 25 | 3 | 3 | 1 |
| Florence ...... |  |  | 1 |  | 1 |  |  | 3 |  |
| Fond du Lac. | 239 | 84 | 181 | 33 | 22 | 72 | 141 |  |  |
| Forest Grant | 5 <br> 8 | 1 6 | ${ }^{6}$ | 5 9 | 9 | 15 | r 8 | $\begin{array}{r} 54 \\ 1 \end{array}$ |  |
| Green . | 8 | 6 1 | 110 | 9 10 | 10 | 13 | 13 | 2 |  |
| Green Lake | 3 | 1 | 13 | 10 | 10 5 | 6 5 5 | 11 | 4 |  |
| Iowa . | 9 | 2 | 8 | $\stackrel{4}{9}$ | ${ }_{6}$ | 12 | $\stackrel{2}{9}$ | $\stackrel{2}{2}$ | $\cdots$ |
| Iron | 25 | 8 | 25 | 3 | 12 | 13 | 21 | 7 | 23 |
| Jackson | 2 | 1 | 2 | 9 | 7 | 11 | 3 | 4 |  |
| Jefferson | 2 | 3 | 4 | 10 | 7 | 8 | 10 | 1 | $\quad \begin{array}{r}6 \\ 7\end{array}$ |
| Juneau . | 1 | 1 | 2 | 7 | 1 | 6 | 3 |  | . |
| Kenosha | 67 | 9 | 20 | 8 | 8 | 20 | 10 | 16 | - 37 |
| Kewaunee | 8 | 1 | 1 | 3 | 6 | 6 | 3 |  | . |
| La Crosse | 10 | 2 | 2 | 7 | 5 | 18 | 12 |  | 8 16 <br> 20  |
| Lafayette | 4 | 5 | 5 | 7 | 7 | 15 | 12 | 5 |  |
| Langlade <br> Lincoln | 33 9 | 8 | 21 | 21 | 9 | 34 | 19 | 4 | 20 71 |
| Manitowoc | 73 | 10 | 21 | 12 | - 5 | 10 37 | 2 26 |  | - ${ }^{7}$ |
| Marathon | 23 | 6 | 16 | 12 9 | 11 | 31 | 26 | 13 4 | 2915 |
| Marinette | 38 | 11 | 28 | 8 | 17 | 22 | 18 | ${ }_{6}^{4}$ |  |
| Marquette | 1 |  | 1 |  | 1 | 1 | 18 | 6 |  |
| Milwaukee | 1,177 | 277 | 633 | 248 | 201 | 449 | 365 | 273 |  |
| Monroe | 10 | 11 | 14 | 11 | 2 | 10 | 11 |  | 30541 |
| Oconto | 4 | 3 | 2 | 3 | 3 | 1 | 2 | 1 |  |
| Oneida ... |  |  |  | 2 | 3 | 2 | 1 | 1 | $\cdots$ |
| Outagamie | 20 | 7 | 21 | 15 | 3 | 18 | 19 | 6 |  |
| Pzaukee | 2 |  | 1 |  |  | 2 |  | .. | $\ldots$ |
| Pepince ... | $\frac{1}{2}$ | 2 |  |  |  | 3 | . |  |  |
| Polk ... | 3 | 3 | ${ }_{3}^{4}$ | 2 | 1 | ${ }_{12}^{6}$ | 3 | 1 2 | $\begin{aligned} & 3 \\ & 6 \end{aligned}$ |
| Portage | 7 | 8 | 9 | 9 | 3 | 14 | 9 | ${ }_{3}^{2}$ |  |
| Price ... | 1 |  |  |  |  |  |  |  |  |
| Racine | 237 | 30 | 61 | 45 | 25 | 31 | 28 | $\begin{array}{r} 20 \\ 1 \\ 22 \end{array}$ | $\begin{array}{r} 25 \\ 6 \\ 38 \end{array}$ |
| Richland | 6 | 2 | 9 | 6 | 3 | 8 | 2 |  |  |
| Rock | 32 | 10 | 37 | 47 | 31 | 60 | 40 |  |  |
| Rusk | 2 | 1 | 3 |  | 1 | 2 |  |  |  |
| St. Croix | 8 | 3 | 11 | 5 | 5 | 12 | 8 | 2 8 <br> 4 9 <br> 1 5 <br> 8 14 <br> 1 4 |  |
| Sauk | 6 | 6 | 10 | 25 | 7 | 21 | 12 |  |  |  |
| Sawyer | 1 | 1 | 6 | 6 | 2 | 4 | 1 |  |  |  |
| Shawano | 14 | 10 | 18 | 8 | 4 | 13 | 10 |  |  |  |
| Sheboygan | 15 | 4 | 19 | 16 | 10 | 27 | 15 |  |  |  |
| Taylor ..... |  | 1 |  | 1 | 4 | 5 | 1 |  |  |  |
| Trempealeau | 1 |  | 2 | 3 | 3 | 11 |  | 1 | 3 |
| Vernon ..... | ${ }_{2}$ |  | $\stackrel{2}{3}$ | 2 | 2 | 4 | 3 |  |  |
| Vilas ... |  |  |  |  | 1 | 1 |  | 1 |  |

${ }^{\top}{ }^{1}$ ABBLE NO. 17.-Continued.

| County. | Result of Injury. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Temporary disablement. |  |  |  |  |  |  |  |  |
|  |  |  |  |  | 烒 | (en |  | 或 |  |
| Walworth |  | 1 | 2 | 7 | 6 | 8 | 1 | 2 |  |
| W ashburn | 4 | 3 | 11 | 8 | 2 | 13 | 6 | 1 | 7 |
| Wáshington | 19 | 13 | 26 | 12 | 14 | 24 | 22 | 9 | 4 |
| Waukesha . | 3 |  | 4 | 3 | 4 | 3 | 2 | 2 | $\stackrel{2}{2}$ |
| Waupaca | 16 | 7 | 13 | 7 | 4 | 19 | 9 | 1 | 3 |
| Waushara | 3 | 4 | 7 | 1 | 7 | 4 | 3 | 2 | 1 |
| Winnebago Wood | 25 6 | 4 7 | 15 4 | 21 13 | 12 | 33 | 10 |  | 3 |
| Total | 2,528 | 686 | 1,671 | 935 | 725 | 1,416 | 1,183 | 631 | 885 |

I'ABLE NO. 17.-Continucd.


TABLE NO. 17.-Continued.

| County. | Refult of Injury. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Permanent disablement. |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | ज. | -i. | O. |
| Langlade . | 9 |  | 1 | 1 | 2 |  |  |  | 17 |
| Lincoln .... | 10 |  |  |  |  |  |  |  | 1 |
| Manitowoc | 33 | 2 | 1 |  |  |  |  |  | 12 |
| Marathon | 6 |  |  |  | 1 |  |  |  |  |
| Marinette . | 6 | 1 | 2 | 2 |  | 1 | 3 |  | .... |
| Marquette |  |  |  |  |  |  |  |  |  |
| Milwaukee | 170 | 8 | 7 | 15 | 84 | 3 | 64 | 76 | 171 |
| Monroe | 6 | 1 | 3 | 1 | 1 | 1 | 1 |  | 1 |
| Oconto | 3 | 1 |  |  |  |  | 1 | 5 | ..... |
| Oneida |  | 1 | 1 |  |  |  | 1 |  |  |
| Outagamie | 4 | 3 | 1 | 2 |  | 1 | 2 | 1 | 4 |
| Ozaukee . |  |  |  |  |  |  |  |  |  |
| Pepin | 1 |  |  |  |  |  |  |  |  |
| Pierce ... | 1 |  |  |  |  |  | 1 | 1 | 1 |
| Portage | 2 4 | 1 |  |  |  |  | 1 | 2 | 3 |
| Price . |  |  |  |  |  |  |  |  |  |
| Racine | 44 | 2 | 2 | 1 |  |  | 2 |  | 23 |
| Richland | 6 | 1 |  |  |  |  |  | 1 | 2 |
| Rock | 8 | 2 | 2 |  | 1 |  |  |  | 9 |
| Rusk ... | 3 |  | 1 | 1 | .... |  | 1 |  |  |
| St. 'Croix | 1 | 1 | 2 |  |  |  |  |  | 2 |
| Sauk. | 5 |  |  |  | . ..... |  | 6 |  | 3 |
| Sawyer . |  |  |  |  |  |  |  |  |  |
| Shawano | 5 |  |  |  |  | 2 | 3 |  | 10 |
| Sheboygan | 25 | 1 |  |  |  | ...... | 5 | 4 | 1 |
| Taylor ..... | 1 |  |  |  |  |  | 1 |  |  |
| Trempealeau | 1 | 1 |  |  |  |  |  |  |  |
| Vernon ....... | 1 | 1 | 1 |  |  |  |  |  |  |
| Vilas .... |  |  |  |  |  |  | 1 |  |  |
| Walworth | 3 |  | 1 |  |  |  | 2 |  |  |
| Washburn .. | 1 |  |  | 1 |  |  |  |  | 15 |
| Washington Waukesha | 9 1 | 2 1 1 | 1 | 1 |  |  | 1 | 1 | 15 |
| Waupaca | 7 | 1 |  | 1 |  |  | 1 | 1 | 5 |
| Waushara |  | 1 | 1 |  |  |  |  |  |  |
| Winnebago | 23 | 1 | 1 | ...... |  | 2 | 1 | 2 | 1 |
| Wood ..... | 4 | 1 | 2 |  |  |  | 1 | 1 | .... |
| Total | 560 | 53 | 48 | 48 | 104 | 73 | 181 | 139 | 458 |

TABLE NO. 17.-Continued.

| County. | Duration of injury. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{aligned} & \text { g } \\ & \text { B } \\ & 0 \\ & \text { an } \end{aligned}$ |  |  |  |  |  |
| Adams . | 1 |  |  |  | 1 |  |  |  |  |
| Ashland | 5 | 55 | 51 | 66 | 40 | 25 | 1 | 4 | 33 |
| Barron | 7 | 7 | 13 | 37 | 33 | 6 | 2 |  | 4 |
| Bayfield | 1 | -180 | 5 | 4 | 5 | 1 |  |  | 19 |
| Brown | 9 | 180 | 218 | 257 | 88 | 11 |  | 2 | 19 |
| Buffalo | 2 | 1 | ........ | ${ }^{6}$ |  | 2 |  |  | 1 |
| Burnett |  |  |  | 23 | 5 | 2 |  |  |  |
| Calumet | 1 | 11 | 12 | 38 | 20 | 1 |  | 1 | 1 |
| Ohippewa |  |  | 1 | 5 | 2 | 2 |  |  |  |
| Clark ... |  | 1 | 5 | 22 | 13 | 1 |  |  | 1 |
| Columbia | 2 | 4 | 3 | 20 | 27 | 3 | 1 | 3 | 4 |
| Crawford |  | 3 | 3 | 9 | 14 | 5 | 1 | 2 | 1 |
| Dane | 8 | 19 | 15 | 44 | 36 | 8 | 3 | 5 | 4 |
| Dodge | 5 | 121 | 41 | 33 | 43 | 6 | 6 |  | 8 |
| Door |  | 1 | 10 | 14 | 12 | 2 |  |  |  |
| Douglas | 1 | 20 | 21 | 45 | 18 | 10 | 3 | 2 | 5 |
| Dunn . | 5 | 3 | 6 | 9 | 10 | 2 |  | 1 | 1 |
| Eau Claire | 5 |  | 15 | 34 | 24 | 7 | 2 | 1 | 7 |
| Florence . |  |  |  |  |  |  |  |  |  |
| Fond du Lac. | 5 | 485 | 167 | 130 | 68 | 14 | 6 | 6 | 11 |
| Forest . | 3 | 2 | 9 | 31 | 11 | 6 |  | $\stackrel{2}{2}$ | 3 |
| Grant | 2 | 11 | 6 | 33 | 27 | 4 | 1 | 1 | 2 |
| Green . |  | 8 | 4 | 39 | 19 | 9 |  | 3 | 6 |
| Green Lake | 1 | 2 | 4 | 6 | 7 | 3 |  |  | 3 |
| Iowa . | 1 | 25 | 11 | 20 | 10 | 3 |  |  | 5 |
| Iron . | 3 | 44 | 34 | 48 | 12 | 3 | 1 | 3 | 1 |
| Jackson |  | 2 | 10 | 16 | 13 | 3 | ....... | 2 | 3 |
| Jefferson | 2 | 8 | 7 | 14 | 16 | 5 | 1 |  | 4 |
| Juneau . |  |  | 1 | 19 | ${ }^{6}$ | 3 | 1 |  | 1 |
| Kenosha Kewaunee | 2 | 54 | 63 | 59 7 | 19 12 | 8 4 | 1 2 | 1 | 5 |
| La Crosse | 3 | 9 | 14 | 39 | 14 | 4 |  | 1 | 4 |
| Lafayette | 1 | 5 | 9 | 28 | 20 | 7 | 2 | 3 | 9 |
| Langlade | 1 | 38 | 59 | 71 | 46 | 12 | 3 | 2 | 1 |
| Lincoln .. | 1 | 16 | 10 | 4 | 8 | 2 |  |  | , |
| Manitowoc | 9 | 98 | 60 | 118 | 56 | 8 | 5 | 2 | 6 |
| Marathon | 4 | 28 | 34 | 37 | 29 | 11 | 1 | 2 | 5 |
| Marinette | 3 | 55 | 28 | 52 | 18 | 12 | 1 | 1 | 8 |
| Marquette |  | 1. |  | 1 |  | 1 | 1 |  |  |
| Milwauke | 201 | 1,723 | 825 | 874 | 507 | 128 | 34 | 36 | 57 |
| Monroe | 5 | 20 | 15 | 18 | 20 | 3 |  |  | 6 |
| Oconto | 1 | 2 | 3 | 10 | 9 | 3 |  |  | 2 |
| Oneida .. | 3 |  |  | 2 | 5 | 1 |  |  | 1 |
| Outagamie | 6 | 26 | 6 | 33 | 30 | 14 | 2 | 3 | 7 |
| Ozaukee | 1 | 2 |  | 1 | , |  |  |  |  |
| Pepin .. |  |  | 1 | 3 |  | 1 |  |  | 1 |
| Pierce | 2 | 3 |  | 8 | 10 | 2 |  | 1 |  |
| Polk Portage |  | 5 5 | 3 10 | 10 31 | 14 25 | 3 |  |  | 2 |
| Portage | 3 | 5 | 10 | 31 | 25 | 2 |  |  |  |
| Racine | 4 | 265 | 110 | 95 | 65 | 7 | 5 |  | 8 |
| Richland | 1 | 5 | 6 | 10 | 23 | 1 | 1 |  | 4 |
| Rock | 7 | 39 | 65 | 93 | 65 | 19 | 10 | 5 | 27 |
| Rusk | 2 | 6 | 2 | 4 |  | 1 |  |  |  |
| St. Croix |  | 16 | 4 | 20 | 18 | 5 |  |  | 3 |
| Sauk | 7 | 6 | 6 | 38 | 35 | 6 |  | 3 | 10 |
| $\underset{\text { Shawana }}{\text { Saw }}$. | 3 |  | 5 | 11 | ${ }^{6}$ |  |  |  | 2 |
| Shawano ... | 4 19 | 41 7 | 14 29 | 30 36 | 15 36 |  |  | 6 | 5 |
| Taylor ... | 19 3 | 7 | 29 | 36 4 | $\stackrel{3}{5}$ | 7 2 | 1 | 6 | 5 |
| Trempealeau | 4 |  | 1 | 2 | 11 | 5 | 1 |  | 2 |
| Vernon ..... | 1 |  | 2 | 2 | 8 | 2 |  |  |  |
| Vilas .... | 1 |  | 1 | 5 |  |  |  |  |  |
| Walworth | 5 |  |  | 8 | 10 | 7 |  | 1 | $\stackrel{1}{1}$ |
| Washburn .. | 2 | 8 24 | $\begin{aligned} & 6 \\ & 30 \end{aligned}$ | 29 42 | 8 88 | 2 | 1 | 8 | 1 |

TABLE NO. 17.-Continued.

| County | Duration of injury. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 立 | ¢ \# ¢ a |  |  |  |  |
| Waukesha | 5 | 1 |  |  |  |  |  |  |  |
| Waupaca | 4 | 14 | 15 | 20 | ${ }_{6}^{6}$ | 1 | 1 | 1 | 17 |
| Waushara . |  | 5 | 3 | 9 | 12 | 1 |  | $\stackrel{1}{2}$ | 18 |
| Winnebago | 3 | 18 | 24 | 60 | 29 | 8 | $\cdots$ | 1 | 8 |
| Wood ..... | 3 | 6 | 7 | 16 | 18 | 2 |  | 2 |  |
| Total | 395 | 3,578 | 2,144 | 2,973 | 1,847 | 453 | 106 | 120 | 345 |

TABLE NO. 18.-SHOWING ACCIDENTS REPORIED' FROM JANUARY 1, 1910 TO DECEMBER 31, 1910, ARRANGED BY COUN'ITES ACCORDING TO CAUSE OF INJURY.

| County. | Injured by machinery. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
| Adams |  |  |  |  |  |  |  |
| Ashland | 2 | 1 |  | 8 | 2 |  | 14 |
| Barron <br> Bayfield | 1 |  |  | 7 |  |  |  |
| Brown | 7 | 1 |  | ${ }_{16}^{1}$ | $\cdots$ | 1 | 2 |
| Buffalo | 1 | 1 |  |  |  |  | 36 |
| Burnett |  |  |  | 2 |  | 1 | 1 |
| Calumet | 4 |  |  | 4 |  |  | $\stackrel{2}{2}$ |
| Chippewa |  |  |  | 4 |  | 1 | 7 |
| Clark | 1 |  |  | 5 |  | 2 |  |
| Columbia | 2 |  |  | 1 |  | 2 | 4 |
| Crawford |  |  |  | 1 | 1 | 4 | ${ }_{2}^{4}$ |
| Dane | 2 |  | 2 | 4 | 2 | 3 | 10 |
| Dodge | 1 | 18 |  | 8 | 1 | 4 | 20 |
| Douglas |  | 3 |  | 5 |  |  |  |
| Dunn . |  | 3 |  | 2 | 1 |  | 3 |
| Eau Claire |  |  |  | 1 | 1 | $\stackrel{2}{2}$ | 1 |
| Florence . |  |  |  |  |  | 2 | 5 |
| Fond du Lac. | 7 | 4 |  |  |  |  |  |
| Forest | 1 |  |  | 18 | 8 | 2 | 87 6 |
| Grant | 4 |  |  | 2 | i | 3 |  |
| Green Green Lake | 5 |  |  |  | 2 | 1 | 3 |
| Iowa ..... |  |  |  |  |  | 1 | $\stackrel{2}{2}$ |
| Iron | 4 |  |  |  |  | 5 | 4 |
| Jackson | 1 |  |  | 2 |  |  | 5 |
| Jefferson |  |  |  | 2 | ${ }_{3}^{1}$ | 2 | $\stackrel{\square}{2}$ |
| Juneau | 2 |  |  | 2 | 1 1 | 2 | 2 |
| Kenosha | 11 | 7 | 13 | 5 | ${ }_{9}^{1}$ | ...... | 26 |
| Kewaunee |  |  |  | 1 |  | 1 |  |
| Lafayette - | 2 |  | 2 |  | 1 | 3 | 6 |
| Langlade .. | 3 |  | 2 | 5 | $\cdots \cdots$ | $\stackrel{2}{2}$ | 3 9 |

TABLE NO. 18.-Continued.

| County. | Injured by machinery, |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 䜿 |  |  |  |
| Lincoln | 2 |  |  | 2 | 3 | 2 |  |
| Manitowoc | 8 |  | 6 | 7 | 15 | 5 | 53 |
| Marathon | 2 |  |  | 2 | 1 | 2 | 11 |
| Marinette | 4 |  | 2 | 2 | 3 |  | 23 |
| Marquette | 1 |  |  |  |  |  |  |
| Milwaukee | 76 | 33 | 113 | 24 | 45 | 3 | 292 |
| Monroe . | 1 | ... | 1 | 1 | 2 | 1 | 6 |
| Oconto |  | ...... |  |  |  | 1 | 2 |
| Outagamie | 3 | ........ |  | 4 | 1 | 2 | 4 |
| Ozaukee . . |  |  |  | 4 |  |  |  |
| Pepin . |  |  |  |  |  | 1 | 1 |
| Pierce |  |  |  | 1 |  |  | 1 |
| Polk .. |  |  |  |  |  | 2 | 2 |
| Portage | 1 | .... |  | 1 | -1 | 1 | 8 |
| Price .. |  |  |  |  | 1 |  |  |
| Racine | 17 | 28 | 11 | 6 | 4 | 1 | 32 |
| Richland | 1 |  | 1 | 1 |  | 2 | 2 |
| Rock | 5 | ........ | 1 | 4 |  | 4 | 10 |
| Rusk |  |  |  |  | 2 |  |  |
| St. Oroix | 2 |  | 1 |  | 1 | 3 | 1 |
| Sauk | 1 |  |  |  | 1 | 6 | 3 |
| Sawyer .... |  |  |  |  |  |  |  |
| Shawano | 1 3 |  |  |  | 6 | ${ }_{5}^{3}$ | ${ }_{4}^{2}$ |
| Sheboygan Taylor .... | ${ }_{1}^{3}$ |  | 2 | 4 | 6 | 5 | 4 |
| Trempealeau |  |  |  |  |  | 1 | $\underline{2}$ |
| Vernon | 1 |  |  |  |  |  | 1 |
| Vilas |  |  |  |  |  |  | 2 |
| Walworth |  |  |  |  |  | 3 |  |
| Washburn | 1 |  |  |  |  | 1 | 1 |
| Washington | 2 |  |  | 2 | 1 | 6 | 3 |
| Waukesha |  |  |  | 2 |  | 2 | 1 |
| Waupaca | 2 | 1 |  | 4 |  | 2 | 6 |
| Waushara |  |  |  |  |  | 1 |  |
| Winnebago | 4 |  |  | 3 | 2 |  | 32 |
| Wood ...... | 3 |  |  | 2 |  |  | 4 |
| Total | 208 | 96 | 164 | 179 | 141 | 113 | 786 |

11-B. H.

TABLE NO. 18.-Continued.

| County. | Steam railroads. |  |  |  |  |  |  | $\begin{aligned} & \dot{\oplus} \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 3 \\ & 3 \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |
| Adams |  |  |  |  |  |  |  |  |  |
| Ashland | 4 | 2 |  | 3 |  |  | 22 | ..... |  |
| Barron ${ }_{\text {Bayfleld }}$ | 3 |  |  | 3 |  |  | 14 |  | 5 3 |
| Bayfeld | 1 76 | ${ }_{4}^{1}$ |  |  |  |  | - 2 |  | 56 |
| Brown | 76 | 4 | 19 | 4 | . | 14 | $\stackrel{52}{2}$ | 4 | 56 |
| Buffalo Burnett |  |  |  |  |  |  | ${ }_{3}$ | $i$ | i |
| Calumet |  |  |  |  | 1 |  | 19 |  | 2 |
| Chippewa |  |  |  |  |  |  | 1 |  | 1 |
| Clark ... |  |  |  |  |  |  | 10 |  | 1. |
| Columbia |  |  | 2 | 1 |  |  | 8 | 1 | 6 |
| Crawford |  |  |  |  | 4 |  | 9 |  | 3 |
| Dane .... | 3 | 12 |  |  | 4 | ${ }_{2}$ | 28 |  |  |
| Dodge |  | 6 |  |  | 1 | 2 | 19 3 | 1 <br> 1 | 11 |
| Door | 1 | 10 |  |  | 1 |  |  |  | 9 |
| Dunn . | 1 |  |  |  |  |  | 5 |  |  |
| Eau Claire |  | 1 |  |  | 2 | 2 | 8 |  | 2 |
| Florence |  |  |  |  |  |  |  |  |  |
| Fond du Lac. | 6 | 155 | 2 |  | 1 | 4 | 29 | 3 | 49 8 |
| Forest |  | 2 |  |  |  |  | 12 |  | 4 |
| Grant |  |  |  |  |  |  | 12 | 2 | ${ }_{4}^{4}$ |
| Green Green Lake |  | 3 |  |  |  |  | 6 3 |  | 4 |
| Green Lake | 1 |  | 2 |  |  |  | 17 | 2 | 3 |
| Iron . |  |  |  |  |  |  |  |  | 12 |
| Jackson |  |  |  | 1 |  |  | 4 |  | 2 |
| Jefferson |  | 1 | 1 | 2 | 1 |  | 4 | 1. | 3 |
| Juneau. |  | 2 |  | 2 | 1 |  | 3 <br> 3 |  | 11 |
| Kenosha |  | 1 |  | 1 |  |  | 3 4 | 6 | 1 |
| Kewaunee |  | 19 |  | 3 |  | i | 1 | 2 | 2 |
| Lafayette |  | 1 |  |  |  |  | 11 |  | 7 |
| Lianglade | , | 5 |  | 1 |  |  | 7 |  | 34 3 |
| Eincoln .... |  |  |  | 1 |  |  | 4 |  | ${ }^{3}$ |
| Manitowoc |  | 8 |  | 2 |  |  | 12 | 5 | 19 |
| Marathon |  |  |  | 1 |  |  | 16 |  | 14 |
| Marinette |  |  |  | 1 |  | 3 | 7 |  | 14 |
| Marquette |  |  |  |  |  |  |  |  |  |
| Milwaukee | 1 | 52 |  | 58 1 |  | 58 | 7 7 |  | ${ }^{2} 7$ |
| Monroe . Oconto |  |  |  |  | 1 |  | 1 | 1 | 1 |
| Oneida ... |  |  |  | 1 |  |  |  | 1 |  |
| Outagamie |  | 5 |  | 3 |  |  | 7 |  | 5 3 |
| Ozaukee |  |  |  |  |  |  | 1 |  | 3 |
| Pepin |  |  |  |  |  |  | 3 |  | 1 |
| Pierce Polk |  | 1 |  | 1 |  |  | 4 |  | 2 |
| Portage |  | 1 | 2 |  |  |  | 4 |  | 7 |
| Price |  | 1 |  | 3 |  |  | 7 | 6 | $45^{\circ}$ |
| Richland |  |  |  |  |  |  | 14 |  | 5 |
| Rock . . |  | 5 |  | 5 |  |  | 16 | 4 | 10 |
| Rusk |  |  |  | 2 |  |  | 1 |  |  |
| St. Oroix |  | 1 |  |  |  |  | 10 |  | 4 |
| Sauk . |  | 1 |  | 1 |  |  | 15 |  | 4 |
| Sawyer .... |  |  |  |  |  |  |  |  | 7 |
| Shawano Sheboygan |  | 2 |  |  |  |  | 13 | 2 | 2 |
| Taylor .... |  |  |  | 1 |  |  | 1 |  |  |
| Trempealeau |  |  |  |  |  |  | 2 |  | 1 |

TABLE NO. 18.-Coutinued.

| County. | Steam railroads. |  |  |  |  |  |  | $\begin{aligned} & \dot{0} \\ & \stackrel{\rightharpoonup}{0} \\ & \stackrel{0}{0} \\ & \text { an } \\ & 0 \\ & \ddot{Z} \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | -Sภిu!̣ssoio proal!ey |  |  |  |  |
| Vernon |  |  |  |  |  |  | 4 |  |  |
| Vilas .... |  |  |  |  |  |  | 1 |  |  |
| Walworth |  |  |  | 1 |  |  | 2 | i | i |
| Washburn . |  |  |  |  |  |  | 3 | 1 | 7 |
| Washington |  | 3 | 1 | 2 | 1 | ...... | 10 | ...... | 7 |
| Waukesha . |  | 3 | ..... |  | 3 | .... | 2 |  |  |
| Waupaca |  | 1 |  | 1 |  |  | 7 |  | 9 |
| Waushara |  |  |  |  |  |  | 3 |  |  |
| Winnebago |  |  |  |  |  |  | 1 | 1 | $\stackrel{\square}{5}$ |
| Wood | 5 | 1 |  | 2 |  |  | 2 | 2 | 2 |
| Total | 109 | 311 | 29 | 114 | 18 | 87 | 586 | 104 | 681 |

TABLE NO．18．－Continued．

| County． |  |  |  | Falls． |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |
| Adams |  |  |  | 2 |  |  |  |  |  |  |
| Ashland | 14 | 8 |  | 100 | 3 | 2 | 29 | 12 |  | 23 |
| Barron | 9 | 2 | 6 | 9 | 4 | 1 | 16 | 15 |  | 8 |
| Bayfleld | 2 |  |  | 2 |  |  |  | 2 |  |  |
| Brown ． | 18 | 27 | 15 | 66 | 38 | 16 | 74 | 86 | 18 | ＇ 107 |
| Buffalo | 1 | 1 |  | 2 |  | 1 |  | 1 |  |  |
| Burnett | 2 |  | 2 | 3 | 1 | 1 | 3 | 3 |  | 6 |
| Calumet | 4 | 1 |  | 7 | 5 | 4 | 10 | 10 |  | 6 |
| Chippewa |  |  |  | 2 |  |  | 2 | 1 | 1 | 2 |
| Clark ．． | 1 | 1 | ．．．．． | 4 |  | 2 | 3 | 5 | 1 | 7 |
| Columbia | 4 | 1 |  | 4 | 2 | 4 | 11 | 11 |  | 3 |
| Crawford | 3 | 2 |  | 2 |  | 1 | 1 | 8 |  | 1 |
| Dane | 1 | 2 |  | 8 | 2 | 4 | 14 | 21 |  | 7 |
| Dodge | 8 | 29 | 11 | 14 | 8 | 8 | 10 | 14 | 2 | 67 |
| Door | 3 | 1 | 2 | 2 | 4 | 2 | 3 | 2 |  | 8 |
| Douglas | 2 | 2 | 1 | 32 | 1 |  | 12 | 14 |  | 31 |
| Dunn | 3 | 3 | ．．． | 3 | 3 | 2 | 4 | 3 |  | 5 |
| Eau Claire | 3 |  | 3 | 7 | 4 | 4 | 13 | 15 | 3 | 19 |
| Florence | 1 |  |  |  |  |  | 1 |  |  |  |
| Fond du Lac | 21 | 42 | 10 | 163 | 26 | 5 | 41 | 97 | 5 | 107 |
| Forest | 1 | 1 | 1 | 21 |  |  | 2 | 7 |  | 6 |
| Grant | 1 | 2 | 1 | 10 | 4 | 1 | 8 | 21 | 2 | 6 |
| Green | 1 | 4 | 2 | 4 | 5 | 3 | 5 | 18 | 1 | 19 |
| Green Lake | 4 | 1 | 1 | 1 |  | 2 | 2 | 6 |  | 3 |
| Iowa | 2 | 3 |  | 8 | 2 | 1 | 6 | 11 | 1 | 5 |
| Iron | 8 | 6 |  | 48 |  |  | 11 | 17 |  | 36 |
| Jackson | 9 |  | 2 | 2 |  | 4 | 12 | 9 |  | 1 |
| Jefferson | 1 | 1 | － | 4 | 4 | 1 | 9 | 15 | $\ldots$ | 1 |
| Juneau | 1 |  | 1 | 2 | 1 | 1 | 3 | 4 |  | ． |
| Kenosha | 1 | 14 |  | 25 | 6 | 4 | 12 | 25 | 1 | 32 |
| Kewaunce |  |  |  | 4 | 1 | 1 | 4 | 6 |  | 7 |
| La＂Crosse | 5 | 4 |  | 11 | 3 | 2 | 2 | 15 | 1 | 3 |
| Lafayete | 8 | 1 |  | 13 | 2 |  | 9 | 17 |  | 10 |
| Langlade | 9 | 3 | 4 | 33 | 4 | 9 | 23 | 39 | 1 | 38 |
| Lincoln | 1 |  | 1 | 8 |  |  | 1 | 3 |  | 8 |
| Manitowoc | 8 | 6 | 1 | 45 | 8 | 8 | 13 | 72 |  | 61 |
| Marathon | 8 | 2 | 2 | 22 | 4 | 3 | 6 | 26 |  | 30 |
| Marinette | 8 | 1 | 1 | 43 | ．．．． | 2 | 10 | 40 | 1 | 13 |
| Marquette |  |  |  | 1 |  |  | 1 |  |  | 1 |
| Milwaukee | 102 | 223 | 16 | 865 | 120 | 80 | 113 | 745 | 21 | 982 |
| Monroe | 7 |  | 1 | 13 | 1 | 2 | 3 | 20 9 |  | 8 |
| Oconto | 2 | 1 | 1 | 9 |  |  | 1 | 9 4 |  |  |
| Oneida | 4 | 1 | 4 | $\stackrel{2}{8}$ | 5 | 4 | 5 | 4 4 | 2 | 13 |
| Ozaukee ． | 4 | 4 |  |  |  |  |  | 4 |  |  |
| Pepin |  |  |  | 1 |  |  |  |  |  | 2 |
| Pierce | 1 | 1 |  |  | 1 |  | 1 | 11 |  | 5 |
| Polk ． | 3 | 2 |  | 5 |  |  | 4 | 9 |  | 2 |
| Portage | 3 | 2 |  | 10 | 4 | 1 | 3 | 21 | 1 | 5 |
| Price ． |  |  |  |  |  |  |  |  |  |  |
| Racine | 7 | 15 | 4 | 141 | 7 | 6 | 9 | 74 |  | 135 |
| Richland | 1 | 2 | 1 | 1 |  | 1 | 6 | 7 |  | 11 |
| Rock | 11 | 12 | 7 | 32 | 17 | 11 | 6 | 110 |  | 59 |
| Rusk | 1 |  | 1 | 5 |  |  |  | 1 |  |  |
| St．Oroix | 3 | 2 |  | 9 |  | 1 | 7 | 19 | 1 | ${ }^{3}$ |
| Sauk | 4 | 2 | 2 | 5 |  | 4 | 6 | 38 |  | 12 |
| Sawyer | 2 | 1 | 1 | 10 |  | 1 |  | 9 | 1 | 1 |
| Shawano | 9 | 8 |  | 17 |  | 1 | 1 | 24 | 4 | 23 |
| Sheboygan | 2 | 1 |  | 13 |  | 4 | 9 | 41 | 1 | 23 |
| Taylor ．．．． | 1 | $\cdots$ | 1 | 1 |  | 2 | 1 | $\stackrel{3}{13}$ |  | 1 |

TABLE NO' 18.-Continued.

| County. |  |  |  | Falls. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |
| Vernon |  |  | 2 |  |  | 1 | 2 | 4 |  | 2 |
| Vilas .... | 1 |  |  | 4 |  |  |  |  |  | 1 |
| Walworth | 1 |  |  | 1 | 1 | 1 | ${ }^{6}$ | 14 |  |  |
| Washburn | 4 | 1 |  | 8 | ...... | 1 | 1. | 22 |  | 3 |
| Washington | 6 | 5 | 3 | 22 |  | 1 | 8 | 49 | 3 | 15 |
| Waukesha . | 4 |  |  |  | $\stackrel{2}{2}$ | 1 |  | 7 |  |  |
| Waupaca | $\stackrel{5}{5}$ |  | 1 | 10 9 | 2 1 | 4 | 1 | 22 10 | - | 10 4 |
| Winnebago | 3 | 1 | 2 | 9 15 | 1 8 | 1 7 | 1 5 | 10 | . | 11 |
| Wood ..... | 1 |  | 2 | 8 |  |  | 2 | 12 |  | 1 |
| Total | 368 | 459 | 129 | 1,965 | 332 | 234 | 584 | 2,066 | 73 | 2,030 |

## DIVORCES.

The reports of divorce actions, filed in the office of the State Bureau of Vital Statistics by the clerks of the various courts having jurisdiction in divorce cases, show that for the year ending September 30, 1909, 1,462 divorces were granted. Suits pending which were started during this period and actions where a divorce was refused are not included in this report. During the twelve months preceding 1909, 82.5 divorces were granted for each one thousand marriages solemnized during the calendar year of 1909 .

Some of the causes for which divorces were granted are; drunkenness, 86 ; adultery, 48 ; cruelty, 727 ; desertion, 458 ; and neglect to provide 88.

The divorce was granted to the wife in 1,127 cases and to the husband in 335 cases.

Considering the divorces due to drunkenness, the wife was the libellant in 82 cases and the husband in 4 cases. In the divorces granted for adultery the wife was the libellant in 15 cases and the husband in 33 cases. In the divorces granted where cruelty was the alleged cause the wife was the libellant in 608 cases and the husband in 119 cases. Where desertion was the alleged cause the wife was the libellant in 307 cases and the husband in 151 cases. For neglect to provide the wife was the libellant in 87 cases and the husband in one case. The one case where the wife was sued for divorce on account of failure to provide was in Milwaukee county.

Thirteen divorces were granted before the married life had lasted six months. In 30 cases the divorced parties had been married over six months but less than one year; 394 after from one to four years of marriage; 393 after from five to nine years of marriage; 368 after from ten to nineteen years of marriage; 168 after from twenty to twenty-nine years of marriage; and sixty after thirty years of married life. In 36 cases the duration of the marriage was not stated.
For adultery where this was the sole alleged cause 30 divorces were granted; for adultery and cruelty 11 ; for adultery, cruelty and nonsupport 5; for adultery and desertion 2; for bigamy 4; for cruel and inhuman treatment 487; for cruelty and desertion 42; for cruelty, desertion and drunkenness 78 ; for cruelty, desertion and non-support 120 ; for desertion 341: for desertion and drunkenness 10 ; for desertion and non-support 107; for drunkenness alone 23 ; for drunkenness and nonsupport 63; for fraud in marriage 2; for insanity none; for imprisonment 5; for impotency 1; for nonsupport alone 89; for refusal
to cohabit none; for voluntary separation 31 ; and other causes, or causes not stated 11 .

Considering the total divorces according to the nativity of the plaintiff in the action, it is shown that 774 were native born; 226 , were foreign born; and in 420 cases the nativity of the plaintiff was unknown or not stated. In 681 cases the defendant was native born; in 305 cases the defendant was foreign born; and in 476 cases the nativity of the defendant was unknown or not stated.

1,036 of the total marriages for which divorces were granted were solemnized in Wisconsin; 326 in other parts of the United States; 63. in foreign countries; and in 37 actions the place of marriage was unknown or not stated.

In 632 cases the plaintiff was reported as having a gainful occupation. Since the husband was the libellant in only 335 cases, the wife must have had a gainful occupation in at least 297 cases. Since, however, the husband in many actions where he was the libellant is reported as having no gainful occupation, a larger number of cases where the wife had an occupation should be recorded.

Only 186 of the total actions for divorce during this period of time were contested, and in many of these cases a cross bill for divorce was filed. In 618 actions for alimony was asked and in 484 cases alimony in some form was granted.

In 643 of the cases of divorce recorded, there were no children by the marriage; in 339 cases there was but one child by the marriage; in 211 cases there were two children; in 105 cases there were three children; in 48 cases there were four children; in 36 cases there were five children; in 24 cases there were six children; in 13 cases there were seven children; in 6 cases.there were eight children; in 7 cases there were nine children; and in 9 cases there were ten children by the marriage. In twenty cases of divorce, arranged according to the number of children in the family, no information was given. In 44 per cent of the total divorces granted the parties to the marriage were without children.

The reports of divorce actions, filed in the office of the State Bureau of Vital Statistics by the clerks of the various courts having jurisdiction in divorce cases, show that for the year ending September 30, 1910, 1,189 divorces were granted. Suits pending which were started during this period and actions where a divorce was refused are not included in this report. During the twelve months preceding 1910, 64.1 divorces were granted for each one thousand marriages solemnized during the calendar year of 1910 .

Some of the causes for which divorces were granted are: Drunkenness 107; adultery 56 ; cruelty 557 ; desertion 352 ; and neglect to provide 71 .

The divorce was granted to the wife in 903 cases and to the husband in 286 cases.
Considering the divorces due to drunkenness the wife was the libellant in 97 cases and the husband in 10 cases. In the divorces granted for adultery the wife was the libellant in 12 cases and the husband in 44 cases. In the divorces granted where cruelty was the alleged cause the wife was the libellant in 340 cases and the husband in 217 cases. Where desertion was the alleged cause the wife was the libellant in 211 cases and the husband in 141. For neglect to provide the wife was the libellant in 71 cases.
Five divorces were granted before the married life had lasted six months. In 18 cases the divorced parties had been married over six months but less than one year; 320 after one to four years of marriage; 308 after from five to nine years of marriage; 316 after from ten to nineteen years of marriage; 151 after from twenty to twentynine years of marriage; and 52 after thirty years of married life. In 19 cases the duration of the marriage was not stated.
For adultery where this was the sole alleged cause 35 divorces were granted; for adultery and cruelty 12 ; for adultery, cruelty and nonsupport 4; for adultery and desertion 5; for bigamy 7; for cruel and inhuman treatment 404; for cruelty and desertion 40 ; for cruelty, desertion and drunkenness 3; for cruelty, desertion and non-support 110; for desertion 257; for desertion and drunkenness 2; desertion and nonsupport 93 ; for drunkenness alone 54 ; for drunkenness and nonsupport 53; for fraud in marriage 1; for insanity 1 ; for imprisonment 5; for impotency 1; for nonsupport alone 71; for refusal to cohabit none; voluntary separation 20 ; and other causes, or causes not stated 11.
Considering the total divorces according to the nativity of the plaintiff in the action, it is shown that 680 were native born; 266 were foreign born; and in 243 cases the nativity of the plaintiff was unknown or not stated. In 608 cases the defendant was native born; in 290 cases the defendant was foreign born; and in 291 cases the nativity of the defendant was unknown or not stated.
Eight hundred and seventeen of the total marriages for which divorces were granted were solemnizd in Wisconsin; 255 in other parts of the United States; 91 in foreign countries; and in 26 actions the place of marriage was unknown or not stated.
In 540 cases the plaintiff was reported as having a gainful occupation. Since the husband was the libellant in only 286 cases, the wife must have had a gainful occupation in at least 254 cases. Since, however, the husband in many actions where he was the libellant is reported as having no gainful occupation, a larger number of cases where the wife had an occupation should be recorded.

Only 167 of the total actions for divorce during this period of time were contested, and in many of these cases a cross bill for divorce was filed. In 511 actions alimony was asked and in 405 cases alimony in some form was granted.

In 500 of the cases of divorce recorded, there were no children by the marriage; in 270 cases there was but one child by the marriage; in 158 cases there were two children; in 94 cases there were three children; in 49 cases there were four children; in 32 cases there were five children; in 27 cases there were six childrn; in 16 cases there were seven children: in 11 cases there were eight children; in four cases there were nine children; and in 8 cases there were ten children by the marriage. In 20 cases of divorce, arranged according to the number of children in the family, no information was given. In 42 per cent of the total divorces granted, the parties to the marriage were without children.

TABLE NO 19.-SHOWING DIVORCES FROM EACH CAUSE, TABULATED BY COUNTIES, FROM OCT. 1, 1908, TO SEPT. $30,1909$.

| Adams |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ashland | 2 |  |  |  |  | 2 |  |  |  | 3 |  | . | 1 |  |  |  |  |  | 2 |  | 1 | . . . |
| Barron |  |  |  |  |  | 1 |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |
| Bayfield | 2 | 1 |  |  |  | 2 |  |  |  | 1 |  |  | 1 | 1 |  |  |  |  |  |  |  | 1 |
| Brown |  | 1 |  |  |  | 26 |  | 3 | 3 | 13 |  | 1 | 1 |  |  |  | 1 |  | 2 |  | 1 | ..... |
| Buff alo |  |  |  |  |  |  |  |  | 2 |  |  |  |  | 2 |  |  |  |  |  |  |  |  |
| Burnett |  |  |  |  | . .... | 1 |  |  |  | 2 |  | 1 |  |  |  |  |  |  |  |  |  |  |
| Calumet |  |  |  |  |  | 5 |  |  |  | 1 |  | ...... |  |  |  |  |  |  |  |  |  |  |
| Chippewa |  |  |  |  |  |  |  |  |  | 1 |  | . |  |  |  |  | 1 |  |  |  | 1 | ....... |
| Clark ... |  |  |  |  |  | 1 |  |  |  |  |  |  |  | ...... |  |  |  |  |  |  |  |  |
| Columbia |  |  |  |  |  | 1 |  |  | 2 | 1 | 1 | 1 |  | ...... |  |  |  |  | 2 |  | 1 |  |
| Crawford |  |  |  |  |  | 1 |  |  | 1 | 5 |  |  |  |  |  |  |  |  |  |  |  |  |
| Dane .... | 1 |  |  |  |  | 11 | 2 | 5 | 1 | 14 |  |  | 3 | 1 |  |  |  |  | 1 |  |  |  |
| Dodge |  |  |  |  |  | 6 | 1 | 2 | 1 | 9 |  | 1 |  | 1 |  |  |  |  |  |  |  |  |
| Door ... |  |  |  |  |  | 2 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| Douglas | 1 |  |  |  |  | 5 | 1 | 6 | 2 | 11 |  | 3 |  | 4 |  |  |  |  | 8 |  | 1 |  |
| Dunn .. |  |  |  |  |  | 1 |  | 1 | 2 | 4 |  | 1 |  |  |  |  |  |  |  |  |  |  |
| Eau Claire | 2 |  |  |  |  | 5 | 1 |  | 2 | 9 |  | 4 | 1 | 2 | . |  |  |  | 4 |  | 1 |  |
| Florence . |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |  | 2 |  |
| Fond du L |  |  | 1 |  |  | 19 | $\dddot{i}$ | 4 | 5 | 7 |  |  |  | 3 | . |  |  |  | 2 |  | 2 |  |
| Forest |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Grant |  |  |  |  |  | 7 2 | 4 1 | 2 1 | 2 | 5 6 |  | 1 5 |  | 2 |  |  |  |  |  |  |  |  |
| Green Lake |  |  |  |  |  | 2 |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |
| Iowa | 1 |  |  |  |  | 1 |  |  |  | 1 |  |  | 1 |  |  |  |  |  |  |  | 1 |  |
| Iron | 1 |  |  |  |  |  |  | 1 |  | 3 |  | 2 | ...... |  |  |  |  |  |  |  |  |  |
| Jackson |  |  |  |  |  | 4 3 | 2 | 1 |  | 5 4 |  |  | 1 | $\because$ |  |  | 1 |  | $1{ }^{-}$ |  |  |  |

Report of the Bureau of Vital Statistics.

| Juneau |  |  |  |  | 7 |  |  |  | 5 |  |  |  |  |  |  |  |  |  |  | 1 | ．．．．．． |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Kenosha |  |  |  |  | 5 |  |  |  | 6 | ． |  |  |  |  |  |  |  |  |  |  |  |  |
| Kewaunee |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| La Crosse |  | 1 | 1 | …… | 12 | 1 | 6 | 4 | 14 |  | 7 | 2 | 1 |  |  |  |  | 2 | ．．．．．． | 2 | ．．．．．． |  |
| Lafayette |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |
| Langlade |  |  |  |  | 4 | 1 | 3 | $\cdots$ | 7 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lincoln ． |  |  |  |  | 4 |  | 2 | 1 | 1 |  | 1 |  | 4 |  |  |  |  |  |  |  |  |  |
| Manitowoc |  |  |  |  | 3 | .. | 1 | 1 | 4 | 1 | 2 | ．．．．．． |  |  |  |  |  |  |  |  |  | （0） |
| Marathon |  |  |  |  | 18 |  | 2 |  | 11 |  |  |  |  |  |  |  |  |  |  | 1 | 1 | 界 |
| Marinette |  |  |  |  | 3 |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  | $\bigcirc$ |
| Marquette |  |  |  |  |  |  |  | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  | 䳐 |
| Milwaukee | 4 | 2 |  | 1 | 124 | 7 | 17 | 54 | 74 | － 3 | 33 | 3 | 23 | 2 |  | 1 | 1 | 35 |  | 4 | 4 ， | $\stackrel{-}{ }$ |
| Monroe ． |  |  |  |  | 6 10 | 1 | 4 | 1 | 3 4 | ． | 5 1 | 1 | 1 |  |  |  |  | 2 |  | 1 | ．．．．．． | O |
| Oconto Oneida |  |  |  |  | 10 |  |  |  | 4 | …． | 1 |  |  |  |  |  |  | 2 |  |  |  | 2 |
| Oneida Outagamie |  |  |  | 1 | 11 | 1 | 1 | － 3 | 8 |  | 4 |  | －．．．．． |  |  |  |  | 1 |  | 4 | $\cdots$ | 可 |
| Ozaukee |  |  |  |  | 11 | 3 |  | － 3 | 1 |  |  |  |  |  |  |  |  |  |  |  |  | 田 |
| Pepin ． |  |  |  |  | 1 |  |  |  | 2 | ．．．．．． |  |  |  |  |  |  |  |  |  |  | 1 |  |
| Pierce |  |  |  |  | 3 |  |  |  | 4 | . |  |  |  |  |  |  |  | 1 |  |  |  | $\square$ |
| Polk |  |  |  |  | 3 |  | 1 | 1 | 2 | ． | 1 | 2 |  |  |  |  |  | 1 |  |  |  | c |
| Portage |  |  |  |  | 6 |  |  | 2 | 3 |  | 2 |  |  |  |  |  |  | 2 |  | 1 | $\ldots$ | \％ |
| Price |  |  |  |  | 1 |  |  | 1 | 1 |  | 4 |  |  |  |  |  |  |  |  |  |  | － |
| Racine |  |  | 1 |  | 13 | 4. | 1 | 6 | 10 |  | 4 | 2 | 3 |  |  |  |  | 1 |  | 1 | ．．．．． | $\stackrel{8}{\text { c }}$ |
| Richland |  |  |  |  | 4 |  | 1 | 1 | 2 |  | 6 |  | 1 |  |  |  |  | 3 |  |  | ．．．．．． |  |
| Rock |  |  |  |  | 22 |  | 2 | 5 | 14 | 1 | 5 |  | 5 |  |  |  |  | 1 |  | 1 | ．．．．．． | 喵 |
| Rusk |  |  |  |  | 2 |  |  | ．．．．．． | 2 | $\ldots$ | 1 | ．．．．． | 1 |  |  |  |  |  |  |  |  |  |
| St．Croix |  |  |  |  |  |  |  |  | 4 |  |  |  |  |  |  |  |  | 1 |  |  |  | $<$ |
| Sauk ． | 4 | 1 |  |  | 9 | 1 |  | 4 | 3 |  |  |  |  |  |  |  |  | 3 |  |  | a | H |
| Sawyer |  |  |  |  |  | ． 1 |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 2 | 2 |
| Shawano |  |  |  |  | 4 |  | － 2 | 1 | 3 | ．．．．．． | 1 |  |  |  |  |  |  |  |  |  | 1 | E |
| Sheboygan |  |  |  |  | 13 |  |  |  | 3 |  |  |  |  |  |  |  |  | 1 |  |  |  |  |
| Taylor ．．．．． |  |  |  |  | 11 |  |  |  | 5 |  | 2 |  |  |  |  |  |  | 1 |  |  |  | ${ }_{\sim}^{\sim}$ |
| Trempealeau |  |  |  | 1 | 3 |  | 2 |  | 2 |  | …．．． |  | 1 | …… |  |  |  |  |  |  | 1 | $\stackrel{\square}{8}$ |
| Vernon |  |  |  |  | 2 |  |  |  | 6 | 1 |  | 1 |  |  |  |  |  |  |  |  | 1 | 國 |
| Vilas ．．．．． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |
| Walworth |  |  |  |  | 6 |  | 1 |  | 4 |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| Washburn |  |  |  |  | 1 |  |  |  | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Washington |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  | 1 |  |  |  | 1 | ．．．．．． | Q |
| Waukesha ． |  |  |  |  | 16 | 3 |  |  | 9 |  |  | 1 |  |  |  |  |  | 2 |  |  |  | ${ }^{2}$ |
| Waupaca |  |  |  | 1 | 14 | 1 | 1 | 3 | 6 |  | 1 |  |  |  |  |  |  | 1 |  |  |  |  |
| Waushara |  |  |  |  | 1 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Winnebago | 1 |  |  |  | 26 | 2 | 4 | 8 | 4 | 2 | 5 |  | 4 |  |  |  |  | 3 |  | 4 | ． |  |
| Wood |  |  |  |  | 6 |  | 1 |  | 3 |  |  | 1 | 1 |  |  |  |  | 3 |  |  |  |  |
| Total | 11 | 5 | 2 | 4 | 487 | 42 | 78 | 120 | 341 | 10 | 107 | 23 | 63 | 2 | ．．． | 5 | 1 | 89 |  | 31 | 11 | $\square$ |

TABLE NO. 20--SHOWING DIVORCES FROM OERTAIN OAUSES ARRANGED BY COUNTIES AND SEX OF PLAINTVE'N FROM OCI'. 1, 1908 T' SEPT'. 30, 1909.

|  <br>  <br>  | $\begin{aligned} & \text { O} \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |
| :---: | :---: | :---: |
|  | Granted to husband. | $\stackrel{B}{3}$ |
|  | $\begin{gathered} \text { Granted to } \\ \text { wife. } \end{gathered}$ | + |
|  |  |  |
|  | husband. | ¢ |
|  | $\begin{gathered} \text { Granted to } \\ \text { wife. } \end{gathered}$ |  |
|  | Granted to husband. | 号 |
|  | $\begin{aligned} & \text { Granted to } \\ & \text { wife. } \end{aligned}$ | $\stackrel{\text { ¢ }}{4}$ |
|  | Granted to husband: | ? |
|  | $\begin{gathered} \text { Yranted to } \\ \text { wife. } \end{gathered}$ | 4 |
|  | Granted to husband. | \% |
|  | $\begin{gathered} \text { Granted to } \\ \text { wife. } \end{gathered}$ | \% |
|  | Granted to husband. |  |
|  | $\begin{gathered} \text { Granted to } \\ \text { wife. } \end{gathered}$ | $\stackrel{\omega}{0}_{0}^{+}$ |

TABLE NO. 20.-SHOWING DIVORCES FROM CERTAIN CAUSES ARRANGED BY COOUNTIES AND SEX OF PLAINTIFE FROM OC'I'. 1, 1908 TO'SEP'I. 30, 1909.Continued.

| County. | All causes. |  | Drunken-ness. |  | Adultery. |  | Cruelty. |  | Desertion. |  | Neglect to provide. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Walworth | 4 | 7 |  |  |  |  |  | 7 | 4 |  |  |  |
| Washburn .... | 2 | 3 |  |  |  |  |  | 1 | 2 | 2 |  |  |
| Washington .. | 1 | 2 |  |  |  |  |  | 1 |  |  |  |  |
| Waukesha .... | 4 | 28 |  | 1 |  | 1 | 3 | 16 | 1 | 8 |  | 2 |
| Waupaca . | 8 | 21 |  |  | 1 |  | 3 | 16 | 3 | 4 |  | 1 |
| Waushara | 1 | 1 |  |  |  |  |  | 1 | 1 |  |  |  |
| Winnebago | 11 | 54 |  | 4 | 1 | 2 | 5 | 35 | 2 | 9 |  | 3 |
| Wood ..... | 3 | 12 |  | 2 |  |  | 1 | 6 | 2 | 1 |  | 3 |
| Total | 335 | 1,127 | 4 | 82 | 33 | 15 | 119 | 608 | 151 | 307 | 1 | 87 |

TABLE NO. 21. $\rightarrow$ SHOWING DIVORCES IN WISOONSIN BY COUNTIES FROM OC'I. 1, 1908 TO SEPT. 30, 1909, ARRANGED ACCORDING TO CAUSE, SEIX, NA'IVITY, PLACE OF MARRIAGE, NUMBER, OF" CHILDREN AND DURATION OF' MARRIAGE.

\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Causes.} \& \multirow[t]{2}{*}{} \& \multirow[t]{2}{*}{} \& \multicolumn{3}{|l|}{Nativity of plaintiff.} \& \multicolumn{3}{|l|}{Nativity of defendant.} \\
\hline \& \& \&  \& \[
\begin{aligned}
\& \text { gi } \\
\& 0 \\
\& 0 \\
\& 0 \\
\& 000 \\
\& 000 \\
\& 0
\end{aligned}
\] \& 立
0
E
है \& \[
\] \&  \& 号 \\
\hline Adultery ............ \& Total.....
Male.....
Female... \& 30
25
5 \& 12
11
1 \& 7
5
2 \& 11
9
2 \& 13
2
11 \& \(\begin{array}{r}5 \\ \ldots \cdots \\ \hline\end{array}\) \& 12
3
9 \\
\hline Adultery and cruelty \& \begin{tabular}{l}
Total.....
Male...... \\
Female
\end{tabular} \& 11
5
6 \& 8
4
4 \& ….... \& 3
1
2 \& 7
5
2 \& ........ \& 4
1
3 \\
\hline Adultery, cruelty and non-support \& \begin{tabular}{l}
Total..... \\
Male. \\
Female....
\end{tabular} \& 5
1
4 \& 3
\(\cdots \cdots \cdots\) \& 2
1
1 \&  \& 4
3
1 \& 1
1
\(\ldots .\). \& . \\
\hline Adultery and desertion \& \begin{tabular}{l}
Total..... \\
Male. \\
Female...
\end{tabular} \& \(\stackrel{2}{2}\) \& \[
\begin{aligned}
\& 1 \\
\& 1
\end{aligned}
\] \& 1 \& \& 1 \& 1
7 \&  \\
\hline Bigamy ............. \& \begin{tabular}{l}
Total..... \\
Male. \\
Female...
\end{tabular} \& 4
4
4 \& \[
\begin{aligned}
\& \mathbf{3} \\
\& 3
\end{aligned}
\] \& \& 1 \& r

$\cdots$
$\cdots$ \& .... \& 1. <br>

\hline Cruel and inhuman treatment ......... \& | Total..... |
| :--- |
| Male. |
| Female... | \& \[

$$
\begin{array}{r}
487 \\
95 \\
392
\end{array}
$$

\] \& \[

$$
\begin{gathered}
227 \\
46 \\
181
\end{gathered}
$$
\] \& 103

25
78 \& 157
24
133 \& 191
145
46 \& 120
100

20 \& $$
\begin{array}{r}
176 \\
147 \\
29
\end{array}
$$ <br>

\hline Cruelty and desertion \& | Total..... Male. |
| :--- |
| Female.... | \& 42

13
29 \& 22
9
13 \& 7
1
6 \& 13
3
10 \& 18
10
8 \& 10
8
2 \& 14
11
3 <br>
\hline
\end{tabular}

TABLE NO. 21- $\rightarrow$ SHOWING DIVORCES IN WISCONSIN BY OOUNTIES FROM OCT. 1, 1908 TO SEPT. 30, 1909, ARRIANGED ACICORDING TO COAUSE', SEX, NATIVITY, PLACE OF MARRIAGE, NUMBER OF 'OHILDREN' AND DURATION OF MAR RIAGE.-Continued.


TABLE NO．21．－SHOWING DIVORCES IN WISCONSIN BY OOUNTIES FROM OCI． 1，1908，TO SEPT．30，1909，ARRANGED AOGORDING TO OAUSE，SEX，NA． TIVITY，PLACE OF MARRIAGE，NO丹 OF．OHILDREN AND DURATION OF MAR－ RIAGE－Cont．

| Causes． | Place of marriage．－ |  |  |  |  |  | Alimony． |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
| Adultery ．．．．．．．．．．．．．．．． | 19 | 9 | 2 |  | 21 |  | 2 | 2 |
| Adultery and cruelty．．． | 10 | 1 |  |  | 5 | 4 | 4 | 4 |
| Adultery，cruelty and non－support | 3 | 2 |  |  | $\stackrel{4}{2}$ |  | 4 | 3 |
| Adultery and desertion． | $\stackrel{2}{2}$ |  |  |  | $\stackrel{2}{2}$ | 1 |  |  |
| Bigamy ．．．．．．．．．．．．．．．．． | 2 | 2 |  |  | 2 |  |  |  |
| Oruel and inhuman treatment ．．．．．．．．．．．．．． | 358 | 94 | 25 | 10 | 177 | 103 | 265 | 227 |
| Cruelty and desertion．． | 35 | 6 | 1 |  | 18 | 3 | 13 |  |
| Cruelty，desertion and drunkenness | 58 | 16 |  | 4 | 27 | 13 | 49 | 38 |
| Oruelty，desertion and non－support | 91 | 23 | 4 | $\stackrel{2}{2}$ | $\stackrel{44}{-95}$ | 18 | 71 75 | 55 49 |
| Desertion ．．．．．．．．．．．．．．． | 221 | 90 | 22 | 8 | 195 | 22 | 75 | 49 |
| Desertion and drunken－ ness $\qquad$ | 5 | 3 | 2 |  | 5 |  | 5 | 4 |
| Desertion and non－sup－ port …．．．．．．．．．．．．．．．．．． | 81 | 18 |  | 8 | ${ }_{37}$ | 3 | 41 | $\begin{array}{r}24 \\ \hline 6\end{array}$ |
| Drunkenness ．．．．．．．．．．．． | 18 | 4 | 1 | ．．．．．．．． | 6 | 1 | 7 |  |
|  | 46 | 14 |  | 3 | 19 | 3 | 35 | 23 1 |
| Fraud in Marriage ．．．．． |  | 1 | 1 |  | $\stackrel{2}{3}$ | 1 | 1 | 1 |
| Imprisonment ．．．．．．．．．．．． | ${ }_{1}$ |  |  |  | 3 |  | 1 | 1 |
| Impotency <br> Non－support | 56 | 29 | 2 | 2 | 44 | 8 | 36 | 29 |
| Voluntary separation．．． | 18 | 10 | 3 |  | 17 | 5 | 6 | 5 |
| Other causes or cause not stated | 7 | 4 |  |  | 4 | 1 | 2 | 2 |
| Total | 1，036 | 326 | 63 | 37 | 632 | 186 | 618 | 484 |

TABLE NO．21．－SHOWING DIVOROES IN WISCONSIN BY COUNTIES FROM OCT． 1，1908，TO SEPT．30，1909，ARRANGED ACCORDING TO CAUSE，SEX，NA－ TIVITY，PLACE OF MARRIAGE，NO．OF CHILDREN AND DURATION OF MAR－ RIAGE．－Cont．

|  | No．of children in family． |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Causes． | $\begin{aligned} & \text { 言白 } \\ & \text { ód } \\ & \text { ód } \end{aligned}$ | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | $10+$ | （\％ |
| Adultery | 22 | 6 |  |  | 1 | $\ldots$ |  | 1 |  |  |  | 1 |
| Adultery and cruelty．．．．．．．．．． | 9 |  |  | 1 |  | $\cdots$ | $\cdots$ | 1 |  |  |  |  |
| Adultery，cruelty and non－ support ．．．．．．．．．．．．．．．．．．．．．．．． | 3 |  | 2 |  |  |  |  |  |  |  |  |  |
| Adultery and desertion．．．．．．． |  | 1 | 1 |  | ．．． |  |  |  |  |  |  |  |
| Bigamy $\times$ ．．．．．．．．．．．．．．．．．．． | 3 |  |  |  |  | 17 | 6 |  | 2 | 4 | 6 | ． 4 |
| Oruel and inhuman treatment | ${ }^{204}$ | 13 | 4 8 | 4 | 1 | 17 | 6 | 1 |  |  | I．．． |  |

TABLE NO. 21.-SHOWING DIVORGES IN WISGONSIN BY COUNTIES FROM OCT. 1, 1908, 'TO SEP'T. 30, 1909, ARRANGED ACOORIDING TO OAUSE, SEX, NAIIVITY, PLACE OF MARRIAGE, NO. OF CHILDREN AND DURATION OF MAR-
RIAGE.-Cont.

| Causes, |
| :--- |

TABLE NO. 21.-SHOWING DIVORCES IN WISCONSIN FROM OCT. 1, 1908, TO SEPT. 30, 1909, ARRANGED ACCORDING TO' CLAUSE, SEX, NATIVITY, PLACE OF MARRIAGE, NO. OF'CHILDREN AND' DURIATION OF MARRIAGE.-Con.

| Causes. | Duration of marriage. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | ¢ |  | 㐌 |  |  | $\stackrel{+}{+}$ | 家 |
| Adultery | 1 |  |  |  |  |  |  |  |
| Adultery and cruelty.. | 1 |  | 12 3 |  | 3 4 | 2 |  | 2 |
| Adultery, cruelty and nonsvipport.... |  | i | ${ }_{1}$ | $\stackrel{3}{2}$ | 4 | 1 |  |  |
| Adultery and desertion............... |  |  |  | 1 | 1 |  |  |  |
| Bigamy ................. | 1 |  | $\because$ | 1 |  |  | 1 |  |
| Cruel and inhuman treatment. | 9 | 18 | 141 | 125 | 109 | 50 | 28 | 7 |
| Cruelty and desertion................... | 1 | 3 | ${ }^{6}$ | 16 | 11 | 1 | $\stackrel{1}{3}$ | 1 |
| Cruelty, desertion and drunkenness... |  |  | 14 | 17 | 29 | 12 | 4 | 2 |
| Desertion .......................... |  | 2 3 | 29 | 28 | 31 | 22 | 3 | 5 |
| Desertion and drunkenness. |  | 3 | 99 | 99 4 | 8 | 35 | 12 | 9 |
| Desertion and non-support. |  |  | 17 | 45 | -5 |  |  |  |
| Drunkenness .............. |  |  | 37 3 | 35 7 | 23 7 | 8 | 1 | 1 |
| Drunkenness and non-support |  |  | 13 | 16 | $\begin{array}{r}79 \\ \hline\end{array}$ | 13 |  | 1 |
| Fraud in marriage ............ |  | i | 1 | 16 | 19 | 13 |  | 2 |
| Imprisonment |  |  |  | 1 |  |  |  |  |
| Impotency .... |  |  |  | 1 |  |  |  | 1 |
| Non-support .......... |  | 2 |  | 19 |  |  |  |  |
| Voluntary separation |  | 2 | 1 | 6 | 14 |  | 1 |  |
| Other causes or cause not stated. |  |  | 4 | 3 | 14 | 1 |  | 3 |
| Total | 13 | 30 | 394 | 393 | 368 | 168 | 60 | 36 |

TABLE NO. 22.-Continued.


T'ABLE NO. 22.-Continued.

| County. |  |  | Nativity of plaintiff. |  |  | Nativity of defendant. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | $\begin{aligned} & \text { gi } \\ & \text { O } \\ & \text { gin } \\ & \text { du } \\ & 0 \\ & 0 \end{aligned}$ | 号 |
| Dunn | Total..... | 9 | 1 |  | 8 |  |  | 9 |
|  | Male....... | 2 |  |  | 2 |  |  | 7 |
|  | Female.... | 7 | 1 |  | 6 | . ...... |  |  |
| Eau Claire | Total..... | 31 | 20 |  | 9 | 16 |  | 11 |
|  | Male...... | 9 | 5 15 |  | 3 6 | 11 |  | 7 4 |
| Florence |  |  |  |  |  |  |  |  |
|  | Total..... | . | . |  | . |  |  |  |
|  | Male...... <br> Female. | ...... |  |  | . |  |  |  |
| Fond du Lac........ | Total..... | 43 | 36 |  | 3 | 30 |  | 5 |
|  | Male....... | 14 | 11 |  | 1. | 19 |  | 3 |
|  | Female.... | 29 | 25 |  | 2 | 11 |  | 2 |
| Forest | Total..... | 1 | .... |  | 1 | ........ |  | 1 |
|  | Male...... | 1 |  |  | $\cdots{ }^{1}$ |  |  |  |
| Grant | Total..... | 23 | 15 |  | 8 | 17 | $\ldots$ | 6 |
|  | Male...... | $5$ | 3 |  | 2 6 | 13 |  | $\stackrel{5}{1}$ |
| Green | Total..... | 15 | 7 |  | 3 | 6 |  | 4 |
|  | Male...... | 2 | 1 | ... | 1 | 5 |  | 3 |
|  | Female.... | 13 | 6 |  | 2 | 1 | ... | 1 |
| Green Lake | Total. | 3 | 2 |  | 1 | 1 |  | 2 2 |
|  | Female.... | 3 | 2 |  | 1 | 1 |  |  |
| Iowa | Total..... | 5 | 4 |  | 1 | 4 <br> 3 |  | 1 |
|  | Male...... | 1 4 | 4 |  | 1 | 1 |  | 1 |
| Iron | Total..... | 7 | 1 |  | 5 | 1 |  | 5 |
|  | Male....... | 1 |  |  | 1 | \% 1 |  | 4 |
| Jackson | Total..... | 12 | 10 |  | ........ | 8 |  | ...... |
|  | Male...... | 6 6 | 6 4 |  | ... | . ${ }^{3}$ |  |  |
| Jefferson |  |  |  |  |  |  |  |  |
|  | Total..... Male. | 12 3 |  |  |  | 5 |  | 1 |
|  | Female.... |  | 8 |  | $\cdots 1$ | 2 |  |  |
| Juneau | Total..... | 13 | 1 |  | 12 |  |  | 13 9 |
|  | Male. | 4 9 | 1 |  | 3 9 |  |  | 9 |
| Kenosha | Total..... | 12 |  |  | 12 |  |  | 12 |
|  | Male....... | 7 |  |  | 7 5 | $\ldots \ldots$. |  | 5 7 |
|  | Female... | 5 |  |  | 5 |  |  |  |
| Kewaunee | Total..... | 1 | 1 |  | . ......... | 1 |  |  |
|  | Male. <br> Female $\qquad$ | 1 | 1 |  |  | 1 |  |  |
| La Crosse | Total..... | 53 | 41 |  | 9 | - 36 |  | 8 |
|  | Male...... | 13 40 | 10 31 |  | 3 $\cdots \cdots \cdots$ <br> 6  | - 97 |  | 4 |

TABLE NO. 22.-Continued.


TABLE NO. 22.-Continued.


TABLE NO. 22.-Continued.


TABJE NO. 22.-Continued.

| County. | Place of marriage. |  |  |  |  |  | A Inco. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | घ 0 है है है |  |  |  |  |
| Adams |  | 1 |  |  |  |  | 1 | 1 |
| Ashland | 8 | 2 | 1 |  | 6 | 1 | 3 | 3 |
| Barron ... | ${ }_{6}^{2}$ |  |  |  |  |  |  |  |
| Bayfleld . | 6 40 | $\begin{array}{r}3 \\ 10 \\ \hline\end{array}$ | 2 |  | 27 | 6 | 4 <br> 19 | 3 19 |
| Buffalo | 3 | 1 |  |  | 2 | 6 | 3 | 3 |
| Burnett | 4 |  |  |  | 2 |  |  |  |
| Oalumet | 4 | 1 |  | 1 | 4 | 2 | 3 | 3 |
| Chippewa | 2 | 1 |  |  |  |  |  |  |
| Clark ...... <br> Columbia | 1 |  |  |  |  |  | 1 | 1 |
| Crawford | 7 | 2 |  |  | 9 | 1 | 4 | 3 3 3 |
| Dane | 25 | 13 |  |  | 14 | $\ddot{7}$ | 22 | 16 |
| Dodge . | 17 | 13 |  |  | 8 | 6 | 12 | 6 |

TABLE NO. 22.-Continued.

| County. | Place of marriage. |  |  |  |  | $\begin{aligned} & \text { すi } \\ & \text { す } \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ | Alimony. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | United States. |  | $\begin{aligned} & \text { घं } \\ & 0 \\ & 0 \\ & \text { g } \\ & \text { ह } \end{aligned}$ |  |  |  |  |
| Door | 3 |  |  |  |  |  |  |  |
| Douglas | 21 | 19 | 2 |  | 28 | 3 | 9 |  |
| Dunn | 5 |  |  | 4 | 7 |  | 2 <br> 6 |  |
| Eau Claire | 23 | 6 | ..... | 2 | 11 |  | 6 |  |
| Fond du ${ }_{\text {Lac. }}$ | $3 \ddot{4}$ | $\ddot{8}$ | .. | $i$ | 23 | 3 | 19 | 16 |
| F'orest |  |  |  |  |  | 1 |  |  |
| Grant . | 19 | 4 |  | . | 4 | 4 | 14 | 12 |
| Green | 10 | 4 | 1 | ... | 6 | 1 | 4 | 3 |
| Green Lake | 3 |  |  |  |  |  | 2 | 1 |
| Iowa .. | 5 |  |  |  |  |  | 2 | 2 |
| Iron . . | 2 | 4 | 1 |  | 2 |  | 1 | 1 |
| Jackson | 12 |  |  |  | 12 |  | 3 | 3 |
| Jefferson | 10 | 2 |  |  | 6 |  | 3 | 2 |
| Juneau . | 8 | 4 |  | 1 |  | 1 |  |  |
| Kenosha | 5 | 7 |  |  | 1 | 1 | 3 | 1 |
| Kewaunee |  | 1 |  |  |  |  |  |  |
| La Crosse | 37 2 | 15 | 1 | . | 25 | 2 | - 16 | 13 2 |
| Lafayette <br> Langlade | ${ }_{12}^{2}$ | 3 | 1 |  | ${ }_{6}^{2}$ | 3 | ${ }_{10}^{2}$ | $\stackrel{2}{5}$ |
| Lincoln . | 10 | 3 |  | . | 5 |  | 5 | 2 |
| Manitowoc | 9 | 1 |  | . | 4 | 2 | 6 | 5 |
| Marathon | 26 | 5 | 2 |  | 3 |  | 20 | 19 |
| Marinette | 2 | 1 |  | 1 | 1 |  | 2 | 2 |
| Marquette | 2 |  |  |  |  |  | 2 | 2 |
| Milwaukee | 263 | 99 | 37 | 1 | 218 | 63 | 185 | 165 |
| Monroe | 13 | 6 |  | 4 | 8 | 1 | 13 | 8 |
| Oconto | 9 | 5 |  | 1 | 7 | 3 | 3 | 2 |
| Oneida |  |  |  |  |  |  |  |  |
| Outagamie |  | ${ }^{6}$ |  |  |  | ${ }^{6}$ | 16 | 15 |
| Ozaukee | 6 | 1 |  |  | $\stackrel{2}{2}$ | 1 | ${ }_{2}^{5}$ |  |
| Pepin | $\stackrel{3}{5}$ | 1 |  |  | $\stackrel{2}{2}$ | 1 4 4 | $\stackrel{2}{2}$ |  |
| Pierce | ${ }_{7}^{5}$ | 3 2 2 |  |  | $\stackrel{3}{2}$ | $\stackrel{4}{2}$ | 3 4 | 2 3 |
| Polk | 7 | 2 |  | 1 | 2 | 2 | 4 | 3 |
| Portage | 14 | 2 |  | 1 | 6 | 1 |  |  |
| Price | 4 | 1 |  |  | 1 | 6 |  |  |
| Racine | 33 | 12 | 1 | ${ }_{7}^{2}$ | 19 | 6 | 12 | 10 |
| Richland | 11 |  |  | 7 | ${ }_{6}^{6}$ | $\stackrel{2}{2}$ | 10 | 10 |
| Rock | 31 | 26 |  | 1 | 15 | 2 | 24 | 17 |
| Rusk . | 4 | 2 |  |  |  |  | 1 | 1 |
| St. Croix | 4 19 | 1 |  |  |  | 1 4 | 13 |  |
| Sauk ... | 19 | 4 |  | 1 | 8 | 4 | 13 | 13 3 |
| Sawyer ${ }_{\text {Shawano }}$ | $\stackrel{2}{9}$ | $\stackrel{2}{2}$ |  | 1 | 6 | 3 | 3 <br> 8 | 3 7 |
| Sheboygan | 16 | 1 |  |  | 2 | 2 | 10 | 9 |
| Taylor | 13 |  |  | 1 | 14 | 5 | 7 | 7 |
| Trempealeau | 7 | 1 |  | 1 | 2 | . | 3 | 2 |
| Vernon | 9 |  |  | 2 | 4 | 1 |  |  |
| Vilas |  |  | 1 |  |  |  |  |  |
| Walworth | 8 | 3 |  |  | 4 |  |  | 3 |
| W ashburn | 5 |  |  |  | 1 | 1 | i |  |
| Washington | 2 | 1 |  |  | 1 |  | 1 |  |
| Waukesha | 27 | 4 |  |  | 11. | 3 | 19 | 16 |
| Waupaca | 25 | 4 |  |  | 27 | 1 | 14 | 13 |
| Waushara | 2 |  |  |  | 1 | 1 | 2 | 2 |
| Winnebago | 55 |  |  |  | 11 | 24 | 33 | 8 |
| Wood .......... | 12 |  |  | 2 | 1 | 1 | 8 | 6 |

TABLE NO. 22,-Continued.

| County. | No. of children in family. |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ¢ | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | $10+$ | $\underline{8}$ |
| Adams |  |  | 1 |  |  |  |  |  |  |  |  |  |
| Ashland | 5 | 3 | 1 | 1 |  |  | 1 | ... | ... | . |  |  |
| Barron |  | 3 | 1 |  | 1 |  |  | 1 |  |  |  | 1 |
| Brown | 23 | 11 | 7 | 4 | 2 | 3 | 1 |  |  | i |  |  |
| Buffalo |  |  | 3 |  |  | 1 |  |  |  |  |  |  |
| Burnett | 1 | 1 |  |  | 1 | 1 | .. |  |  |  |  |  |
| Calumet | 2 | 1 |  | 2 |  | 1 | .. |  |  |  |  |  |
| Chippewa |  | 2 |  |  | 1 |  | ... | . |  |  |  |  |
| Clark ... |  | 1 |  |  |  |  |  |  |  |  |  |  |
| Columbia | 3 | 2 | 3 | 1 |  |  |  | . | . |  |  |  |
| Orawford | 1 | 4 | 1 | 1 |  |  |  |  |  |  |  |  |
| Dane | 15 | 8 | 10 |  | 1 | 3 | .... | ... | 1 |  | 1 |  |
| Dodge | 12 | 2 | 2 | 1 | 2 | 1 |  |  |  | 1 |  |  |
| Dour ${ }_{\text {Do }}$ | 18 | 14 | 1 | 3 | 1 |  | ... | . |  |  | 2 |  |
| Dunn | 18 3 | 5 | 1 | 3 |  |  |  |  |  |  | 2 |  |
| Eau Claire | 14 | 10 | 4 | 1 |  | . | 1 | 1 | . |  |  |  |
| Florence |  |  |  |  |  |  |  |  |  |  |  |  |
| Fond du Lac. | 16 | 11 | 6 | 3 | .... | 2 | 1 | 1 | 1 | 1 |  | 1 |
| Forest | 10 | $\cdots$ | 1 |  | 1 | 1 |  |  |  |  |  |  |
| Green | 8 | 1 | 2 | 2 |  |  | 1 | … | .... |  |  | $i$ |
| Green Lake | 2 |  |  |  | 1 |  |  |  |  |  |  |  |
| Iowa | 1 | 1 | . | 2 |  |  |  | 1 |  |  |  |  |
| Iron... | 3 | ${ }_{2}^{2}$ |  |  |  |  | 1 |  |  |  |  | 1 |
| Jackson | 6 3 | 3 | 2 <br> 4 |  |  | ... |  | . |  |  |  |  |
| Jefferson | 3 9 | 1 | 4 | 1 | 2 |  | 1 | .... |  |  |  |  |
| Kenosha | 8 | 2 | $i$ | 1 | ... | ... | ... | ... |  |  |  |  |
| Kewaunee |  | 1 |  |  |  |  |  |  |  |  |  |  |
| La Orosse | 27 | 10 | 9 | 2 | … | 3 | 1 | ... |  |  |  | 1 |
| Lafayette | 1 |  | 1 |  |  |  |  |  |  |  |  |  |
| Langlade | 7 | 2 | 2 | 3 | 1 |  | 1 | ... |  |  |  |  |
| Lincoln | 5 | 5 | 1 |  | .... | 1 | . | $\cdots$ | $\ldots$ | 1 |  |  |
| Manitowoc | 3 | 3 | 2 | 1 |  |  | 1 |  |  | 1 |  |  |
| Marathon | 12 | 7 | 5 | 4 | 1 |  |  |  |  |  |  | 4 |
| Marinette | 1 | 2 |  |  |  | 1 | .. |  |  |  |  |  |
| Marquette |  | 2 |  |  |  |  |  |  |  |  |  |  |
| Milwaukee | 197 | 90 | 55 |  |  | 6 | 5 | 2 | 2 |  |  | 4 |
| Monroe | 9 | 5 | 4 | 2 | 1 |  | 1 |  |  |  |  | 1 |
| Oconto | 9 | 3 | 2 | 1 | ... | 2 | ... |  |  |  |  |  |
| Oneida |  |  |  |  |  |  |  |  |  |  |  |  |
| Outagamie | 14 | 7 | 5 | 4 | 3 |  | ... |  |  | 1 | 1 |  |
| Ozaukee | 4 | 1 |  |  | ... | 1 | . | 1 |  |  |  |  |
| Pepin | 4 |  |  |  |  |  |  |  |  |  |  |  |
| Pierce | 2 | 3 |  |  | 1 | 1 | 1 | ... |  |  |  |  |
| Polk | 4 | $\stackrel{3}{5}$ |  | 2 |  |  |  |  |  |  |  |  |
| Portage | 5 | 5 | 2 | 1 |  |  |  | 1 |  |  | 1 |  |
| Price | 2 | ${ }^{2}$ | 1 | 1 | 1 |  |  |  |  |  |  |  |
| Racine | 24 | 12 | 8 | 1 |  |  | 2 | 1 |  |  |  |  |
| Richland | $\begin{array}{r}3 \\ 23 \\ \hline\end{array}$ | ${ }_{13}^{6}$ | $\begin{array}{r}4 \\ 13 \\ \hline\end{array}$ | 2 1 1 | 1 | 1 |  | i | 1 |  | 1 | 1 |
| Rusk | 5 | 13 | 1 |  |  |  |  |  |  |  |  |  |
| St. Oroix | 4 |  |  | 1 |  |  |  |  |  |  |  |  |
| Sauk | 11 | 3 | 3 | 5 |  | 1 |  | 1 |  |  |  | 1 |
| Shawer | 2 | 1. |  |  |  |  |  |  |  |  |  | 1 |
| Shawano | 8 | 1 | 2 | 1 |  |  |  |  |  |  |  |  |
| Sheboygan | 9 | 2 | 3 | 3 | 1 | ... |  |  |  |  |  |  |
| Taylor | 5 | 5 | 2 | 3 |  |  |  |  |  |  | 3 | 1 |
| Trempealeau | 1 | 1 | 3 | 2 | $\cdots$ | 1 | $\ldots$ | ... |  |  |  | 1 |
| Vernon | 2 | 6 | 2 |  |  |  |  |  |  | 1 |  |  |
| Vilas .... |  |  | 1 |  |  |  |  |  |  |  |  |  |
| W alworth | 8 | 1 | 1 | 1 |  |  |  |  |  |  |  |  |
| Washburn | 1 | 3 | 1 |  |  |  |  |  |  |  |  |  |
| Washington |  |  | 2 |  |  |  |  |  |  |  |  |  |

TABLE NO. 22.-Continued.

|  | No. of children in family. |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| County. | 家 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | $10+$ | - |
| Waukesha | 12 | 10 | 5 | 2 | 1 |  | 1 |  |  |  |  | 1 |
| Waupaca | 12 | 9 | 3 | 3 | 1 |  | 1 |  |  |  |  | .... |
| Waushara |  | 1 |  | 1 |  |  |  |  |  |  |  |  |
| Winnebago | 30 | 19 | 5 | 2 | 3 | 2 | 2 | 1 | 1 |  |  | .... |
|  | 6 | 1 | 3 | 2 |  | 2 | $\cdots$ | 1 |  | $\cdots$ | $\ldots$ | .... |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

TABLE NO. 22.-Continued.


TABLE NO．22．－Continued．


TABLE NO．23．－SHOWING DIVORCES FROM EACH CAUSE TABULATED BY COUNTIES F＇ROM OCT．1， 1909 TO SEPT．30， 1910.

|  | County． | Adultery． |  |  |  |  | Cruelty． |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \dot{4} \\ & \text { む } \\ & \text { 艺 } \\ & \text { 世 } \end{aligned}$ |  |  | $\begin{aligned} & \text { 号 } \\ & \text { O } \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & \text { I } \\ & \text { B } \\ & 4 \end{aligned}$ |  |  | -uo!̣ұдәsəp pụe sifiəniр |  |  |
| Adams ． |  |  |  |  |  |  | 1 |  |  |  |
| Ashland |  |  |  |  |  |  |  |  |  |  |
| Barron |  |  |  | ．．． |  |  | 2 |  |  |  |
| Bayfield |  | 2 |  | ．．． |  |  | 3 |  |  | 1 |
| Brown <br> Buffalo |  |  | 1 | ．．．．． |  | 1 | 16 | 1 |  | 3 |
| Burnett |  |  |  |  |  |  |  | 1 |  | 1 |
| Calumet |  |  |  |  |  |  | 6 |  |  |  |
| Chippewa |  | 1 |  |  |  |  | 7 |  |  |  |
| Clark ．．．． |  | 1 |  |  |  |  | 1 |  |  |  |

TABLE NO. 23.-Continued.

| County. | Adultery. |  |  |  |  | Cruelty. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 盛 |  |  |  |  |
| Crawford |  |  |  |  |  | 2 |  |  |  |
| Dane ... | 3 |  | $i$ |  |  | 8 | 2 |  | 4 |
| Dodge |  |  |  |  |  |  |  |  |  |
| Door |  |  |  |  |  |  | 1 |  |  |
| Douglas | 4 |  | . |  |  | 7 |  |  | 4 |
| Dunn © © Claire |  |  |  |  |  | 1 |  |  | 1 |
| Florence ... |  |  |  | 1 | 1 | 8 | 3 | 1 | 1 |
| Fond du Lac. |  |  |  |  |  | 14 | 1 |  | 1 |
| Forest |  |  |  |  |  | 2 | 2 |  | 1 |
| Grant . |  |  |  |  |  | 3 |  |  | 1 |
| Green . |  |  |  |  |  |  |  |  | 1 |
| Green Lake |  |  |  |  |  |  |  |  |  |
| Iowa ..... |  |  |  |  |  | 7 |  |  |  |
| Iron ... Jackson |  | 2 |  |  |  | 1 |  |  | 3 |
| Jefferson |  | 2 |  | ..... |  | 4 |  |  | 2 |
| Juneau |  |  |  |  |  | 1 |  |  |  |
| Kenosha | 3 |  |  |  |  | 17 |  |  | 1 |
| Kewaunee |  |  |  |  |  |  |  |  |  |
| La Crosse . |  | ..... | 1 | 1 | 1 | 19 | $\cdots 1$ |  | 5 |
| Langlade . |  |  |  |  |  | 1 | 1 |  |  |
| Lincoln . | 1 |  |  |  |  | 4 | 1 |  |  |
| Manitowoc |  |  |  |  |  | 4 | 2 |  |  |
| Marathon |  |  |  |  |  |  |  |  |  |
| Marinette |  |  |  |  |  | 1 |  |  |  |
| Marquette |  |  |  |  |  |  |  |  |  |
| Milwaukee Monroe | 10 | 6 1 | .... | 2 | 2 | 111 | 9 |  | 57 |
| Oconto . |  |  |  |  |  | 7 5 | 1 |  |  |
| Oneida : |  |  |  |  |  | 4 | 1 |  |  |
| Outagamie |  |  |  |  |  | 10 | 1 | i | 1 |
| Ozaukee .. |  |  |  |  |  | 4 |  |  |  |
| Pepin .. |  |  |  |  |  |  |  |  |  |
| Pierce |  |  |  |  |  | 1 |  |  |  |
| Polk |  |  |  |  |  | 1 | 1 |  |  |
| Portage | 2 |  |  |  |  | 9 | 1 |  |  |
| Price | 1 |  |  |  |  | $\stackrel{2}{3}$ | 1 |  | 1 |
| Racine | 1 |  |  |  |  | 5 |  |  |  |
| Richland | 1 | 1 | 2 |  |  | 5 20 | 1 |  | 3 6 |
|  |  | 1 | 2 |  |  | 5 | 1 |  |  |
| St. Croix |  |  |  |  |  | 1 |  |  | 1 |
| Sauk . | 1 |  |  |  |  | 9 |  | 1 | 1 |
| Sawyer |  |  |  |  |  |  |  |  |  |
| Shawano |  |  |  |  |  |  |  |  |  |
| Sheboygan |  |  |  |  |  | 7 | 3 |  |  |
| Taylor |  |  |  |  | 1 | 1 |  |  |  |
| Trempealeau |  |  |  |  |  | 1 | 2 |  |  |
| Vernon ...... <br> Vilas | 1 |  |  |  |  | 2 | 1 |  |  |
| Walworth |  |  |  |  |  | 9 |  |  |  |
| Washburn |  |  |  |  |  | 2 |  |  |  |
| Washington |  | 1 |  |  |  | 2 |  |  |  |
| Waukesha . |  |  |  |  |  | ${ }^{6}$ | 1 |  | 5 |
| Waupaca Waushara |  |  |  | 1. |  | 1 |  |  |  |
| Winnebago |  |  |  | 1. |  | 27 |  |  | 4 |
| Wood .... |  |  |  |  | 1 | 3 |  |  | 2 |
| Total | 35 | 12 | 4 | 5 | 7 | 404 | 40 | 3 | 110 |

TABLE NO. 23.-Continued.

| County. | Desertion. |  |  | Drunken-ness. |  |  |  | $\square$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Adams |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ashland |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Barron |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bayfield | 3 |  |  | 1 |  |  |  |  |  |  |  |  | 1 |
| Brown . | 3 |  | 2 |  | 1 |  |  |  |  | 2 | $\ldots$ | 1 |  |
| Buffalo |  |  | 1 |  |  |  |  |  |  |  |  |  |  |
| Calumet | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| Chippewa | 2 |  |  | i |  |  |  |  |  |  |  |  |  |
| Clark |  |  | 1 |  |  |  |  |  |  |  |  |  |  |
| Columbia |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Crawford | 4 |  |  | 1 |  |  |  |  |  |  |  |  |  |
| Dane ..... | 10 | . | 6 | 3 | 5 | ... |  |  |  | 1 | $\ldots$ | 1 | $\ldots$ |
| Dodge Door |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Douglas | 3 |  | 6 |  | 7 | .... |  |  |  | 10 |  |  |  |
| Dunn .. | 2 |  | 1 |  |  |  |  | 1 |  |  |  |  |  |
| Eau Claire | 6 |  | 5 | 1 | 2 |  |  |  |  | 1 |  |  |  |
|  | 7 |  | 2 | 3 |  |  |  |  |  | 3 |  |  |  |
| Forest ......... |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Grant | 1 |  | 2 |  |  |  |  |  |  |  |  |  |  |
| Green | 2 |  |  |  |  |  |  |  |  |  | .4. |  |  |
| Green Lake |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Iowa ...... |  |  | 1 |  |  |  |  |  |  |  |  |  |  |
| Iron ... |  |  | 1 |  |  |  |  |  |  |  |  |  |  |
| Jackson | 5 |  |  |  |  |  |  | . |  | 2 |  |  |  |
| Jeflerson | 9 |  |  |  |  |  |  | ... |  | 1 |  | 1 | . |
| Juneau | 4 |  |  | 1 | ..... |  |  |  |  | 2 |  |  |  |
| Kenosha | 11 |  |  |  |  |  |  |  |  |  |  |  |  |
| Kewaunee <br> La Crosse | 7 |  | 4 |  | 1 |  |  |  |  | 1 |  | 1 | 1 |
| Lafayette | 2 |  | 4 | 1 |  |  |  |  |  |  |  |  |  |
| Langlade | 2 |  |  |  |  |  |  | ... |  | 1 |  |  |  |
| Lincoln . | 5 |  | 2 | 1 | 2 |  |  |  |  |  |  |  |  |
| Manitowoc | 2 |  | 1 | 1 |  |  |  |  |  |  |  |  |  |
| Marathon |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Marinette | 2 |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Marquette Milwaukee |  |  |  |  |  | 1 |  |  | 1 |  |  | 6 | 3 |
| Milwaukee | 62 3 |  | 1 | 10 2 |  | 1 |  | 1 |  | 27 3 |  | 6 | 3 |
| Oconto | 4 |  |  | 1 | 2 |  |  |  |  | 1 |  |  |  |
| Oneida | 2 |  | 1 |  | 1 |  |  |  |  |  |  |  |  |
| Outagamie | 5 | 2 | 3 | 5 | 4 |  |  |  |  | 3 |  | 1 | 1 |
| Ozaukee | 5 |  |  |  |  |  |  |  |  |  |  |  |  |
| $\underset{\text { Pierce }}{\text { Pepin }}$ | 2 |  | 1 |  |  |  |  |  |  |  |  | 1 |  |
| Polk | 3 |  |  | 1 |  |  |  |  |  |  |  |  |  |
| Portage | 6 5 |  | 1 | 1 |  |  |  |  |  | 1 |  | 1 |  |
| Price. | 5 |  | 1 |  |  |  | 1 |  |  |  |  | 1 |  |
| Richland | 2 |  | 2 |  | 2 |  |  |  |  | 2 |  |  |  |
| Rock | 11 |  | 5 | 3 | 3 |  |  |  |  | 5 |  | 2 | 1 |
| Rusk ...... | 2 |  |  |  |  |  |  |  |  |  |  |  |  |
| St. Croix | 2 |  | 1 |  |  |  |  |  |  |  |  |  |  |
| Sauk <br> Sawyer | 2 |  | 1 | 1 | ...... |  |  |  |  |  |  |  |  |
| Shawano |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sheboygan | 7 |  |  | 1 |  |  |  |  |  |  |  |  | 2 |
| Taylor | 2 |  |  |  |  |  |  |  |  |  |  |  |  |
| Trempealeau | 1 |  |  | 2 |  |  |  |  |  |  |  |  | - |

TABLE NO. 23.-Continued.

| County. | Desertion. |  |  | Drunken-ness. |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Vilas .... |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Walworth | 3 |  | 1 | 3 |  |  |  |  |  |  |  | 1 |  |
| W ashburn | 2 |  | 2 |  |  |  |  |  |  |  |  | 1 | .. |
| Washington | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| Waukesha <br> Waupaca | 7 |  | 1 | 1 | ...... |  |  |  |  |  |  | 1 | .... |
| Waushara | 3 |  | 1 |  |  |  |  |  |  | 1 |  |  |  |
| Winnebago | 11 |  | 2 | 3 |  |  |  |  |  | 1 |  | 1 |  |
| Wood | 3 |  | 1 |  |  |  |  |  |  |  |  | 1 |  |
| Total | 257 | 2 | 93 | 54 | 53 | 1 | 1 | 5 | 1 | 71 | ... | 20 | 11 |

TABLE NO. 24.-SHOWING DIVORCES FROM CERTAIN CAUSES, ARRANGED BY COUNTIES AND SEX OF PLAINTIFF" FROM OCT. 1, 1909, TO SEPT. 30, 1910.

| County. | All causes. |  | Drunken-ness. |  | Adultery. |  | Cruelty. |  | Desertion. |  | $\begin{gathered} \text { Nonsup- } \\ \text { port. } \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\underset{\text { Adams }}{\text { Adand }}$. |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bayfield | 4 | 9 |  |  | 2 |  |  | 4 | 1 | 4 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Columbia |  | 5 |  | 1 |  |  |  | 2 | 2 | 2 |  |  |
|  | 10 | 34 | 1 | 7 | 3 | 1 | $i$ | 13 | 4 | 12 |  | 1 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Door ........... |  |  |  |  |  |  |  |  |  |  |  |  |
| Douglas | 6 | 35 |  | 7 | 4 |  | 4 | 7 | 2 | 7 |  | 10 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fond du L | 8 | 23 | 1 | $\ddot{2}$ |  |  | $\ddot{3}$ | 13 | $\ddot{3}$ | 6 |  | 3 |
| Forest | 2 | 3 |  |  |  |  | 2 | 3 |  |  |  |  |
| Grant | 1 | 6 |  |  |  |  | 1 | 3 |  | 3 |  |  |
| Green Lake ... |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Iowa | 1 | 7 |  |  |  |  | 2 | 5 |  | i |  |  |
| Iron ${ }_{\text {Jackson }}$ |  | 2 |  |  |  |  |  | 1 |  |  |  |  |
| Jackson | 3 <br> 5 | 12 |  |  |  |  |  | 4 | 3 | 2 |  | 2 |

TABLE NO. 24.-Continued.

| County. | All causes. |  | $\begin{gathered} \text { Drunken- } \\ \text { ness. } \end{gathered}$ |  | Adultery. |  | Cruelty. |  | Desertion. |  | Nonsup-port. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Juneau | $\stackrel{2}{8}$ | 6 |  | 1 |  |  |  | 1 | 2 | 2 |  | 2 |
| Kenosha | 8 | 24 |  |  | 3 |  | 1 | 17 | 4 | 7 |  |  |
| Kewaunee |  |  |  |  |  |  |  |  |  |  |  |  |
| La Crosse | 11 | 35 | ..... | 4 | 1 | 1 | 4 | 21 | 5 | 6 |  | 1 |
| Lafayette .. | 1 | 4 |  | 1 |  |  | 1 | 1 |  | 2 |  | 1 |
| Langlade . | 2 | 4 |  |  |  |  | 1 2 | $\stackrel{2}{3}$ | 1 | 1 |  | 1 |
| Lincoln .. <br> Manitowoc | 3 1 | 13 9 |  |  |  | 1 | 2 | ${ }_{6}^{3}$ | 1 | 2 |  |  |
| Marathon |  |  |  |  |  |  |  |  |  |  |  |  |
| Marinette | 2 | 2 |  |  |  |  |  | 1 | 1 | 1 |  |  |
| Marquette |  |  |  |  |  |  |  |  |  |  |  |  |
| Milwaukee | 89 | 272 | 5 | 28 | 15 | 3 | 150 | 27 | 51 | 391 |  | 27 |
| Monroe | 4 | 15 |  | 2 | 1 |  | 1 | 7 | 2 | 2 |  | 3 |
| Oconto | 1 | 12 |  | 3 |  |  | 1 | 1 |  | 4 |  | 1 |
| Oneida ... | 3 | 6 | ...... | 1 |  |  | 4 | 1 | 2 | 1 |  |  |
| Outagamie | 7 | 29 |  | 9 |  |  | 4 | 9 | 1 | 8 |  | 3 |
| Ozaukee | - 4 | 5 |  |  |  |  |  | 4 | 4 | 1 |  |  |
| Pepin |  |  |  |  |  |  |  |  |  |  |  |  |
| Pierce | 2 | 3 |  |  |  |  |  | 1 |  | 2 |  |  |
| Polk .. | 2 | 4 | ..... | 1 |  |  |  | 2 | 2 | 1 |  |  |
| Portage | 6 | 16 |  | 1 | 2 |  | 1 | 9 | 3 | 4 |  | 1 |
| Price . | 4 | 8 |  |  | 1 |  | 1 | 3 | 2 | 3 |  |  |
| Racine | 2 | 3 |  |  | 1 |  | 1. | $\stackrel{2}{9}$ |  | 1 |  |  |
| Richland | 9 | 15 | ...... | 2 6 | 1 |  |  | 9 24 | 2 4 4 | ${ }_{12}^{2}$ |  | $\stackrel{2}{5}$ |
| Rock | 9 | 53 6 |  | 6 | 2 | 3 | 3 | 24 5 | 4 1 | 12 |  | 5 |
| St. Croix | 2 | 3 |  |  |  |  |  | 5 | 1 | 1 |  |  |
| Sauk . | 3 | 13 |  | 1 | 1 |  |  | 11 | 2 | 1 |  |  |
| Sawyer | 1. |  |  |  |  |  |  |  | 1 |  |  |  |
| Shawano |  |  |  |  |  |  |  |  |  |  |  |  |
| Sheboygan | 3 | 17 |  | 1 |  |  |  | 8 | 1 | 6 |  |  |
| T'aylor .... | 2 | 3 |  |  |  |  | 1 |  | 1 | 2 |  |  |
| Trempealeau |  | 3 |  |  |  |  |  | 3 | 1 |  |  |  |
| Vernon | 1 | 12 |  | 2 |  |  | 1 | 2 |  | 6 |  |  |
| Vilas ... | 1 | 1 |  |  | 1 |  |  |  |  | 1 |  |  |
| Walworth | 3 | 14 | 1 | 2 |  |  | 1 | 8 | 1 | 3 |  |  |
| Washburn | 3 | 4 |  |  |  |  |  | 2 | 2 | 2 |  |  |
| Washington |  | 4 |  |  |  | 1 |  | 2 |  | 1 |  |  |
| W aukesha | 9 | 12 |  | 1 |  |  | 3 | 9 | 5 | 2 |  |  |
| Waupaca |  |  |  |  |  |  |  |  |  | 1 |  |  |
| Waushara Winnebago |  |  |  |  | 1 |  |  | $\stackrel{2}{2}$ |  | $\stackrel{4}{8}$ |  |  |
| Winned ..... | 13 | 39 9 |  | 2 |  |  | 7 | 24 5 | 1 | 8 3 |  | 4 |
| Total | 286 | 903 | 10 | 97 | 4 | 12 | 217 | 340 | 141 | 211 |  | 71 |

TABLE NO. 25.-SHOWING DIVOROES IN WISCONSIN FROM OCT. 1, 1909 TO SEPT. 30, 1910, ARRANGED AOCORDING TO OAUSE, SEX, NATIVITY, PLACE OF MARRIAGE, NO. OF OHILDREN. AND DURATION OF MARRIAGE.

| Causes. |  |  | Nativity of plaintiff. |  |  | Nativity of defendant. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | $\begin{aligned} & \text { g } \\ & \text { B } \\ & \frac{B}{d} \\ & b \end{aligned}$ |  | 或运 | (18) |
| Adultery | Total. | 35 | 14 | 14 | 7 | 15 | 13 | 7 |
|  | Male...... | 31 | 13 | 12 | 6 | 2 | 1 |  |
|  | Female.... | 4 | 1 | I | 1 | 13 | 12 | 6 |
| Adultery and cruelty | Total..... | 12 | 6 | 5 | 1 | 5 | 6 |  |
|  | Male...... | 7 | 4 | 3 | ........ | 1 | 3 | 1 |
|  | Female... | 5 | 2 | 2 | 1 | 4 | 3 |  |
| Adultery, cruelty and nonsupport ........ | Total. | 4 | 4 |  | . | 4 |  |  |
|  | Male...... | 1 | 1 |  |  | 3 |  |  |
|  | Female.... | 3 | 3 |  |  | 1 |  |  |
| Adultery and desertion $\qquad$ | Total..... |  |  | 2 | 1 | 3 | 1 | 1 |
|  | Male...... | 5 | 2 | 2 | 1 |  |  |  |
|  |  |  |  |  |  | 3 | 1 | 1 |
| Bigamy | Total..... | 7 | 4 | 1 | 2 | 2 | 2 | 3 |
|  | Male...... | 3 4 |  | 1 | $\ldots$ | 1 | 1 | $\stackrel{2}{1}$ |
| $\begin{aligned} & \text { Cruel and inhuman } \\ & \text { treatment } \ldots . . . . . . \end{aligned}$ | Total..... | 404 | 227 | 81 | 96 | 202 | 94 | 108 |
|  | Male...... | 74 | 41 | 18 | 15 | 161 | 78 | 91 |
|  | Female... | 330 | 186 | 63 | 81 | 41 | 16 | 17 |
| Cruelty and desertion | Total..... | 40 | 21 | 9 | 10 | 19 | 9 | 12 |
|  | Male...... | 11 | 5 | 3 | 3 | 14 | 7 | 8 |
|  | Female.... | 29 | 16 |  | 7 | 5 | 2 | 4 |
| $\begin{gathered} \text { Cruelty, desertion } \\ \text { and drunkenness .. } \end{gathered}$ | Total. | 3 | 2 |  | 1 | 1 | 1 | 1 |
|  | Male...... |  |  |  | 1. | 1 | 1 | 1 |
|  | Female.... | 3 | 2 |  | 1 |  |  |  |
| Cruelty, desertion and nonsupport . |  |  |  |  |  |  |  |  |
|  | Mate...... | 110 | 72 | 24 | \% 14 | 57 | ${ }_{31}^{31}$ | ${ }_{22}^{22}$ |
|  | F'emale... | 110 | 72 | 24 | 14 | ........ |  |  |
| Desertion | Total..... | 257 | 130 | 66 |  | 116 | 66 |  |
|  | Male...... | 129 |  |  | - 26 | 57 | 28 | 43 |
|  | Female.... |  | 68 | 25 | 35 | 59 |  | 32 |
| Desertion and drunkenness | Total..... | 2 | 1 | 1 |  |  | 1 | 1 |
|  | Male...... |  |  |  |  |  | 1 | 1 |
|  | Female... | 2 | 1 | 1 |  |  |  |  |
| Desertion and non-support.......... |  | 93 | 59 | 16 | 18 |  |  |  |
|  | Male...... |  |  |  |  | 49 | 20 | 24 |
|  | Female.... | 93 | 59 | 16 | 18 |  |  |  |
| Drunkenness | Total..... | 54 | 33 | 11 |  | 31 | 12 | 11 |
|  | Male...... | 10 | 6 | 2 | 2 | 25 | 10 | 9 |
|  | Female... | 44 | 27 | 9 | 8 | 6 | 2 | 2 |
| $\begin{array}{cc} \text { Drunkenness } & \text { and } \\ \text { nonsupport } & \ldots . . . . \end{array}$ | Total..... | 53 | 33 | 15 | 5 | 34 | 14 | 5 |
|  | Male...... |  |  |  |  | 34 | 14 | 5 |
|  | Female.... | 53 | 33 | 15 | 5 |  |  |  |

TABILE NO. 25.-Continued.


TABILE NO. 25.-Continued.

| Causes. | Place of marriage |  |  |  |  |  | Alimony. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { g. } \\ & \text { © } \\ & \text { O. } \\ & \text { H2 } \end{aligned}$ |  | \% |  |  |  |  |  |
| Adultery ............... | 24 | 7 | 4 |  | 28 | 6 | 3 |  |
| Adultery and cruelty.... | 6 | 3 | 3 |  | 8 | 2 | 4 | 4 |
| Adultery, cruelty and nonsupport | 2 | 2 |  |  |  |  | 4 |  |
| Adultery and desertion | 3 | 2 |  |  | 5 |  | 4 | 3 |
| Bigamy ................ | 5 | 2 |  |  | 5 |  | 2 | $\cdots$ |
| Cruel and inhuman treat- |  |  |  |  |  |  | 2 |  |
| ment Cruelty and desertion. |  | 80 | 25 | 12 | 140 | 88 | 236 | 190 |
| Cruelty, desertion and |  | 5 | 5 |  | 19 | 5 | 17 | 16 |
| drunkenness ........... | 2 | 1 |  |  |  |  | 2 | 2 |

TABBLE NO. 25.-Continued.


TABLLE NO. 25.-Continued.

| Causes. | Number of children in family. |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\cdots$ | $\infty$ | H | 18 | $\bullet$ | $\cdots$ | $\infty$ | 0 | $\stackrel{+}{-}$ |  |
| Adultery | 22 | 1 | 3 | 6 | 1 | 1 | 1 |  |  |  | 1 | .... |
| Adultery and cruelty....... | 3 | 6 |  | 2 | 1 |  |  | - |  |  |  |  |
| Adultery, cruelty and non- | 1 | 2 |  |  |  |  | 1 |  |  |  |  | $\ldots$ |
| Adultery and desertion....... | 2 | 1 |  |  |  | 1 |  | 1 |  |  |  |  |
| Bigamy . $\ldots$................. | ${ }^{6}$ |  |  | 38 | 15 | 14 | 14 | 8 | 3 |  | 3 | 7 |
| Cruel and inhuman treatment Cruelty and desertion........ | 161 | 12 | 65 3 | $\stackrel{3}{2}$ | 15 4 | 14 | 14 | 8 |  | i |  |  |
| Oruelty, desertion and drunkenness $\qquad$ | 1 | 1 |  | 1 |  |  |  |  |  |  |  |  |
| Oruelty, desertion and nonsupport | 40 | 36 | 14 | ${ }^{3}$ | 8 | 3 | 1 | 2 | 1 |  | 1 | 5 |
| Desertion .................... | 135 | 56 | 29 | 18 | 3 | 4 | 4 | 1 | 1 | 1 |  | 5 |
| Desertion and drunkenness.. |  |  | ${ }_{13}^{2}$ |  |  | 2 | 2 |  | 1 |  |  | 2 |
| Desertion and nonsupport... | 38 | 24 18 | 13 | 7 | 1 | 2 | 1 | i | 2 |  | $\ddot{\square}$ | 2 |
| Drunkenness ................. | 11 | 18 7 | 11 | 6 | 1 | 2 | 1 | 2 | 2 | 1 | 1 | 2 |
| Fraud in marriage............ | 1 |  |  |  |  |  |  |  |  |  |  |  |
| Insanity ..... |  |  | 1 |  |  |  |  |  |  |  |  |  |
| Imprisonment ................. | 4 | 1 |  |  |  |  |  |  |  |  |  |  |
| Impotency .................... | $\begin{array}{r}1 \\ 3 \\ \hline\end{array}$ |  | 3 | 7 | 4 |  |  | 1 |  | 1 |  | 1 |
| Nonsupport $\ldots$................ | 33 | 21 | 3 | 7 | 4 |  |  |  |  |  |  |  |
| Refusal to cohabit........... |  | 6 | 2 |  | 3 |  |  |  |  |  |  |  |
| Other causes or cause not stated | 5 | 2 | 2 |  | 1 |  |  |  |  |  |  |  |
| Total ................. | 500 | 270 | 158 | 94 |  | 32 | 27 | 16 | 11. | 4 | 8 | 20 |

TABLE NO．25．－Continued．

| Causes， | Duration of marriage． |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | \％ | $\begin{aligned} & \dot{2} \\ & \stackrel{0}{0} \\ & \stackrel{\rightharpoonup}{1} \\ & \vdots \end{aligned}$ | con | $\stackrel{+}{\text {＋}}$ |  |
| Adul：ery |  |  |  |  |  |  |  |  |
| Adultery＇and cruelty． |  | 2 | 10 | 12 | 11 | 1 |  | 1 |
| Adultery，cruelty and nonsuppo |  | 2 | 5 | 4 | 1 |  |  |  |
| Adultery and desertion．．．．．．．．．．． |  | 1 | 1 | 1 | 1 |  |  |  |
| Bigamy ．．．．．．．．．．．．．．．．． | 1 |  | 1 | 2 |  | 2 |  |  |
| Cruel and inhuman treatment． | 2 | 9 | 104 | 82 | 111 |  |  |  |
| Cruelty and desertion．．．．．．．．． | 1 |  | $\begin{array}{r}18 \\ 8 \\ \hline\end{array}$ | 11 | 11 | 59 | 26 2 | 11 |
| Cruelty，descrtion and nonsupport． |  |  | 1 | 1 | 1 |  |  |  |
| Desertion ．．．．．．．．．．．．． |  | 1 | 41 | 27 | 27 | 11 | 3 |  |
| Desertion and drunkenness． |  |  | 80 | 76 | 60 | 28 | 12 | 1 |
| Tesertion and nonsupport |  |  |  | 1 | 1 |  |  |  |
| Drunkenness ．．．．．．．．．．．．．．． |  | 1 | $\stackrel{23}{7}$ | 30 | 25 | 10 | 2 | 2 |
| Drunkenness and nonsupport |  |  | 7 | 16 | 18 | 8 | 4 | 1 |
| Fraud in marriage．．．．．．．．．．．． |  | 2 | 8 | 15 | 18 | 8 | 1 | 1 |
| Insanity ．． |  |  |  | 1 |  |  |  |  |
| Imprisonment |  |  |  | 1 |  | ． |  |  |
| Impotency |  |  | 1 | 2 | 2 |  |  |  |
| Nonsupport |  |  | 1 |  |  |  |  |  |
| Refusal to cohabit． |  | 2 | 27 | 16 | 13 | 10 | 1 | 1 |
| Voluntary separation |  |  |  |  |  |  |  |  |
| Other causes or cause not stated． |  | 2 | 1 | $\begin{aligned} & 5 \\ & 2 \end{aligned}$ | $\begin{array}{r} 10 \\ 3 \end{array}$ | 3 3 | 1 | 1 |
| Total | 5 | 18 | 320 | 308 | 316 | 151 | 52 | 19 |

TABLE NO．26．－SHOWING DTVOROES IN WISCONSTN BY COUNTTES FROM OCT． 1， 1909 TO SEPT．30．1910．ARRANGED ACOORDING TO SEX，NATIVITY，PLACE OF MARRIAGE，NUMBER OF CHILDREN，AND DURATION OF MARRIAGE．

| County． | $\begin{gathered} \text { Sex of } \\ \text { complain- } \\ \text { ant. } \end{gathered}$ |  | Nativity of plaintiff． |  |  | Vativity of defendant． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 皐 |  |  | 号边 | 菏號 | E E E |
| Adams | Total．．． | 1 |  |  |  |  |  |  |
|  | Male．．．．．．． |  |  |  | 1 |  |  | 1 |
|  | Female．．． | 1 |  |  | 1 |  |  |  |
| Ashland | Total．．．．． |  |  |  |  |  |  |  |
|  | Male．．．．．． | ． |  |  |  |  |  |  |
| Barron |  |  |  |  | ． |  |  |  |
|  | Total．．．．． |  |  |  |  |  |  |  |
|  | Male．．．．．． | 3 | 2 | 1. |  | 6 4 | 2 | ．． |
|  | Female．．． | 5. | 5 |  |  | $\stackrel{4}{2}$ | 1 |  |
| Bayfleld |  | 13 |  |  | 13 |  |  |  |
|  | Male．．．．．．． | 4 |  |  | 4 |  |  | 13 9 |
|  | Femaie．．． | 9 |  |  | 9 |  |  | 4 |
| Brown | Total．．．．． | 31 | 23 | 8 |  |  | 7 |  |
|  | Male．．．．．． | 12 | 10 | 2 |  | 15 | 4 |  |
|  | Female．．． | 19 | 13 | 6 |  | 9 | 3 |  |
| Buffalo | Total．．．．． | 3 | 1 | ．．． | 2 |  |  |  |
|  | Male．．．．．．． |  |  |  |  |  |  | ${ }_{3}^{3}$ |
|  | Female．．． | 3 | 1 |  | 2 |  |  |  |

IVABLE NO. 26.-Continued.


TABLE NO．26．－Continued．

| County． | Sex of complain－ ant． |  | Nativity of plaintiff． |  |  | Nativity of defendant． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $$ | 昆号 | $\dot{B}$ ह ह ह |  | 品 |  |
| Green Lake | Total．．．． |  |  |  |  |  |  |  |
|  | Male．．．．．． |  |  |  |  |  |  |  |
|  | Female．．． |  |  |  |  |  |  |  |
| Iowa | Total．．．．． | 8 | 3 |  | 5 | 1 |  |  |
|  | Male．．．．．． | 1 |  |  | 1 | 1 | …．．．．． | － 6 |
|  | Female．．． | 7 | 3 |  | 4 |  |  | 1 |
| Iron | Total．．． | 2 |  | 1 | 1 | ． | 2 |  |
|  | F＇emale．．．． | 2 |  | 1 | 1 |  | 2 | ．．．．．．．． |
| Jackson | Total．．．．． | 13 | 12 | 1 | ．．．．． | 8 | 5 |  |
|  | Male．．．．．． | 3 | 2 | 1. | ．．．．． | 6 | 4 |  |
|  | Female．．． | 10 | 10 |  |  | 2 | 1 |  |
| Jefferson | Total．．．．． | 17 | 14 | 3 |  | 13 | 4 |  |
|  | Male．．．．．． | 5 | 5 |  |  | 9 | 3 |  |
|  | Female．．． | 12 | $\theta$ | 3 | ． | 4 | 1 |  |
| Juneau | Total．．．．． | 8 | 7 | 1 |  |  | 2. |  |
|  | Male．．．．．． | 2 2 6 | 2 | 1 |  | $\stackrel{1}{3}$ | 2 | 1 |
| Kenosha | Total．．．．． |  |  |  |  |  |  |  |
|  | Male．．．．．．． | 8 | 3 | 4 | 1 | $\stackrel{11}{8}$ | 11 | 9 |
|  | Female．．． | 24 | 7 | 7 | 10 | 3 | 4 | 1 |
| Kewaunee | Total．．．．． |  |  |  | ．．． |  |  |  |
|  | Male． |  |  |  |  |  |  |  |
|  | Female．．． | ． |  |  |  | ． |  |  |
| La Crosse | Total．．．．． | 46 | 42 | 4 |  | 39 | 6 | 1 |
|  | Male．．．．．． | 11 | 10 | 1 | ． | 28 | 6 | 1 |
|  | Female．．． | 35 | 32 | 3 |  | 11 |  |  |
| Lafayette ．．．．．．．．．． | Total．．．．． | 5 | 4 |  | 1 |  | 1 |  |
|  | Male．．．．．． | 1 | 1 |  |  | 3 | 1 |  |
|  | Female．．． | 4 | 3 |  | 1 | 1 |  |  |
| Langlade | Total．．．．． | 6 | 5 | 1 | ．1． |  | 1 |  |
|  | Male．．．．．． | 2 | 2 |  |  | 3 | 1 |  |
|  | Female．．． | 4 | 3 | 1 |  | 2 |  |  |
| Lincoln | Total．．．．． | 16 | 12 | 4 |  |  |  |  |
|  | Male． Female．． | $\begin{array}{r} 3 \\ \mathbf{3} \end{array}$ | 11 | 2 |  | 8 | 3 3 | 2. |
| Manitowoc | Total．．．．． | 10 |  | 2 | 4 |  | 1 | 5 |
|  | Male．．．．．． | 1 | 1 | 2 | 4 | 3 | 1 | 5 |
| Marathon |  |  |  |  |  |  |  |  |
|  | Total．．．．． |  |  |  |  |  |  |  |
|  | Male．．．．．． | ． |  |  | ．．．．． |  |  | － |
|  | Female．．．． | － |  |  | ． | ．．．．．．．． |  | ． |
| Marinette | Total．．．．． | 4 | 1 | 3 | ． | ．．． | 4 |  |
|  | Male．．．．．． | 2 | 1 | 1 | ．$\cdot$ |  | 2 | ． |
|  | Female．．．． | 2 | ．．．． | 2 |  | ．．．．．．． | 2 | ．．．．．． |
| Marquette | Total．．．．． |  |  |  |  |  |  |  |
|  | Male．．．．． |  |  |  |  |  |  |  |
|  | Female．．． |  |  |  |  |  |  |  |
| Milwaukee | Total．．．．． | 361 | 230 | 128 | 5 | 207 | 134 | 20 |
|  | Male．．．．．． | 89 | 50 | 38 | 1 | 157 | 99 | 16 |
|  | Female．．．． | 272 | 180 | 88 | 4 | 50 | 35 | 4. |

TABLE NO. 20.-Continued.


TABLE NO．26．－Continued．

| County． | $\begin{gathered} \text { Sex of } \\ \text { complain- } \\ \text { ant. } \end{gathered}$ |  | Nativity of plaintiff． |  |  | Nativity of defendant． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | E E E E | 号号 | 兂 | E 号 号 |
| Shawano | Total．．．．． |  |  |  |  |  |  |  |
|  | Male．．．．．． |  |  |  |  |  |  |  |
| Sheboygan ．．．．．．．． | Total．．．．． | 20 | 3 |  |  | 3 |  | 17 |
|  | Male．．．．．． | 3 |  |  |  | 3 |  | 14 |
|  | Female．．．． | 17 | 3 |  | 14 |  | ．．．．．．． | 3 |
| Taylor | Total．．．．． | 5 | 3 | 1 | 1 | 1 |  | 4 |
|  | Male．．．．．． | 2 | 1 | 1 | － |  |  | 3 |
|  | Female．．．． | 3 | 2 |  | 1 | 1 |  | 1 |
| Trempealeau | Total．．．． | 4 | 1 | 1 | 2 | 1 | 1 | $\stackrel{2}{2}$ |
|  | Male．．．．．． | 1 3 | 1 | 1 | $\underline{2}$ | 1 | 1 | 2 |
| Vernon ． | Total．．．．． | 13 | 12 | 1 |  | 11 | 2 |  |
|  | Male．．．．．． | 1 | 1 |  |  | 1 | ．．．．．． |  |
|  | F＇emale．．．． | 12 | 11 | 1 |  | 10 | 2 | ．．．．． |
| Vilas | Total．．．．． | 2 |  |  | 2 |  |  | 2 |
|  | Male．．．．．． | 1 |  |  | 1 |  |  | 1 |
|  | Female．．．． | 1 |  |  | 1 |  |  | 1 |
| Walworth ．．．．．．．．． | Total．．．．． | 17 | 15 | 2 |  | 13 | 4 | ．．．．． |
|  | Male．．．．．． |  | 2 | 1 |  | 11 | 3 | ．．． |
|  | Female．．．． |  | 13 | 1 |  | 2 | 1 | ．．． |
| Washburn | Total．．．．． |  | 3 | 1 | 3 | 3 | 1 | 3 |
|  | Male．．．．．． | 3 4 | 1 2 | 1 | 1 2 | 1 2 | 1 | 2 1 |
| Washington | Total．．．．． | 4 | 2 | 1 | 1 | 1 | 1 | 2 |
|  | Male．．．．．． |  |  |  |  | 1 | 1 | 2 |
|  | Female．．．． | 4 | 2 | 1 | 1 | ．．．．．．．． |  |  |
| Waukesha | Total．．．．． | 21 | 13 | 7 | 1 | 17 | 3 | 1 |
|  | Male．．．．．． | 9 | 4 | $\stackrel{4}{3}$ | 1 | 10 | 2 |  |
|  | Female．．．． | 12 | 9 | 3 | ．．．． | 7 | 1 | 1 |
| Waupaca ．．．．．．．．．．． | Total．．．．． | ． 2 | 2 |  |  | 2 |  |  |
|  | Male．．．．．． |  |  |  |  | 2 |  |  |
|  | Female．．．． | 2 | 2 | ．．．．．．．． |  | ． |  |  |
| Waushara | Total．．．．． | 8 |  | ．．．．．．．． | 8 |  |  | 8 |
|  | Male．．．．．． | 4 | ．．．．．．．． |  | 4 | ．．．．．．．．． |  | 4 |
|  | Female．．．． | 4 |  |  | 4 | ．．．．．．．． |  | 4 |
| Winnebago ．．．．．．．．．． | Total．．．．． | 52 |  |  | 52 |  |  | 52 |
|  | Male．．．．．． | 13 |  | ．．．．．．． | 13 |  |  | 39 |
|  | Female．．．． | 39 |  | ．．．．．．．． | 39 | ．．．．．．．． |  | 13 |
| Wood | Total．．．．． | 10 |  |  | 10 | ．．．．．．．． |  | 10 |
|  | Male．．．．．． | 1 |  |  | 1 |  |  | 1 |
|  | Female．．．． | 9 |  |  | 9 |  |  | 1 |

TABLE NO. 26.-Continued.

| Causes | Place of marriage. |  |  |  |  |  | Alimony. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{aligned} & \text { घं } \\ & \text { 合 } \\ & \text { E } \\ & \text {. } \end{aligned}$ |  |  |  |  |
| Adams . | 1 |  |  |  | 1 |  | 1 | 1 |
| Barron | 8 |  |  |  |  |  |  |  |
| Bayfleld | 11 |  | 1 |  | 3 |  |  |  |
| Brown | 24 | 6 | 1 |  |  | 1 | 5 13 | ${ }_{12}^{4}$ |
| Buffalo <br> Burnett | 2 | 1 |  |  | 1 | 1 | 3 | 1 |
| Calumet | 7 |  |  |  |  |  |  |  |
| Chippewa | 11 |  |  |  | 4 | 3 | 3 2 | 3 2 |
| Clark | 3 |  |  |  | 2 |  | 2 | 2 |
| Columbia |  |  |  |  |  |  |  |  |
| Crawford | 5 |  |  | 2 | 3 |  |  |  |
| Dane Dodge | 20 | 21 | 2 | 1 | 21 | 2 | 22 | 13 |
| Door | i |  |  |  |  |  |  |  |
| Douglas | 23 | 13 | 5 |  | 34 | 3 | 10 |  |
| Dunn .. | 2 |  |  | $\cdots$ | 34 | 3 | 12 | 2 |
| Eau Claire Florence | 24 | 6 |  |  | 8 | 1 | 14 | 11 |
| Fond du Lac. | 23 |  | 1 |  |  |  |  |  |
| Forest | 23 3 | 2 | 1 |  |  | 2 |  | 7 |
| Grant | 7 |  |  |  |  | 1 | 4 | 4 |
| Green | 2 | 1 |  |  | 2 |  |  |  |
| Iowa ...... | 7 |  |  | 1 | 1 |  | 4 |  |
| Iron |  |  | 2 | 1 | 1 | i | 1 | 4 |
| Jackson | 11 | 2 |  |  | 3 | 1 | $\stackrel{1}{3}$ | 1 |
| Jefferson | 13 | 3 | 1 |  | 11 | 3 | 3 | $\stackrel{3}{2}$ |
| Juneau. | 8 |  |  |  | 4 |  | 1. | 1 |
| Kenosha Kewaunee | 15 | 10 | 6 | 1 | 12 | 5 | 11 | 6 |
| La Crosse | 34 | 12 |  |  |  |  | 19 |  |
| Lafayette | 3 | 2 |  |  | $\stackrel{3}{3}$ | 1 | + 4 | 4 |
| Langlade | 5 | 1 |  |  | 4 | 2 | 3 | 2 |
| Lincoln ... | 15 9 |  | 1 | ..... | 7 | 1 | 6 | 6 |
| Marathon . |  | 1 |  |  | 1 | 2 | 3 | 2 |
| Marinette | 1 | 1 | 2 |  | $\because 7$ |  | 3 | 3 |
| Marquette |  |  |  |  |  |  | 3 | 3 |
| Milwaukee | 234 | 77 | 49 | 1 | 198 | 72 | 180 | 160 |
| Monroe | 14 | 1 | 1 | 3 | 10 | 2 | 7 | 3 |
| Oconto . | 9 | 2 |  | 2 | 9 |  | 10 | 6 |
| Oneida | 8 |  | 1. |  | 6 | 1 | 3 | 3 |
| Ozaukee . | 28 5 | 6 2 | $\stackrel{2}{2}$ |  | 15 | 13 | 18 | 17 |
| Pepin |  | 2 |  |  | 3 |  | 3 | 2 |
| Pierce | 4 | 1 |  |  | 2 |  |  |  |
| Polk ... | 2 | 1 | 2 | 1 | 2 |  | 3 | $\dddot{3}$ |
| Portage | 15 | 3 | 3 | 1 | 7 | 1 | 11 | 10 |
| Price | 8 | 3 | 1 |  | 6 | 1 | 2 | 1 |
| Racine ${ }^{\text {Richland }}$ | 4 |  | 1 |  | 4 |  | 1 |  |
| Richland | 12 | 2 |  | 4 | 6 | 4 | 8 | $\stackrel{\square}{8}$ |
| Rock | 28 | 32 | 1 | 1 | 14 | 1 | 22 | 18 |
| Rusk Croix | $\frac{4}{5}$ | 3 | 1 |  | 4 | 2 | 3 | 3 |
| Sauk .... | 12 |  |  |  | ${ }_{2}^{2}$ | 2 | 1 | 1 |
| Sawyer |  | 1 |  |  | $\stackrel{3}{1}$ | 3 | 11 | 11 |
| Shawano |  |  |  |  | 1 |  |  |  |
| Sheboygan | 15 | 2 | 3 |  | 3 | 1 | $\ddot{8}$ | 4 |

TABLE NO. 26.-Continued.


TABLE NO. 26.-Continued.

| County. | Number of children in family. |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { gं } \\ & \text { 苞 } \\ & \text { 己 } \\ & 0.0 \\ & 8 \end{aligned}$ | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | $10+$ | - |
| Adams . |  |  |  | 1 |  |  |  |  |  |  |  |  |
| Ashland . |  |  |  |  |  |  |  |  |  |  |  | $\ldots$ |
| Barron |  | ${ }_{6}^{2}$ |  |  |  | $\cdots$ | 1 |  |  | 1 |  | $\ldots$ |
| Bayfield | 6 11 | 6 10 |  |  |  |  |  |  |  | 1 |  | $\cdots$ |
| Brown <br> Buffalo | 11 | 10 | 5 1 | 2 | 1 | 1 |  | ... | 1 |  |  | $\ldots$ |
| Burnett |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Calumet | 2 | 1 |  |  |  | 1 | 1 | 1 |  |  |  | 1 |
| Chippewa ... | 3 | 4 | $\stackrel{2}{1}$ | 1 | $\ldots$ | 1 |  |  |  |  |  | , |
| Clark ..... <br> Columbia | 1 |  | 1 | 1 |  |  |  |  |  |  |  | $\cdots$ |
| Columbia |  |  |  |  |  |  |  | 1 |  |  |  |  |
| Crawiord Dane ... | 20 | 10 | 7 | 2 | 1 | 1 | 1 | 1 |  |  | 1 | $\ldots$ |
| Dodge .. |  |  |  |  |  |  |  |  |  |  |  |  |
| Door .... |  | 6 |  | 7 | 4 | 1 | 1 | 1 |  | 1 | 1 | $\cdots$ |
| Douglas | 16 3 | 6 | 1 | . | . | 1 | 1 |  |  |  |  | 1 |
| Eau Claire | 12 | 5 | 4 | 4 | 2 |  | 1 | 1 |  |  |  | 1 |
| Florence .... |  |  |  |  |  |  | 1 |  |  |  |  |  |
| Fond du Lac. | 13 3 | 10 | 4 | 2 | 1 |  | 1 |  |  |  |  |  |
| Frorest . | 1 | 3 | 1 | i | 1 |  |  | 1 |  |  |  |  |
| Green . | 2 |  | 1 |  |  |  |  |  |  |  |  |  |
| Green Lake |  |  |  |  |  |  |  | 1 |  |  |  |  |
| Iowa | 3 |  | 2 | ...... |  |  |  | ... |  |  |  |  |
| Iron .... | 1 |  |  | 2 |  | 1 |  |  |  |  |  |  |
| Jackson | 6 7 | 5 | 4 | 2 | $\cdots$ |  |  |  |  |  |  |  |
| Juneau . | ${ }^{6}$ | 1. | 1 |  |  |  |  |  |  |  |  |  |
| Kenosha ... | 15 | 6 | 3 |  | 1 |  | 2 | 1 |  |  |  |  |

TABLE NO. 26.-Continued.

| i6. County. | Number of children in family. |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | $10+$ | 䓪 |
| Kewaunee |  |  |  |  |  |  |  |  |  |  |  |  |
| La Crosse |  |  |  |  |  |  |  |  |  |  |  |  |
| Lafayette | 2 2 | 14 1 | 2 | [.... |  |  | 1 |  | 1 |  |  |  |
| Lancoln | 2 | 2 | 1 | . |  |  |  |  |  |  |  |  |
| Manitowoc | $\stackrel{4}{2}$ | 3 4 4 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{aligned} & \text { Monroe } \\ & \text { Oconto } \end{aligned}$ | 9 | 1 |  |  |  |  |  | 4 | 3 |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Outagamie | 9 |  |  |  |  |  |  |  |  |  |  |  |
|  | 2 | 2 |  |  |  |  |  | 1 | 1 |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Price . | 7 |  |  |  |  |  |  |  | 1 |  | 2 |  |
| Racine $\ldots \ldots \ldots \ldots \ldots \ldots \ldots .1$ |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| St. Oroix | 3 1 | 1 |  |  |  |  |  |  |  |  | 1 |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Taylor $\ldots \ldots \ldots \ldots \ldots \ldots . .1{ }_{3}$ |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Washington .......... | 1 | 1 | 2 |  |  |  | ... |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Wood $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$. |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

TABLE NO. 26.-Continued.

| Causes. | Duration of marriage. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | $\begin{aligned} & \dot{N} \\ & \stackrel{y}{\omega} \\ & \stackrel{\rightharpoonup}{\top} \\ & \vdots \end{aligned}$ | ¢ ¢ g ¢ \% | + |  |
| Adams |  |  |  |  | 1 |  |  |  |
| Ashland |  |  |  |  |  |  |  |  |
| Barron |  |  | 4 | 2 |  |  | 2 |  |
| Bayfleld |  |  | 5 | 6 | 1 | 1 |  |  |
| Brown | 1 | ...... | 8 | 9 | 8 | 3 | 1 | 1 |
| Burfalo |  |  |  | 1 | 1 |  | 1 | $\ldots$ |
| Calumet |  |  | 3 | 2 | 2 |  |  |  |
| Chippewa |  |  | 3 | 2 | 4 | 1 | 1 | - |
| Clark .... |  |  | 1 |  | 2 | 1 | 1 |  |
| Columbia |  |  |  |  |  |  |  |  |
| Crawford |  |  | 1 | 2 | 3 |  | 1 |  |
| Dane | 1. | 2 | 12 | 16 | 8 | 5 |  | ... |
| Dodge |  |  |  |  |  |  |  |  |
| Door ... |  |  |  | 1 |  |  |  |  |
| Doung ${ }^{\text {D }}$. |  | 2 | 11 | ${ }_{3}^{6}$ | 14 | 8 |  |  |
| Eau Claire |  | 1 | 12 | ${ }_{6}^{3}$ | $\stackrel{1}{8}$ | 3 |  |  |
| Florence . |  | 1 | 12 | 6 | 8 | 3 |  |  |
| Fond du Lac. |  |  | 10 | 9 | 10 | $\ddot{2}$ |  |  |
| Forest . | 1 |  | 1 | 3 |  |  |  |  |
| Grant . |  |  | 2 | 2 | 2 | $\cdots$ |  |  |
| Green |  |  | 1 |  | 1 |  | 1 |  |
| Green Lake |  |  |  |  |  |  |  |  |
| Iowa. <br> Iron |  |  | 1 | 1 | 4 | 2 |  |  |
| Jackson |  |  | 2 | 4 | 1 5 | 1 | 1 |  |
| Jefferson |  |  | 5 | 3 | 5 | 2 | 1 |  |
| Juneau. |  |  | $\stackrel{5}{3}$ | $\stackrel{3}{2}$ | ${ }_{3}^{5}$ | 2 | 1 | 1 |
| Kenosha |  |  | 7 | 14 | 5 | 5 | 1 |  |
| Kewaunee ... |  |  |  |  |  | 5 | 1 |  |
| La Orosse . |  |  |  | 8 |  | 3 | i | $\ddot{2}$ |
| Lafayette |  |  | 2 | 1 | 2 | 3 | 1 | 2 |
| Langlade |  | 1 |  | 1 | 2 | 2 |  |  |
| Lincoln ... |  |  | 6 | 3 | 6 | 1 |  |  |
| Manitowoc |  |  | 3 | 3 | 1 | 2 |  | 1 |
| Marathon Marinette |  |  |  |  |  |  |  |  |
| Marquette |  | 1 |  |  |  | 2 | 1 |  |
| Milwauke |  | 4 | 103 | 87 | 99 | 50 | 13 | 4 |
| Monroe . |  |  |  | 3 | 5 | 3 | 1 | 1 |
| Oconto |  |  |  | 3 | 2 | 2 | 1 | 3 |
| Oneida |  |  | 2 | 4 | 2 |  |  |  |
| Outagamie | 1 | 1 | 8 | 7 | 9 | 7 | 3 |  |
| Ozaukee |  |  |  | 3 | 5 | 1 |  |  |
| Pierce |  |  | 1 | 2 |  | 1 | 1 |  |
| Polk . |  |  |  |  | 2 | 2 | 2 |  |
| Portage |  |  | 3 | 4 | 9 | 1 | 4 | 1 |
| Price .. |  |  | 3 | 5 | 2 | 2 |  |  |
| Racine .. |  |  | 2 | 1 | 2 |  |  |  |
| Richland |  |  | 7 | 3 | 2 | 3 |  | 3 |
| Rock |  | 3 | 15 | 25 | 10 | 9 |  |  |
| Rusk |  |  | 3 |  | 1 | 2 | $\ddot{1}$ |  |
| St. Croix |  |  | 2 | 1 | 2 |  |  |  |
| Sauk ... |  |  | 4 | 6 | 4 | 1 | 1 |  |
| Sawyer <br> Shawano |  |  | 1 |  |  |  |  |  |
| Shawano .. <br> Sheboygan |  |  |  |  |  |  |  |  |
| Sheboygan |  | 1 | 2 | 5 <br> 3 | 3 | 5 | 2 | 2 |
| Trempealeau |  | 1 | 1 | 1 |  |  |  |  |
| Vernon ..... |  |  | 3 | 1 |  | 1 | 1 |  |
| Vilas |  |  | 1 |  | 1 |  | 1 |  |
| Walworth |  |  | 4 |  | 7 |  | i |  |
| W ashburn |  |  | 1 | 3 | 1 | 2 |  |  |


| Causes. | Duration of marriage. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | in |  |  | 寺 | 家 |
| Washington |  |  | 1 | 1 | 1 |  | 1 |  |
| Waukesha |  |  | 3 | 10 | 6 | 1 |  | 1 |
| Waupaca .... |  |  |  | 2 |  |  |  |  |
| Waushara ... |  | 1 | 1 | 1 |  | 3 |  |  |
| Winnebago Wood | 1 | 1 | 22 | 9 | 11 | 4 | 4 |  |
|  |  |  | 6 | 3 |  | 1 |  |  |

## DEATHS.

During the calendar year of 1909, 27,380 deaths exclusive of stillbirths were recorded in the office of the State Bureau of Vital Statistics. This represents an annual death rate of 11.6 per thousand estimated population.

For the calendar year of $1908,27,100$ deaths were reported exclusive of stillbirths. This shows an annual death rate of 11.6 per thousand estimated population, which is exactly the same rate as for 1909.

Table No. 27, which gives a tabulation of deaths by counties, according to color, sex, conjugal condition and age grouping, shows that 27,219 of the de'cedents were white; 55 were black; 100 were Indians; and in 6 cases the color was unknown or not stated.

Classifying the deaths according to sex, 15,089 were males; 12,276 females; and 15 deaths where the sex was unknown.

The conjugal condition of the decedents in each case is as follows: single 12,332; married 9,360 ; widowed 5,196 ; divorced 197 ; and the conjugal condition was unknown or not stated in 295 cases.

The tabulation of deaths by age groups for 1909 is as follows:
Under 2 months ..... 3,339
Over two months and under one year ..... 2,688
From 1 to 4 years ..... 1,568
From 5 to 9 years ..... 766
From 10 to 19 years ..... 1,225
From 20 to 29 years ..... 1,962
From 30 to 39 years ..... 1,733
From 40 to 49 years ..... 1,950.
From 50 to 59 years ..... 2,340
From 60 to 69 years ..... 2,997
From 70 to 79 years ..... 3,718
From 80 to 89 years ..... 2,564
From 90 to 99 years ..... 418
100 years of age or over ..... 14
Age unknown or not stated ..... 98

During the calendar year of $1910,28,213$ deaths exclusive of stillbirths were recorded in the office of the State Bureau of Vital Statistics. This represents an annual death rate of 12 per thousand estimated population.

Table No. 28 , which gives a tabulation of deaths by counties, according to color, sex, conjugal condition and age grouping, shows that 27,995 of the decedents were white; 47 were black; 122 were Indians; and in 49 cases the color was unknown or not stated.

Classifying the deaths according to sex, 15,759 were males; 12,445 were females; and 9 deaths where the sex was unknown.

The conjugal condition of the decedents in each case is as follows: single 12,759; married 9,660 ; widowed 5,292 ; divorced 205 ; and the conjugal condition was unknown or not stated in 287 cases.

The tabulation of deaths by age groups for 1910 is as follows:
Under 2 months ..... 3,175
Over two months and under one year ..... 2,600
From 1 to 4 years ..... 1,953
From 5 to 9 years. ..... 777
From 10 to 19 years ..... 1,209
From 20 to 29 years ..... 2,019
From 30 to 39 years. ..... 1,848 ..... 1,848
From 40 to 49 years ..... 2,067
From 50 to 59 years ..... 2,455
From 60 to 69 years ..... 2,986
From 70 to 79 years. ..... 3,730 ..... 3,730
From 80 to 89 years ..... 2,742
From 90 to 99 years ..... 526
100 years of age or over ..... 33
Age unknown or not stated ..... 93

Special attention is directed to the tabulation by age groups for each year. Nearly as many children die under two months as adults from 70 to 79 years of age. The mortality under two months is almost entirely due to preventable diseases or a lack of knowledge regarding the proper care of infants. This is also true of the deaths over two months and under one year where there is a loss of over 2,600 lives per year. For 1909, the total deaths, under one year of age, equals $\mathbf{2 2 \%}$ of the total deaths. For 1910, the rate is 20.4.

Table No. 29 shows the total deaths reported by months and calendar years for each disease. Table No. 30 shows the total deaths reported for each disease by age groups. Deaths reported by counties for each disease during 1909, 1910 and the total for the biennial period is shown in table No. 31. Table No. 32 shows total deaths by diseases, arranged according to color, sex, conjugal relation, nativity of deceased, birthplace of father and birthplace of mother for each disease.

Table No. 33 shows the total deaths reported in cities for the calendar year of 1909. This report is based upon the monthly records filed by the various city health officers. During 1909, a total of 13,817 deaths in cities were recorded. This corresponds to an annual death rate, per thousand estimated population, of 13.1.

Two thousand nine hundred and forty-nine of the total deaths reported were among persons under one year of age; 987 were from one to four years of age; and 3,614 were 65 years of age or over.

The following table shows the total deaths reported in cities during 1909 from the following preventable causes: Tuberculosis 1,234; typhoid fever 243; diphtheria 207; scarlet fever 259; measles 56 ; whooping cough 71; pneumonia 1,277; diarrhea and enteritis, under two years 686; meningitis 284; influenza 88; puerperal septicemia 37 ; cancer 712; violence 774; and stillbirths 813.

Table No. 34 shows the total deaths reported in cities for the calendar year of 1910. During 1910, a total of 14,795 deaths in cities were recorded. This corresponds to an annual death rate, per thousand estimated population, of 13.6.

Three thousand one hundred and thirty-one of the total deaths reported were among persons under one year of age; 976 were from one to four years of age; 3,826 were 65 years of age or over.

The following table shows the total deaths reported in cities during 1910 from the following preventable causes; tuberculosis 1,261; typhoid fever 386 ; diphtheria 231; scarlet fever 175; measles 58 ; whooping cough 72; pneumonia 1,402; diarrhea and enteritis, under two years 789; meningitis 29 ; influenza 70; puerperal septicemia 53 ; cancer 800 ; violence 875 ; and stillbirths 792.

## Typhoid Fever.

For the calendar year of 1908, 322 deaths were recorded from typhoid fever. During 1909, there were 352 deaths and for 1910, 558 deaths. It is quite evident from a comparison of the deaths from typhoid fever by years, since the adoption of the uniform registration law, that this disease was unusually prevalent during 1910 as compared with the mortality for the two previous years. More deaths were reported from typhoid fever for 1910 than for any year since 1903, when the mortality reports were first compiled and published. The deaths from typhoid in Wisconsin prior to 1903 were not compiled, so it is impossible to make any comparison prior to this time. If proper precautions were taken in caring for each case of typhoid fever as soon as the nature of the disease is discovered, it would be but a short time until a death from typhoid fever; in Wisconsin, wuuld be extremely rare instead of having an average of more than one death from this disease per day as is now the case.

Out of a total of 910 deaths from this disease during 1909 and 1910, 906 were white, two black and two Indian.

Arranging the deaths by sex, it is shown that 605 were males and 305 were females. This gives a male excess of 300 , and is probably accounted for by the greater activity on the part of the males and hence the increased opportunity of infection.

The conjugal condition of the decedents is as follows: single 527; married 339; widowed 28; divorced 4; and unknown 12.

The nativity of the deceased in the 910 deaths reported is as follows: Wisconsin 507; other United States 101; German 79; Irish 6; Great Britain 9: Norwegian 30; Swedish 19; Polish 25; Danish 7; Italian 6; Canadian 14; Bohemian 4; Russian 9; Austrian 23; other foreign countries 47; and unknown 24.

The following tabulation shows the distribution of deaths by age groups:
Under 2 months ..... 3
Under 1 year. ..... 7
From 1 to 4 years. ..... 30
From 5 to 9 years. ..... 46
From 10 to 19 years ..... 175
From 20 to 29 years ..... 275
From 30 to 39 years ..... 173
From 40 to 49 years. ..... 116
From 50 to 59 years. ..... 52
From 60 to 69 years. ..... 21
From 70 to 79 years ..... 7
From 80 to 89 years. ..... 1
From 90 to 99 years. ..... -
100 years of age or over. ..... 4

The tabulation by age groups shows that eighty-one per cent of the total deaths for typhoid fever occurred between the ages of from 10 to 19 and 40 to 49 . This age grouping represents the period of greatest activity on the part of each individual and also corresponds to the period of the greatest earning capacity.

During 1909, the death rate in cities from typhoid fever per 10,000 population was 2.3. The rate for the state as a whole exclusive of cities was only eight-tenths of one per cent per 10,000 population. It. is, therefore, very evident that typhoid fever during this period of time at least was confined almost entirely to the urban centers.

During 1910, the death rate from typhoid fever in cities per 10,000 population was 3.5 , and the rate for the state as a whole exclusive of cities was 1.3.

## Scarlet Fever.

The deaths reported from scarlet fever by calendar years since the, adoption of the uniform registration law are as follows: 1908, 133;

1909, 352 ; and 1910,304 . During the biennial period a total of 656 deaths from scarlet fever were recorded.

Arranging the deaths reported according to the color of the deceased, it is shown that 655 were white and 1 black. 314 were males and 342 females. 634 were single; 20 married; 1 widowed; and 1 divorced.

The nativity of the deceased is as follows: Wisconsin 574 ; other United States 43; German 9; Great Britain 1; Norwegian 2; Polish 9; Italian 1; Canadian 2; Russian 4; Austrian 1; other foreign countries 5 ; and unknown 5 .

The following table shows the distribution of deaths from scarlet fever by age groups:
Under two months ..... 2
Over two months and under one year ..... 37
From 1 to 4 years ..... 313
From 5 to 9 years ..... 194
From 10 to 19 years ..... 80
From 20 to 29 years ..... 13
From 30 to 39 years ..... 11
From 40 to 49 years ..... 4
From 50 to 59 years ..... 1
Age unknown ..... 1

Table No. 29 shows the deaths reported from scarlet fever by months during 1909 and 1910. The deaths by months for the biennial period are as follows: January 50; February 52; March 59, April 66, May 82; June 68; July 50; August 47; September 38; October 48; November 45; and Dccember 51.

During 1909, 259 deaths from scarlet fever were reported in cities, giving an anrual death rate for cities, per 10,000 population of 2.4. For the state as a whole exclusive of cities, 93 deaths were reported, representing an annual death rate, per 10,000 population of seventenths of one per cent.

For 1910, there were 175 deaths in cities with a rate of 1.6 per 10,000 population, and 129 deaths in the state exclusive of cities, with the rate of 1 per 10,000 population.

Classifying all of the cities in the state as urban and the remainder of the population as rural, it is shown that the mortality from scarlet fever is about twice as high in cities as in the rural districts.

## Measles.

For 1908, 96 deaths from measles were recorded. During 1909, there were 120 deaths from this disease and during 1910, 158 deaths. During the biennial period covered by this report, 278 deaths from measles were recorded. 275 of the decedents were white and 3 were Indians. 141 were males and 187 females.

Classifying the deaths from measles according to conjugal condition 269 were single and 9 married.

The nativity of the deceased is as follows: born in Wisconsin 262; other United States 10; Norwegian 1; Swedish 1; Polish 1; Italian 1; and Austrian 1.
The following table shows the distribution of deaths from measles by age groups:


The deaths from this disease by months for the biennial period as given in table No. 29 is as follows: January 13; February 15; March 29; April 28; May 44; June 64; July 31; August 13; September 9; October 6; November 5; and December 21. This shows that deaths from measles are more numerous in the early spring months than at any other season of the year.

For 1909, 56 deaths from measles were reported in cities. This represents an annual death rate per 10,000 population of five-tenths of one per cent. The deaths reported for the entire state exclusive of cities are 93 with a rate of seven-tenths of one per cent. per 10,000 population.

For 1910, there were 58 deaths in cities with a rate of five-tenths of one per cent per 10,000 population, and 100 deaths in the state exclusive of cities with a rate of seven-tenths of one per cent per 10,000 population.

This shows that the mortality from measles in urban and rural districts is practically the same for the biennial period.

## Dipitheiehia.

There were 345 deaths from diphtheria in 1908; 411 in 1909; and 429 in 1910. During the biennial period there were 840 deaths from diphtheria.

Eight hundred and thirty-five of the persons who sacrificed their lives from this easily preventable disease were white; 1 black; 2 Indian; and in 2 cases the color was unknown or not stated.

The sex of the decedents is as follows: males 409; and females 431. Classifying by conjugal condition, it is shown that 801 were single; 35 married; 3 widowed; and in 1 case the conjugal condition was not stated.

The nativity of the deceased, as shown by table No. 33, is as follows: Wisconsin 751; other United States 56; German 6; Norwegian 3; Polish 1; Danish 2; Italian 2; French 1; Canadian 1; Bohemian 1; Russian 5; Austrian 3; other foreign born 5 ; and nativity unknown 3.
The following table shows the distribution of deaths from diphtheria and croup by age groups:

| Under 2 mont |  |
| :---: | :---: |
| Over two months and | 10 |
| From 1 to 4 years. | 53 |
| From 5 to 9 years. | 307 |
| From 10 to 19 years | 253 |
| From 20 to 29 years. | 121 |
| From 30 to 39 years. | 33 |
| From 40 to 49 years. | 15 |
| From 50 to 59 years. | 40. |
| From 60 to 69 years. |  |
| From 70 to 79 years. |  |
| Age unknown | 2 |

Diphtheria, as is shown by the above table, is essentially a disease of early childhood. Seventy-four per cent of the total deaths from diphtheria were among children nine years of age or less.
The distribution of deaths by months is as follows: January 102; February 60; March 62; April 58; May 71; June 60; July 62; August 44; September 47; October 99; November 80; and December 95.

An examination of the deaths from diphtheria shows that the disease is unusually prevalent during the entire school year. After the close of school in the spring and until it again opens in the fall, there is a marked decline in the number of cases and deaths from diphtheria. The schools play an important part in the spread of this disease, and this condition will continue to exist until a satisfactory state-wide system for the medical inspection of schools is provided.
For 1909, 207 deaths from diphtheria were reported in cities. This represents an annual death rate, per 10,000 population, of 1.9. There were 204 deaths for the entire state, exclusive of cities, with a rate of 1.5 per 10,000 population.
During 1910, there were 231 deaths in cities, with a rate per 10,000 population of 2.1 , and 198 deaths in the state, exclusive of cities, with a rate of 1.5 per 10,000 population.

This shows that for 1909 the mortality rate in cities and in the rural districts was practically the same. For 1910, the rate was nearly twice as high in cities as in the country districts.

## Whooping Cough.

There were 192 deaths from whooping cough in 1908; 197 in 1909; and 200 in 1910. During the biennial period covered by this report, there were 397 deaths from this disease. The color of the decedents
in each case is as follows: white 393 ; black 1 ; and Indian 3 . Classifying the deaths by sex, 104 were male and 203 female. Three hundred and eighty-nine were single and 8 married.

The nativity of the deceased in each case is as follows: born in Wisconsin 282; other United States 8; German 2; Polish 2; other foreign countries 2; and unknown or not stated 1.

The following table shows the distribution of deaths from whooping cough by age groups:
Under 2 months ..... 67
Over two months and under one year. ..... 199
From 1 to 4 years. ..... 104
From 5 to 9 years ..... 15
From 10 to 19 years ..... 2
From 20 to 29 years. ..... 3
From 30 to 39 years ..... 2
From 40 to 49 years. ..... 5

The tabulation by age groups shows that deaths from whooping cough are confined almost entirely to children under four years of age. Out of a total of 397 deaths reported, 370 , or 93 per cent were among children four years of age or under. Two hundred and sixty-six of this total were among children under one year of age.

Every precaution should be taken to prevent a spread of whooping cough among young children, and homes, or other places, where the disease exists, should be placarded so as to warn the general public of the presence of the disease. If this is done, and the parents realize the danger of whooping cough to young children, every precaution will be taken to prevent the spread instead of wilfully exposing children to the infection as is often done at the present time.

## Tuberculosis.

During 1908, 2,509 deaths from tuberculosis were reported; for 1909, there were 2,476 and for $1910,2,404$. The death rate for this disease, per 100,000 estimated populated, for 1908 was 103.5 ; for 1909, 102.9; and for $1910,102.6$. The rate for 1911, so far as the returns show at present, will be still further reduced.

This does not indicate any material decrease in the number of deaths from this disease, but it is proof that the disease is not increasing in prevalence and, we believe, that after the people, who now have the disease, are cured or death results; there will be a material decline in the number of deaths reported from tuberculosis. On account of a sufficient number of suitable quarters not being provided for the care and treatment of both chronic and incipient cases, methods for the prevention of the disease are more generally practiced.
than methods of treatment or cure. Hence, we may expect to discover a very marked decline in the number of new cases before there will be any appreciable decrease in the number of deaths.

Statistics published by the German government show that if tuberculosis decreases at the present rate, there will be no tuberculosis in the German Empire after thirty years. English government statistics show that at the present rate of decrease, there will be no tuberculosis in England after forty years. Massachusetts, long recognized as a most progressive state in public health work, has reduced her tuberculosis rate 63 per cent. in the last fifty years. New York state reduced her tuberculosis death rate during the seven years from 1900 to 1907,8 per cent; since that time a more vigorous campaign has been made with the result that in the last two years, the death rate from this disease was decreased 8.5 per cent, making a total decrease in nine years of 16.5 per cent.

The following interesting table, showing the cost of tuberculosis during 1909 and 1910, is presented:
Total deaths ..... 4,880
single males and females ..... 2,320
Married males and females ..... 2,124
Widowed ..... 350
Homes deprived of father or mother. ..... 2,124
Homes with no parents, children orphans ..... 350
Orphans estimated at ..... 1,400Loss in money value for 1909 and 1910:
Loss in wages for nine months at $\$ 1$ per day ..... $\$ 270$
Food, nurses, medicine, etc. for nine mos., at $\$ 1.50$ per day. ..... 405
Value of each life according to the American table. ..... 1,700
Total cost for each death from tuberculosis ..... 2,375
Total cost for 4,880 deaths, during 1909 and 1910 ..... $\$ 11,590,000$
Loss in wages for 12,000 cases, during 1909 and 1910. ..... 6,960,000
Total cost of tuberculosis during 2 years ..... $18,550,000$

It has been determined from a careful study of several thousand cases that an individual who dies from tuberculosis is totally incapacitated for work for at least nine months before death occurs. The loss in wages, if estimated at one dollar per day, would be $\$ 270$ for each case. The cost of food, nurses, medicine, etc., for nine months is estimated at $\$ 1.50$ per day or a total cost of $\$ 405$ for these items. If each individuai is valued according to the American table at $\$ 1,700$, the total cost for each case of death from tuberculosis, as shown by the above tabulation, is $\$ 2,375$.

Based on the mortality returns for tuberculosis, it has been determined from the deaths reported that we have in Wisconsin about 12,000 active cases. Assuming that each of these individuals in
health could earn $\$ 580$ per year, which is the average earning for a factory worker, the total income from these 12,000 individuals would be $\$ 6,960,000$ per year. For the purpose of determining approximately the loss in earning capacity, it is assumed that the earning power on account of the individual having tuberculosis is reduced one-half. This would represent a loss each year in earning power of $\$ 3,480,000$, or a total during the biennial period of $\$ 6,960,000$.

These estimates, we believe, are conservative in every case and the loss from tuberculosis during the biennial period of $\$ 18,550,000$ is not overstated in any way. in general we may say that the annual loss from tuberculosis in Wisconsin is in excess of $\$ 9,000,000$.

The tabulation of deaths from tuberculosis during the biennial period of 1909 and 1910 by color is as follows: white 4,806 ; black 22 ; Indian 50; and unknown or not stated 2.

The sex of the decedents is as follows: males 2,509; females 2,371. This gives a male excess of 138 .

Classifying by conjugal condition 2,320 were single; 2,124 married; 350 widowed; 53 divorced; and in 33 cases the conjugal condition was unknown or not stated.

The nativity of the deceased, as shown by table No. 33, is as follows: Wisconsin 2,879; other United States 567; German 614; Irish 46; Great Britain 52; Norwegian 235; Swedish 75; Polish 40; Welsh 1; Danish 33 ; Italian 12; Hrench 1; Canadian 65; Bohemian 21; Russian 29; Austrian 55; other foreign countries 115; and unknown or not stated 38.

The following table shows the distribution of deaths from tuberculosis by age groups:
Under two months. ..... 11
Over two months and under one year. ..... 119
From 1 to 4 years ..... 123
From 5 to 9 years. ..... 63
l'rom 10 to 19 years. ..... 510
From 20 to 29 years. ..... 1,416
From 30 to 39 years. ..... 990
From 40 to 49 years. ..... 660
From 50 to 59 years. ..... 455
From 60 to 69 years. ..... 339
From 70 to 79 years. ..... 152
From 80 to 89 years. ..... 30
From 90 to 99 years. ..... 1
100 years of age or over. ..... None
Age unknown or not stated. ..... 11

For 1909, 1,234 deaths from tuberculosis were reported in cities. This corresponds to an anrual death rate, per 10,000 population, of 11.7. The deaths reported for the entire state, exclusive of cities, was 1,242 , with a rate per 10,000 population of 9.5 . This gives an excess of deaths in cities per 10,000 population of 2.2 .

For 1910, there were 1,261 deaths in cities with a rate per 10,000 population of 11.6 , and $1,1.43$ deaths in the state, exclusive of cities, with a rate of 9.1 per 10,000 population, the rate for cities during 1910 being 2.5 greater than for the rural districts.

## Pneumonia.

Two thousand three hundred and twenty-one deaths from pneumonia were reported for 1909, and 2,253 in 1910. During the biennial period there were 4,574 deaths from this disease. During 1909, there were 527 deaths from bronchial pneumonia and 1,794 from other forms; for 1910, there were 529 from bronchial pneumonia and 1,724 deaths from the disease in other forms.

The color of the decedents in each case is as follows: white 4,535; black 5; Indian 26; and color unknown or not stated 7.

Classifying the deaths by sex 2,535 were males and 2,039 were females; 2,489 were singie; 1,214 married; 799 widowed; 28 divorced; and in 44 cases the conjugal condition was unknown or not stated.

The nativity of the deceased in each case is as follows: born in Wisconsin 2,776; other United States 247; German 680; Irish 147; Great Britain 93; Norwegian 164; Swedish 41; Polish 68; Danish 28; Italian 17; French 3; Canadian 66; Bohemian 27; Russian 16; Austrian 41; other foreign countries 85 ; and nativity unknown or not stated 75 .

The following table shows the distribution of deaths from pneumonia by age groups:
Under two months ..... 417.
Over two months and under one year ..... 884
From 1 to 4 years ..... 566
From 5 to 9 years ..... 124
From 10 to 19 years ..... 144
From 20 to 29 years
185
185
From 30 to 39 years ..... 232
From 40 to 49 years ..... 268
From 50 to 59 years ..... 299
From 60 to 69 years ..... 426
From 70 to 79 years ..... 609
From 80 to 89 years ..... 356.
From 90 to 99 years ..... 52
100 years of age or over ..... 1
Age unknown or not stated ..... 11.

For 1909, 1,277 deaths from pneamonia were reported in cities. This represents an annual death rate, per 10,000 population of 12. The deaths reported for the entire state, exclusive of cities, were 1,044 with a rate, per 10,000 population, of 7.9 . This gives an excess of deaths in cities for 1909 of 4.1 , per 10,000 population.

For 1910, there were 1,402 deaths in cities with a rate, per 10,000 population, of 12.9 , and 851 deaths in the state, exclusive of cities, with a rate of 6.8 , per 10,000 population, the rate for cities during 1910 being 6.1 greater than for the rural districts.

## Diarrilea and Enteritis.

There were 1,594 deaths from diarrhea and enteritis under two years of age in 1908; 1,233 in 1909; and 1,503 in 1910. During the biennial period there were 2,736 deaths from this disease.

Among the total deaths reported 2,715 were white; 1 black; 18 Indian; and 2 where the color was unknown or not stated. 1,515 of the decedents were male and 1,221 female.

Tabulating the total deaths from this disease by conjugal condition and age group, it is shown that 2,736 were single; 583 were under two months of age; 1,738 were over two months, and under one year; and 387 were over one year of age but less than two years old; and in 28 cases the age was unknown or not stated.

It will be seen from an examination of table No. 30, showing the deaths from diarrhea and enteritis by age groups, that out of a total of 2,736 deaths reported, 2,321 or more than 84 per cent of the total deaths were among children under one year of age.

Diarrhea and enteritis under two years of age is classed as an easily preventable disease and the large mortality is due almost entirely to improper feeding and the use of unwholesome food. By reasonable application of the knowledge now existing regarding the proper care and feeding of infants practically all of the deaths from this disease could be prevented.

The distribution of deaths by months for the two years is as follows: January 100; February 83; March 135; April 99; May 107; June 128; July 222; August 637; September 752; October 303; November 96; and December 92 . This shows that the disease is unusually prevalent during the months of July, August and September.

Table No. 35, which shows total deaths under one year of age by counties, and death rates per 1,000 births reported, is extremely interesting in the study of infantile mortality especially diarrheal diseases.

For 1908 the death rate, per 1,000 births, by counties fluctuates from 49 per 1,000 in Vilas county to 151.4 per 1,000 in Waushara county. The mortality rate is also unusually high in Brown, Iron, Milwaukee, Sawyer, Shawano, and Taylor counties.

The rate for 1909 varies from 55.2 per 1,000, in Adams county to 182.3 per 1,000 in Iron county. The rate is also unusually high for 1909 in Ashland, Brown, Burnette, Juneau, Marinette, Milwaukee, Oneida, Portage, and Sawyer counties.

For 1910, the death rate per 1,000 births varies from 53.2 in Ozaukee county to 148.7 in Brown county. Kewaunee and Lincoln counties also show a very high rate for 1910.

## Meningitis.

There were 607 deaths from meningitis during 1908; 499 for 1909; and 478 for 1910. This shows a decrease of over 100 deaths from this disease for 1909 and 1910 as compared with 1908. During the biennial period covered by this report there were 977 deaths from simple meningitis.

The color of the decedents in each case is as follows: white 970 ; Indian 6; and color unknown or not stated 1. Classifying the deaths by sex 515 were males and 462 females. 831 were single; 110 married; 32 widowed; and in 4 cases the conjugal condition was unknown or not stated.
The nativity of the deceased in each case is as follows: born in Wisconsin 794; other United States 78; German 39; Great Britain 4; Norwegian 7; Swedish 9; Polish 9; Welsh 1; Danish 1; Italian 6; Canadian 6; Russian 6; Austrian 3; born in other foreign countries: 12; and nativity unknown or not stated 2.

The following table shows the distribution of deaths from simple. meningitis by age groups:

Under two months. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 71
Over two months and under one year. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 244

From 5 to 9 years. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 98
From 10 to 19 years. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 100
From 20 to 29 years. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 54
From 30 to 39 years. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 30
From 40 to 49 years..................................................................... 32
From 50 to 59 years. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 36
From 60 to 69 years. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 28
From 70 to 79 years. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 21
From 80 to 89 years................................................................... . . . 4
From 90 to 99 years. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1
Age unknown ...........................................................................
Table No. 29 shows the total deaths from meningitis by months for both 1909 and 1910.

For 1909, 284 deaths from meningitis were reported in cities. This represents an annual death rate of 2.7 , per 10,000 population. There were 215 deaths for the entire state, exclusive of cities, with a rate of 1.6 per 10,000 population.

During 1910, there were 295 deaths in cities with a rate, per 10,000 population, of 2.7 the same as for 1909 , and 183 deaths in the state, exclusive of cities, with a rate of 1.4 per 10,000 population.

The rate for the biennial period is quite constant for cities and also in the rural districts with an excess in cities of 1.1 per $10,000^{*}$ population for 1909, and 1.3 for 1910.

## Bronchitis.

During the calendar year of 1908,553 deaths were recorded as due to bronchitis in both the acute and chronic stages. For 1909, there were 572 deaths and for 1910,526 . During 1909 there were 310 deathsfrom acute bronchitis and 262 from chronic, while for 1910, there were 313 deaths from the disease in the acute form and 213 from chronic bronchitis.

There is not any decline in the number of deaths from this disease since 1906, and the assumption that the failure to show a decline in the number of deaths from tuberculosis is due to better diagnosis and a consequent decrease in the number of deaths reported from respiratory diseases other than tuberculosis is not true either in the case of deaths from bronchitis or asthma. We believe the slow decline in the number of deaths from tuberculosis is due to other causes as stated in the summary of deaths from that disease.

The deaths from bronchitis by color show that 1,094 were white; 1 black; and 3 Indian. The sex is as follows: males 568 , females 530. Deaths by conjugal condition show that 501 were single; 183 married; 407 widowed; 1 divorced; and in 2 cases the conjugal condition was unknown or not stated.

The nativity of the deceased in each case is as follows: born in Wisconsin 481; other United States 138; German 249; Irish 67; Great Britain 35; Norwegian 49; Swedish 10; Polish 8; Welsh 2; Danish 9; Canadian 11; Bohemian 6; Russian 2; Austrian 9; born in other foreign countries 20 ; and nativity unknown or not stated 2 .

The following table shows the distribution of deaths from bronchitis by age groups:
Under two months ..... 128
Over two months and under one year. ..... 236
From 1 to 4 years ..... 84
From 5 to 9 years. ..... 11 ..... 13
From 10 to 19 years
From 10 to 19 years
From 20 to 29 years. ..... 11
From 30 to 39 years ..... 4
From 40 to 49 years. ..... 11 ..... 11 ..... 42
From, 50 to 59 years
From, 50 to 59 years
From 60 to 69 years ..... 47
From 70 to 79 years ..... 290 ..... 290
From 80 to 89 years ..... 197 ..... 197
From 90 to 99 years ..... 22
Age unknown ..... 2

## Suicide.

For the year ending December 31, 1909, 278 deaths from suicide were reported. During the calendar year of 1910 there were 318 deaths from suicide. 596 deaths from this cause were reported for the biennial period.

594 of the decedents were white, 1 black, and in 1 case the color was not stated. The sex is as follows; male 491; and female 105. Deaths by conjugal condition show that 218 were single; 271 married; 60 widowed; 17 divorced; and in 30 cases the conjugal condition was unknown or not stated.
The nativity of the deceased in each case is as follows; born in Wisconsin 207; other United States 68; German 154; Irish 4; Great Britain 6; Norwegian 26; Swedish 22; Polish 7; Danish 9; Italian 1; French 1; Canadian 8; Bohemian 11; Russian 7; Austrian 13; born in other foreign countries 21 ; and birthplace unknown or not stated 33 .

## Accidental Deathis.

During 1909, 1,377 deaths from external causes other than suicides were reported. For 1910, there were 1,444 deaths from these causes.
The following table shows deaths from external causes, exclusive of suicides, reported during 1909.
Poisoning by food
Other acute poisonings ..... 32
Conflagration ..... 23
Burns (Conflagration excepted) ..... 101
Absorption of deleterious gases ..... 44
Accidental drowning ..... 13
Traumatism by firearms ..... 190
Traumatism by cutting or piercing instruments ..... 93
Traumatism by fall ..... 10
Traumatism in mines and quarries ..... 126
Traumatism by machines ..... 22
Traumatism by other crushing ..... 44
Injuries by animals ..... 308
Starvation ..... 32
Excessive cold ..... 3
Effects of heat ..... 14
Lightning ..... 23
Electricity (Lightning excepted) ..... 11
Homicide by firearms ..... 11 ..... 11
Homicide by cutting or piercing instruments ..... 10
Homicide by other means ..... 10
Fractures (Cause not specified) ..... 8
Other external violence ..... 139110The following table shows deaths from external causes, exclusive ofsuicides, reported during 1910:
Poisoning by food ..... 26
Other acute poisonings ..... 30
Conflagration ..... 85
Burns (Conflagration excepted) ..... 29.
Absorption of deleterious gases ..... 18
Accidental drowning ..... 216
Traumatism by firearms ..... 68
Traumatism by cutting or piercing instruments ..... 37
Traumatism by fall ..... 154
Traumatism in mines and quarries ..... 10
Traumatism by machines ..... 42
Traumatism by crushing. ..... 342
Injuries by animals ..... 40
Starvation ..... 2
Excessive cold ..... 17
Effects of heat ..... 40
Lightning ..... 7
Electricity (Lightning excepted) ..... 17
Homicide by firearms ..... 22
Homicide by cutting or piercing instruments ..... 6
Homicide by other means ..... 13
Fractures (Cause not specified) ..... 124
Other external violence ..... 99

Table No. 32 shows the total accidental deaths and deaths from violence, exclusive of suicides, reported during the biennial period according to the color, sex, conjugal condition and nativity.

TABLE NO. 27.-SHOWING DEATHS BY COUNTIES DURING THE CALENDAR YEAR OF 1909, ARRANGED ACCORDING TO OOLOR, SEX, CONJUGAL CON. DITION, AND AGE GROUPS.

| County. | Total. | Color. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | White. | Black. | Indian. | Unknown. |
| Adams ........... | 77 | 77 |  |  |  |
| Ashland | 376 | 343 | ......... | 31 | - 2 |
| Barron, ... | 288 | 288 |  |  | ....... |
| Bayfield <br> Brown | 135 801 | 124 782 | $\cdots{ }^{\text {c. }}$ | 11 | ............ |
| Buffalo . | 150 | 150 |  |  | ............... |
| Burnett | 94 | 94 |  |  |  |
| Calumet | 178 | 174 | 1 | 3 |  |
| Chippewa | 436 | 435 |  | 1 |  |
| Clark ... | 273 | 272 | 1 | ........ | ........... |
| Columbia | 367 | 367 |  |  |  |
| Crawford | 201 868 | 201 861 | $\cdots$ | $\cdots$ |  |
| Dodge .... | 466 | 466 |  |  |  |
| Door .. | 186 | 186 |  |  |  |
| Douglas | 461 | 458 | 2 | 1 | ............ |
| Dunn | 264 | 264 |  |  |  |
| Eau Claire | 371 | 369 | 2 | ..... | ........... |
| Florence ... | 24 | 24 |  |  |  |
| Fond du Lac. | 635 55 | 634 53 | 1 | 2 |  |
| Forest . | 55 435 | 53 433 | 2 | 2 |  |
| Green | 224 | 223 , | 1 | ............. |  |
| Green Lake | 198 | 197 | 1 |  |  |
| Iowa | 243 | 243 |  |  |  |
| Iron .... | 113 | 113 | .......0. |  |  |
| Jackson | 200 | 199 |  | 1 |  |
| Jefferson | 377 236 | 376 234 | 1 | 1 |  |
| Juneau ... | 236 348 | 234 348 | 1 | 1 |  |
| Kewaunee | 211 | 211 |  |  |  |
| La Crosse | 509 | 508 | i |  |  |
| Lafayette | 226 | 226 |  |  |  |
| Langlade | 136 | 136 | ......... |  |  |
| Lincoln | 230 | 230 | ........... |  |  |
| Manitowoc | 507 | 507 |  |  |  |
| Marathon | 567 | 565 |  | 2 |  |
| Marinette | 391 | 389 | 1 |  |  |
| Marquette | 123 | 123 |  |  |  |
| Milwaukee | 6,134 | 6,122 | 12 |  |  |
| Monroe | 298 263 | 297 262 | 1 |  | ............ |
| Oneida . | 127 | 127 |  |  |  |
| Outagamie | 534 | 527 | 2 | 5 |  |
| Ozaukee | 197 | 186 | 1 |  |  |
| Pepin | 67 | 67 |  |  |  |
| Pierce .. | 234 | 234 | 1 | ......... |  |
| Polk ... | 196 | 194 | 1 | 1 |  |
| Portage | 372 79 | 372 79 |  |  |  |
| Racine | 658 | 654 | $\cdots$ |  |  |
| Richland | 222 | 222 |  |  |  |
| Rock | 684 | 678 | 6 |  |  |
| Rusk | 96 | 95 |  | 1 |  |
| St. Croix | 269 | 269 | . |  |  |
| Sauk | 391 | 390 | 1 |  |  |
| Shawyer ${ }^{\text {Shawano }}$ | 66 321 | 56 312 | $\cdots$ | 10 7 | 1 |
| Sheboygan | 616 | 616 |  |  |  |
| Taylor ..... | 121 | 121 |  |  |  |
| 'Trempealeau | 242 278 | 241 278 |  |  | 1 |
| Vernon .. | 278 | 278 |  |  |  |

TABLE NO. 27.-SHOWING DEATHS BY COUNTIES DURING THE CALENDAR YEAR OF 1909, ARRANGED A:CICORDING 'I'O COLOR, SEX, CONJUGAL CON. DITION, AND AGE GROUPS.-Cont.

| County. | Total. | Color. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | White. | Black. | Indian. | Unknown. |
| Vilas . | 29 | 29 | ........ |  |  |
| Walworth | $\stackrel{381}{80}$ | 380 80 | 1 |  |  |
| W ashburn ${ }^{\text {W ashington }}$ | 80 249 | -80 | . |  | 1 |
| Waukesha . | 484 | 483 | 1 | ....... |  |
| Waupaca . | 405 | 405 | ............ | . |  |
| Waushara Winnebago | 215 | 276 | $\cdots \cdots$ | 2 |  |
| Wood ..... | 323 | 322 |  |  |  |
| Total | 27,380 | 27,219 | 55 | 100 | ${ }_{6}$ |

TABLE NO. 27.-SHOWING DEATHS BY COUNTIES DURING THE CALENDAR YEAR OF 1909, ARRANGED ACOORDING TO COLOR, SEX, CONJUGAL CONDITION, AND AGE GROUPS.-Cont.

| County. | Sex. |  |  | Conjugal Condition. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female. | $\left\|\begin{array}{c} \text { Un- } \\ \text { known } \end{array}\right\|$ | Single. | Married. | Widowed. | $\begin{gathered} \text { Di- } \\ \text { vorced } \end{gathered}$ | $\begin{gathered} \text { Un- } \\ \text { known } \end{gathered}$ |
| Adams | 38 | 39 | ...... | 26 | 30 | 19 | 2 |  |
| Ashland | 234 | 142 | ....... | 198 | 117 | 34 | 3 |  |
| Barron | 168 | 120 | ....... | 138 | 95 <br> 42 | 176 | 2 | ${ }_{2}^{6}$ |
| Bayfield | +81 | $\begin{array}{r}54 \\ 380 \\ \hline\end{array}$ |  | 393 | 271 | 123 | 5 | 9 |
| Brown | ${ }_{74}$ | 76 |  | 59 | 49 | 40 |  | 2 |
| Burnett | 56 | 38 |  | 52 | 23 | 17 | 1 | 1 |
| Calumet | 101 | 77 |  | 90 | 51 | 36 | 1 |  |
| Ohippewa ... | 278 | 158 |  | 244 | 118 | 68 | 3 | 3 |
| Clark ... | 135 | 138 |  | 119 | 97 | 51 | 4 | 2 |
| Columbia | 185 | 182 |  | 113 | $\begin{array}{r}147 \\ 88 \\ \hline\end{array}$ | 102 36 |  | 4 |
| Crawford | 99 492 | 102 |  | 74 319 | 88 323 | 36 208 | 8 | 10 |
| Dane ${ }^{\text {Dodge }}$ | + 492 | 374 214 | 1 | 173 | 165 | 125 | 3 |  |
| Door | 107 | 79 |  | 89 | 62 | 29 | 4 | 2 |
| Douglas | 283 | 177 | 1 | 255 | 144 | 41 |  | 1 |
| Dunn | 138 | 126 |  | 114 | 103 | 47 |  |  |
| Eau claire | 219 | 152 |  | 140 | 164 | 58 | 5 | 4 |
| Florence ... | 13 | 11 |  | 13 | $\stackrel{4}{235}$ | - 117 |  | 6 |
| Fond du Lac | 325 | 310 |  | 274 | 235 | 117 | 3 | ${ }_{2}$ |
| Forest | 39 | 16 |  | $\begin{array}{r}36 \\ 167 \\ \hline\end{array}$ | 12 |  |  | 3 |
| Grant | 242 | 193 |  | 167 83 | 156 79 | 105 54 | 4 | 3 |
| Green . | 123 | 101 96 |  | 83 69 | 79 83 | 54 43 | $\stackrel{5}{3}$ | 3 |
| Green Lake | 102 | 96 |  | 69 88 | 83 97 | 43 52 | 3 <br> 2 | $\ldots$ |
| Iowa | 133 | 109 | 1 | 88 70 | 97 33 | 5 | 2 | 4 |
| Iron | 71 | 42 | 1 | 70 75 | 33 82 | ${ }^{6}$ | 1 | 4 |
| Jackson | 114 | 85 | 1 | $\begin{array}{r}75 \\ 115 \\ \hline\end{array}$ | 82 156 | 102 |  |  |
| Jefferson | 196 | 181 | ....... | 115 | 156 | 102 | 4 |  |
| Juneau | 118 | 118 |  | 98 172 | 114 | 54 |  | 8 |
| Kenosha | 183 | 165 |  | 172 86 | 114 | 42 |  | 8 |
| Kewaunee | 280 | 229 |  | 168 | 213 | 118 | 3 | 7 |
| Lafayette | 127 | 99 |  | 71 | 84 | 64 | 2 | 5 |
| Langlade | 68 | 68 | ........ | 69 | 48 | 17 | 2 |  |
| $\underset{\text { Lincoln }}{\text { Manitowoc }}$ | 136 280 | 94 29 |  | 126 216 | r 76 | 25 | $\stackrel{3}{2}$ | 2 |

TABLE NO. 27.-SHOWING DEATHS BY COUNTIES DURING THE OALENDAR YEAR OF 1909, ARRANGED ACCORDING TO COLOR, SEX, OONJUGAL CONDI'TION, AND AGE GROUPS.-Cont.

| County. | Sex. |  |  | Conjugal Condition. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female. | $\begin{gathered} \text { Un- } \\ \text { known } \end{gathered}$ | Single. | Married. | $\begin{gathered} \text { Wid- } \\ \text { owed. } \end{gathered}$ | $\begin{array}{\|c} \text { Div- } \\ \text { orced. } \end{array}$ | $\begin{gathered} \text { Un- } \\ \text { known } \end{gathered}$ |
| Marathon | 290 | 277 |  | 303 | 181 | 76 | 2 |  |
| Marinette | 222 | 169 |  | 216 | 117 | 48 | $\stackrel{2}{2}$ | 8 |
| Marquette Milwaukee | ${ }_{5}^{65}$ | 58 |  | 46 | 50 | 24 | 1 | 2 |
| Monroe . | 3,526 161 | 2,604 | 4 | 3,279 | 1,770 | 979 | 44 | 62 |
| Oconto | 142 | 121 |  | 105 | 112 | 76 | 3 | 2 |
| Oneida | +74 | 121 |  | 147 72 | 76 29 | 38 | 1 | 1 |
| Outagamie | 285 | 249 |  | 234 | 183 | 18 |  | 8 |
| Ozaukee | 100 | 97 | …… | 234 71 | 183 94 | 106 30 | 6 1 | 5 |
| Pepin | 41 | 26 |  | ${ }_{31}^{71}$ | $\stackrel{94}{22}$ | 30 12 | 1 | 1 |
| Pierce | 131 | 103 |  | 104 | 80 | 12 |  |  |
| Polk .. | 113 | 83 |  | 104 95 | 70 | 47 30 | 2 | 1 |
| Portage | 194 | 177 | 1 | 187 | 121 | 60 | 3 | 1 |
| Price | $\begin{array}{r}47 \\ 348 \\ \hline\end{array}$ | 32 |  | 46 | 29 | 3 |  | 1 |
| Richland | 348 111 | 310 |  | 286 | 209 | 151 | 5 | 7 |
| Rock | 111 | 111 |  | 96 | 73 | 49 | 2 | 2 |
| Rusk | $\begin{array}{r}151 \\ 53 \\ \hline\end{array}$ | 333 43 |  | 229 49 | 255 | 186 | 5 | 9 |
| St. Croix | 142 | 127 |  | $\begin{array}{r}49 \\ 110 \\ \hline\end{array}$ | 35 102 | 7 | 2 | 3 |
| Sauk .. | 204 | 185 |  | 110 | 102 | ${ }_{91}$ | - | $\stackrel{6}{1}$ |
| Sawyer | 45 | 21 | 2 | 138 41 | 157 19 | 91 | 4 | 1 |
| Shawano | 171 | 149 | 1 | 168 | $\stackrel{19}{99}$ | 4 50 | 1 |  |
| Sheboygan | 339 | 277 | 1 | 252 | 219 | 130 | 3 | 5 |
| Taylor | 67 | 54 |  | 64 | 219 39 | 137 | 3 | 5 |
| Trempealeau | 128 | 114 |  | 110 | 83 | 44 | 3 | 1 |
| Vernon | 151 | 127 |  | 101 | 106 | 69 | 3 | 1 |
| Walworth | 203 | 111 |  | 17 | 10 | 2 |  |  |
| Washburn | 18 40 | 178 |  | 95 43 | 160 28 | 118 | 5 | 3 |
| Washington | 114 | 134 | 1 | ${ }_{83}^{43}$ | $\stackrel{28}{98}$ | 9 68 |  |  |
| Waukesha | 248 | 236 |  | 199 | 171 | 102 |  |  |
| Waupaca | 234 | 171 |  | 135 | 169 | 102 92 | 5 9 | 7 |
| Waushara | 121 | 94 |  | 85 | 88 | 41 | 1 |  |
| Winnebago | 421 | 347 | 1 | 283 | 298 | 178 | 1 |  |
| Wood | 170 | 152 | 1 | 143 | 117 | 58 | 1 | 4 |
| Total | 15,089 | 12,276 | 15 | 12,332 | 9,360 | 5,196 | 197 | 295 |

TABLE NO. 27.-SHOWING.DEATHS BY COUNTIES DURING THE OALENDAR YEAR OF 1909, ARRANGED ACCORDING TO COLOR, SEX, CONJUGAL CONDITION, AND 'AGE GROUPS.-COnt.

| County. | Age Grouping. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Under 2 mos. | $\begin{aligned} & \text { Under } \\ & 1 \text { yr. } \end{aligned}$ | 1-4 | 5-9 | 10-19 | 20-29 | 30-39 | 40-49 |
| Adams | 10 | 2 | 3 | 4 |  |  |  |  |
| Ashland | 42 | 29 | 27 | 13 | 20 | 40 | $\begin{array}{r}99 \\ \hline\end{array}$ |  |
| Barron | 42 | 30 | 16 | 18 9 | 18 | 23 | 12 | 16 |
| Bayfeld | 20 | 19 | 6 | 11 | 8 | 9. | 8 | 11 |
| Buffalo | 143 | 84 10 | 36 6 | 24 | 29 | 67 | 46 | 55 |
| Burnett | 14 | 11 | 5 | 2 | 13 | 7 | 10 | 6 |
| Calumet | 31 | 28 | 7 | 5 | 11 | 5 | 2 | 5 |
| Chippewa | 45 | 30 | 21 | 16 | $\begin{array}{r}5 \\ 44 \\ \hline\end{array}$ | 9 55 | ${ }^{6}$ | 5. |
| Clark .... | 40 | 31 | 12 | 10 | 10 | 55 21 | 33 12 | 39 |
| Columbia | 27 | 24 | 11 | 7 | 12 | 13 | 120 | ${ }_{21}^{15}$ |

TABLE NO. 27.-SHOWING DEATHS BY COUNTTES DURING THE CALENDAR YEAR OF 1909, ARRANGED ACOORDING 'IO COLOR, SEX, CONJUGAL CONDITYON, AND AGE GROUPS.-Cont.

| County. | - Age Grouping. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Under 2 mos. | $\begin{aligned} & \text { Under } \\ & 1 \mathrm{yr} . \end{aligned}$ | 1-4 | 5-9 | 10-19 | 20-29 | 30-39 | 40-49 |
| Crawford | 25 | 15 | 1 | 7 | 11 | 9 | 20 | 12 |
| Dane | 85 | 54 | 31 | 17 | 25 | 70 | 52 | 69 |
| Dodge | 44 | 40 | 19 | 6 | 12 | 31 | 21 | 32 |
| Door | 29 | 22 | 11 | 5 | 7 | 15 | ${ }^{6}$ | 12 |
| Douglas | 41 | 61 | 40 | 19 | 29 | 49 | 53 | 57 |
| Dunn . | 42 | 14 | 18 | 5 | 18 | 20 | 18 | 11 |
| Fau Claire | 29 | 21 | 18 | 10 | 26 | $\begin{array}{r}42 \\ 3 \\ \hline\end{array}$ | 26 | 31 |
| Florence .. | 3 | 2 | 1 | ${ }^{2}$ | $\stackrel{3}{8}$ | $\begin{array}{r}3 \\ 38 \\ \hline\end{array}$ | 38 | 53 |
| Fond du Lac | 78 | 45 | 30 | 11 | 28 4 | $\begin{array}{r}38 \\ 5 \\ \hline\end{array}$ | $\begin{array}{r}38 \\ 4 \\ \hline\end{array}$ | 3 3 3 |
| Forest | 10 | 13 | 17 | 3 8 8 | 2 | +5 |  | 0 |
| Grant | 52 | 25 | 17 7 | 8 9 | 21 | 18 | -99 | 15 |
| Green | 23 | 14 12 | 7 | 9 <br> 1 | 6 6 | 15 | 6 | 13 |
| Green Lake | 25 20 | 12 13 | ${ }^{6}$ | 1 3 | ${ }^{6}$ | 12 | 15 | 2 ? |
| Iowa | 20 13 | 13 20 | 10 10 | 4 | 11 | 18 | 11 | 12 |
| Tron ... | 13 17 | 10 | 15 | 4 | 12 | 17 | 9 | 12 |
| Jackson | 27 | 25 | 8 | 6 | 16 | 21 | 19 | 9 |
| Tuneau | 33 | 23 | 6 | 1 | 10 | 15 | 9 | 14 |
| Kenosha | 57 | 53 | 11 | 10 | 17 | 28 | 25 | $2 \pi$ |
| Kewaunce | 29 | 21 | 9 | 3 | 11 | 12 | 8 | 34 |
| La Crosse | 48 | 28 | 11 | 11 | 19 | 41 | ${ }_{12}$ |  |
| I afavette | 18 | 10 | 7 | 2 | 7 | 18 |  | 11 |
| I, anglade | 27 | 12 | 8 | 4 | 5 12 | ${ }_{27}^{18}$ |  | 19 |
| Jincoln | 32 | ${ }_{59} 9$ | 11 | 15 | 12 | ${ }_{25}^{27}$ | 23 | 29 |
| Manitowoc | 62 | 59 | 17 46 | 17 <br> 19 <br> 12 | 30 | 28 | 40 | 35 |
| Marathon Marinette | 117 | 65 4.5 | 21 | 19 | ${ }_{23}$ | 26 | 30 | 26 |
| Marinette | 16 16 | 10 | 4 | 1 | 3 | 8 | 7 | 8 |
| Milwankee | 775 | 906 | 502 | 215 | 233 | 462 | 426 | 40 |
| Monroe . | 36 | 29 | 6 | 5 | 9 | 10 | 13. | 19 |
| Oconto | 47 | 37 | 24 | 9 | 15 | 13 | 18 | 15 |
| Oneida | 19 | 12 | 6 | 7 | 3 | 17 | 9 | 9 |
| Ontagamie | 78 | 42 | 24 | 18 | 22 | 46 | 30 | 13 |
| Ozankee | 22 | 19 | 8 | 4 | 1 | 11 | 15 3 | 13 |
| Pepin . | 17 | 4 | 3 | 5 | $\stackrel{2}{13}$ |  |  | 5 |
| Pierce | 28 | 12 | 17 |  | 13 |  | 14 9 | 7 |
| Polk | 34 |  |  |  | 13 | 25 | 10 | 25 |
| Portage |  | 47 6 | 32 9 | 10 3 | 7 | 13 | 5 | 7 |
| Price ${ }^{\text {Racine }}$.... | ${ }_{50}^{12}$ | 54 | 44 | +17 | 28 | 53 | 61 | 39 |
| Racine | 29 | 18 | 21 | - 2 | 12 | 12 | 10 | 11. |
| Rock . | 60 | 34 | 23 | 10 | 22 | 42 | 41 | 50 |
| Rusk | 12 | 7 | 10 | 3 | 7 | 11 | 10 | 7 |
| St. Croix | 33 | 16 | 12 | 7 | - 16 | 16 | 12 | 11 |
| Sauk .... | 30 | 31 | 18 | 9 | 18 | 21 | 24 | 24 |
| Sawyer | 13 | 7 | 9 | 2 | 4 | 4 | 3 | 5 |
| Shawano | 49 | 43 | 25 | 11 | 19 | 18 | 18 | 40 |
| Sheboygan | 63 | 43 | 35 |  | 38 |  | 32 | 9 |
| Taylor | 18 | 7 | 12 | 8 | 11 | ${ }_{21}^{8}$ | 10 9 | $\stackrel{9}{12}$ |
| Trempealeau | $\stackrel{27}{26}$ |  |  | 5 3 | 17 14 | 21 15 | 11 | ${ }_{22}$ |
| Vernon | 26 2 | 17 | 13 2 | 3 <br> 2 | 14 | 15 | 2 | 2 |
| Walworth | 23 | 11 | 11 | 4 | 12 | 14 | 22 | 31 |
| W ashburn | 16 | 7 | 7 | 2 | 5 | 2 | 6 | 10 |
| Washington | 15 | 18 | 13 | 5 | 4 | 17 | 15 | 11 |
| Waukesha | 42 | 38 | 28 | 14 | 17 | 32 | 39 | 28 |
| Waupaca | 46 | 26 | 73 | 4 | 14 | 18 | 16 | 26 |
| Waushara | 23 | 17 | 16 | 7 | 9 | 13 | 8 | 12 |
| Winnebago | 71 | 58 | 35 | 11 | $\stackrel{27}{19}$ | 42 | 58 | 70 |
| Wood | 48 | 26 | 17 | 15 | 19 | 25 | 19 | 19 |
| Total | 3,339 | 2,688 | 1,568 | 766 | 1,225 | 1,962 | 1,733 | 1,950 |

TABLE NO. 27.-SHOWING DEATHS BY COUNTIES DURING THE CALENDAR YEAR OF 1909, ARRANGED AOOORDING TO COLOR, SEX, OONJUGAL CONDITION, AND AGE GROUPS.-Ciont.

| County | Age Grouping. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 50-53 | 60-69 | 70-79 |  | 90-99 | $100+$ | $\begin{gathered} \text { Age } \\ \text { un- } \\ \text { known. } \end{gathered}$ |
| Adams | 6 | 7 | 10 | 11 | 2 |  |  |
| Ashland | 48 | 25 | 23 | 7 | 2 | $\cdots$ | $\ddot{9}$ |
| Barron | 25 | - 43 | 31 | 16 | 3 |  | 9 |
| Bayfield | 10 | 8 | 13 | 8 | 2 |  | 2 |
| Brown | 63 | 81 | 95 | 55 | 16 | 1 | 6 |
| Buffalo Burnett | 9 | 22 | 27 | 23 | 8 |  | 1 |
| Calumet | ${ }_{13}^{4}$ | 12 14 | 7 30 | 12 19 | 1 |  |  |
| Chippewa | 13 29 | 14 <br> 35 | 30 47 | 19 36 | 5 |  |  |
| Clark | 24 | 33 | 38 | 24 | 2 |  | 1 |
| Chlumbia | 47 | 47 | 66 | 62 | 7 | 1 |  |
| Crawford | 13 | 19 | 42 | 20 | 4 |  | 5 |
| Dodge | $\begin{array}{r}87 \\ 28 \\ \hline\end{array}$ | 100 | 142 | 113 | 19 | 1 | 3 |
| Door | 28 11 | 57 24 | $\begin{array}{r}88 \\ \hline \quad 23\end{array}$ | 71 | 16 |  | 1. |
| Douglas | 41 | 34 | 21 | 12 | 3 | 1 | 3 |
| Dunn | 23 | 26 | 46 | 22 | 1 |  | 3 |
| Fau Claire | 32 | 61 | 39 | 30 | 1 |  | 2 |
| Florence . |  |  | 5 | 1 |  |  |  |
| Fond du Lac | 60 | 71 | 99 | 70 | 11 | $i$ | 2 |
| Forest | 1 30 | 5 49 | 1 | 3 | 1 |  | 1 |
| Green . | 22 | 49 31 | 100 36 | 57 | 7 | .... | 2 |
| Green Lake | 16 | 27 | 31 | 27 34 | 5 |  | 1 |
| Iowa | 21 | 28 | 44 | 35 | 4 |  | 1 |
| Jron | 5 | 4 | 2 | 2 |  |  | 1 |
| Jackson | 14 | 22 | 47 | 17 | $\ddot{2}$ |  | 2 |
| Tefferson | 41 | 53 | 74 | 54 | 6 |  | 7 |
| Tunear | 21 | 30 | 38 | 29 | 5 |  | 2 |
| Kenosha | 34 | 34 | 29 | 19 | 5 |  | 8 |
| Kewaunee | 14 | 22 | 30 | 33 | 6 |  |  |
| La Crosse | 48 | 69 | 90 | 46 | 7 |  |  |
| Lafayette | 24 | 30 | 32 | 39 | 9 |  | 2 |
| Inco'n . | 17 | 14 22 | 15 | 10 | 3 |  |  |
| Manitowoc | 36 | 46 | 19 89 | 9 76 | ${ }_{15}^{2}$ |  |  |
| Marathon | 37 | 53 | 59 | 35 | ${ }_{3}^{15}$ |  |  |
| Marinette | 31 | 37 | 35 | 18 | $\stackrel{3}{2}$ |  | 5 |
| Marquette | 12 | 16 | 20 | 15 | 3 |  |  |
| Milwauke | 526, | 581 | 628 | 347 | 38 | i | 2 |
| Monroe . | $33^{\prime}$ | 44 | 54 | 34 | 8 | 1 | 1 |
| Oconto . | 18 | 16 | 25 | 17 | 7 |  | 2 |
| Oneida | 13 39 | 14 | 8 | 5 | 1 |  | 1 |
| Ozaukee . | 39 23 | ${ }_{27} 6$ |  | 62 | 10 |  | 1 |
| Pepin | 23 3 | 22 | 32 9 | 22 9 | 5 |  |  |
| Pierce | 24 | 26 | 35 |  | ${ }_{6}$ |  |  |
| Polk | 13 | 24 | 28 | 14 | ${ }_{2}^{6}$ | 1 |  |
| Portage | $\%$ | 89 | 48 | 35 | 2 |  |  |
| Price . | 6 | 7 | 3 |  |  |  | 1 |
| Racine | 60 | 71 | 89 | 73 | 10 |  | 3 |
| Richland | 16 | 24 | 41 | 22 | 3 |  | 1 |
| Rock | 55 | 95 | 128 | 100 | 17 | 2 | 5 |
| Rusk Croix | 11 | 7 | -88888 | 2 |  | 2 | 1 |
| Sauk ..... | 25 | 39 49 | 47 | 29 | 3 |  | 3 |
| Sawyer | ${ }_{6}{ }^{3}$ | 49 7 | $\begin{array}{r}78 \\ 4 \\ \hline\end{array}$ | 47 | 8 | 1 |  |
| Shawano | 30 | 30 | 36 | 23 | 1 | 1 |  |
| Sheboygan | 54 | 66 | 91 | 73 | 15 |  | 2 |
| Taylor ..... | 9 | 14 | 9 | 6 |  |  |  |
| Trempealeau | 19 | 19 | 45 | 27 | 3 | 2 |  |
| Vilas . | 19 5 | 39 | 51 | 46 | 2 |  |  |
| Walworth | 42 | 19 | ${ }_{75}^{2}$ | ${ }_{6}^{2}$ |  |  | 1 |
| Washburn | 8 | 19 6 | 8 | 66 3 | 20 |  | 1 |

TABLE NO. 27.-SHOWING DEATHS BY COUNTIES DURING THE CALENDAR YEAR OF 1909, ARRANGED ACCORDING TOO COLOR, SEX, CONJUGAL CONDITION, AND AGE GROUPS.-Cont.

| County. | Age Grouping. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 50-59 | 60-69 | 70-79 | 80-89 | 90-99 | 100+ | $\underset{\substack{\text { Age } \\ \text { un- } \\ \text { known. }}}{\text { cen }}$ |
| Washington | 19 | 28 | 54 | 42 | 7 |  | 1 |
| Waukesha ...... | 48 | 61 | 70 | 49 | 14 | .... | 4 |
| Waupaca | 36 | 62 | 78 | 52 | 13 | ..... | 1 |
| Waushara | 13 | 25 | 46 | 23 | 3 | ..... |  |
| Winnebago | 78 | 106 | 103 | 94 | 14 | ....... | 2 |
| Wood .... | 30 | 43 | 36 | 21 | 5 |  |  |
| Total | - 2,340 | 2,997 | 3,718 | 2,564 | 418 | 14 | 98 |

TABLE NO. 28.-SHOWING DEATHS BY COUNTIES DURING THE CALENDAR YEAR OF 1910, ARRANGED ACCORDING TO COLOR, SEX, CONJUGAL CONDITION, AND AGE GROUPS.

| County. | Total. | Color. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | White. | Black. | Indian. | $\begin{aligned} & \text { Un- } \\ & \text { known. } \end{aligned}$ |
| Adams | 90 | 90 |  |  |  |
| Ashland | 355 | 319 |  | 36 |  |
| Barron | 316 | 314 | 1 | 1 | ........... |
| Bayfield | 169 | 155 |  | 14 | I |
| Brown | 789 | 773 | 1 | 14 | 1 |
| Buffalo | 158 89 | 158 85 |  | 4 |  |
| Oalumet | 162 | 159 | 2 | 1 | ............. |
| Chippewa | 436 | 435 | 1 |  | ........... |
| Clark ... | 261 | 261 |  |  |  |
| Columbia | 395 | 395 |  |  |  |
| Crawford | 190 | 190 |  |  | . |
| Dane | 935 | 931 | 3 |  | 1 |
| Dodge | 522 | 522 |  |  |  |
| Door ${ }_{\text {Douglas }}$ | 186 518 | 186 507 | ${ }_{3}$ | 8 |  |
| Dunn . | 249 | 249 | 3 | 8 | ........... |
| Eau Claire | 400 | 400 |  |  |  |
| Florence | 26 | 26 |  |  |  |
| Fond du Lac | 615 | 612 | 2 | . ........ | 1 |
| Forest | 63 | 62 |  | ........... | 1 |
| Grant | 436 | 434 | 2 |  |  |
| Green $\ldots$ | 214 | 213 | 1 | . |  |
| Green Lake | 172 | 172 |  |  |  |
| Iowa | 233 | 233 |  |  |  |
| Iron ...... | 80 | 80 |  |  |  |
| Jackson | 167 <br> 400 | 166 399 |  | 1 | 1 |
| Juneau . | 239 | 235 |  |  | 4 |
| Kenosha | 381 | 381 |  |  |  |
| Kewaunee | 189 | 187 | 1 |  | 1 |
| La Crosse | 594 | 593 | 1 |  |  |
| Lafayette. | 198 | 196 | ........... |  | ${ }^{2}$ |
| Lincoln | 161 | 1216 |  | 1 | 1 |
| Manitowoc | 479 | 478 |  |  | 1 |
| Marathon . | c86 | 686 |  |  |  |

TMABTE NO. 28.-SHOWING DEATHS BY OOUNTIES DURING THE CALENDAR YEAR OF 1910. ARRANGED ACCORDING TO COLOR, SEX, CONJUGAL CONDITION, AND AGE GROUPS.-Cont.

| County. | Total. | Color. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | White. | Black. | Inđian. | $\begin{aligned} & \text { Un- } \\ & \text { known. } \end{aligned}$ |
| Marinette | 356 | 352 |  |  | 4 |
| Marquette | 135 | 134 |  |  | , 1 |
| Milwaukee | 6,570 | 6,549 | 16 |  | 5 |
| Monroe Oconto | 366 | 363 | 1 | 2 |  |
| Oneida . | 112 | 250 | 1 | 2 | 8 |
| Outagamie | 601 | 597 | 2 | 2 |  |
| Ozaukee | 151 | 149 | 1 |  | 1 |
| Pepin | 73 | 72 |  |  | 1 |
| Pierce | 250 | 250 |  |  |  |
| Polk ... | 185 | 183 |  | 2 |  |
| Prortage | 375 99 | 375 | , . . . . . |  |  |
| Racine | 99 756 | $\begin{array}{r}98 \\ 755 \\ \hline\end{array}$ |  | . | 1 |
| Richland | 182 | 181 |  |  | 1 |
| Rock | 672 | 665 | 5 | ........ | 2 |
| Rusk . | 98 | 94 |  | 2 | 2 |
| St. Croix | 278 | 277 |  |  | 2 |
| Sauk | 371 | 371 |  |  |  |
| Sawyer | 70 | 61 |  | 9 |  |
| Shawano . | 310 | 289 |  | 21 | ....... |
| Sheboygan | 650 | 6.0 |  |  |  |
| Taylor | 113 | 113 |  |  |  |
| Trempealeau | 229 | 229 |  |  |  |
| Vernon | 310 | 309 | i |  |  |
| Vilas .... | 37 | 37 |  |  |  |
| Walworth . | 362 | 361 |  |  | i |
| Washburn . | 84 | 82 |  | 2 |  |
| Washington | 243 507 | 243 507 |  |  |  |
| Waunaca | 407 | 403 | 1 |  | 3 |
| Waushara | 178 | 178 | 1 |  | 3 |
| Winnebago | 782 | 775 | 1 |  | 6 |
| Wood | 277 | 275 |  |  | 2 |
| Total | 28,213 | 27,995 | 47 | 122 | 49 |

TABLE NO. 28. T SHOWING DEATHS BY COUNTTES DURING THE OALENDAR YEAR OF 1910. ARRANGED ACCORDING TO COLOR, SEX, CONJUGAL CONDITION, AND AGE GROUPS.-Cont.

| County. | Sex. |  |  | Conjugal Condition. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female. | Unknown. | Single. | Married, | Widowed. | $\underset{\text { Di- }}{\text { vorced }}$ | $\begin{gathered} \text { Un- } \\ \text { known } \end{gathered}$ |
| Adams | 53 | 37 |  | 38 | 37 | 12 | 1 | 2 |
| Ashland | 216 | 138 | 1 | 206 | 103 | 36 | 4 | 6 |
| Barron | 162 | 154 | ... | - 149 | 109 | 52 | 1 | 5 |
| Bayfleld | 99 | 70 |  | 110 | 42 | 13 | 1 | 3 |
| Brown | 439 | 350 | ........ | 407 | 247 | 120 | 12 | 3 |
| Buffalo | 90 | 68 |  | 60 | 61 | 32 | 3 | 2 |
| Burnett | 46 | 43 |  | 45 | 34 | 10 |  |  |
| Calumet | 90 | 72 |  | 57 | 71 | 29 | 1 | 4 |
| Chippewa | 235 | 201 |  | 2.57 | 109 | 60 | 5 | 5 |
| Clark | 158 | 103 |  | 120 | 97 | 39 | 2 | 3 |
| Columbia | 211 | 184 |  | 142 | 136 | 110 | 3 |  |
| Orawford | 107 | 83 |  | 71 | 79 | 37 | - |  |

TABLE NO. 28.-SHOWING DEATHS BY COUNTIES DURING THE CALENDAR YEAR OF 1910, ARRANGED ACGORDING TO COLOR, SEX, CONJUGAL CONDITIION, AND AGE GROUPS.-Cont.

| County. | Sex. |  |  | Conjugal Condition. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\begin{gathered} \text { Fe- } \\ \text { male. } \end{gathered}$ | $\begin{gathered} \text { Un- } \\ \text { known } \end{gathered}$ | Single. | Married. | Widowed. | $\begin{gathered} \mathrm{Ti}- \\ \text { vorced } \end{gathered}$ | Inknown |
| Dane | 490 | 445 |  | 346 | 3-3 | 216 | 5 | 15 |
| Dodge | 286 | 236 |  | 183 | 198 | 180 | 5 | fi |
| Door | 108 | 78 |  | 86 | 67 | 31 | 1 | 1 |
| Douglas | 320 | 198 |  | 305 | 134 | 58 | 3 | 18 |
| Lunn | 139 | 110 |  | 107 | 93 | 45 | 1 | 3 |
| Eau Claire | 225 | 175 |  | 148 | 147 | 101 | 2 | 2 |
| Florence | 18 | 8 |  | 15 | 7 | 4 |  |  |
| Fond du Lac | 313 | 302 |  | 234 | 219 | 143 | 9 | 10 |
| Forest | 42 | 21 |  | 43 | 11 | 4 | 1 | + |
| Grant | 239 | 197 |  | 164 | 159 | 109 | 2 | 2 |
| Green | 115 | 99 | ........ | 72 | 83 | $\stackrel{7}{8}$ |  | 1 |
| Green Lake | 99 | 73 |  | 70 | 58 | 42 | 2 |  |
| Towa . | 118 | 115 |  | 95 | 81 | 55 | 1 | 1 |
| Iron ... | 50 | 30 |  | 61 | 12 | 2 | 1 | 4 |
| Jackson | 96 | 71 |  | 71 | 63 | co | 1 | 2 |
| Jefferson | 206 | 194 |  | 135 | 154 | 109 | 2 |  |
| Juneau | $1: 8$ | 301 |  | 83 | 82 | 63 | 4 | 2 |
| Kenosha | 215 | 163 |  | 206 | 113 | 51 | 3 | $\delta$ |
| Kewaunce | 105 | 84 |  | 86 | 62 | 40 |  | 1 |
| La Crosse | 320 | 274 |  | 229 | 233 | 112 | 6 | 14 |
| Layfayette | 113 | 85 |  | 761 | 64 | 56 | 2 |  |
| Langlade | ¢0 | 71 |  | 79 | 53 | 29 |  |  |
| Lincoln | 121 | 96 |  | 127 | 69 | 20 | 1 |  |
| Manitowoc | 2 2\% | 221 |  | 199 | 150 | 118 | 4 | 2 |
| Marathon | 281 | 305 |  | 398 | ¢06 | 73 | 3 | 3 |
| Marinette | 206 | 150 |  | 189 | 117 | 48 | 1 | 1 |
| Marquette | 63 | 67 |  | 52 | 42 | 40 |  | 1 |
| Milwaukee | 3,839 | 2,730 | 1 | 3,459 | 2,023 | 98.3 | 46 | 59 |
| Monroe | 200 | 166 |  | 155 | 129 | 78 | 2 | , |
| Oconto | 141 | 113 |  | 125 | 87 | 40 | 1 | 1 |
| Oneida | 74 | 38 |  | 61 | 41 | 6 |  | 4 |
| Outagamie | 332 | 269 |  | 248 | 218 | 127 | 3 | 5 |
| Ozaukee | 91 | 60 |  | 46 | 67 | 33 | 3 | $\stackrel{2}{2}$ |
| Pepin | 3.5 | 37 | 1 | 24 | 28 | 20 |  |  |
| Pierce | 156 | 94 |  | 99 | 86 | 59 | 3 | 3 |
| Polk ... | 95 | 90 |  | 80 | $6{ }^{1}$ | 43 | 2 |  |
| Pratage | 203 | 168 | 4 | 174 | 128 | 71 | 2 |  |
| Price | 58 | 41 |  | 58 | 27 | 12 |  | 2 |
| Racine | 404 | 352 |  | 343 | 245 | 157 | 4 | 7 |
| Richland | 97 | 84 | 1 | 70 | 71 | 37 | 1 | 3 |
| Rock . | 366 | 306 |  | 239 | 248 | 175 | 5 | 5 |
| Rusk .. | 47 | 51 |  | 48 | 31 | 16 | 1 | $\stackrel{2}{2}$ |
| St. Oroix | 160 | 118 |  | 100 | 112 | 62 | 1 | 3 |
| Sauk . | 210 | 161 |  | 108 | 166 | ¢0 | 5 | 2 |
| Sawyer | 44 | 26 |  | 32 | 24 | 9 | 1 | 4 |
| Shawano | 178 | 132 |  | 151 | 112 | 42 | 1 | 4 |
| Sheboygan | 361 | 289 |  | 279 | 243 | 118 | 4 | 6 |
| Taylor ${ }_{\text {Trempealeau }}$ | 56 | $\begin{array}{r}57 \\ 106 \\ \\ \hline\end{array}$ |  | $\begin{array}{r}47 \\ 8 \\ \hline 8\end{array}$ | 49 87 | - 17 | 4 |  |
| Vernon .... | 123 | 106 |  | ¢9 126 | 87 | ¢2 | 1 |  |
| Vilas. | 161 | 149 |  | $\begin{array}{r}126 \\ 23 \\ \hline\end{array}$ | 117 12 | $\stackrel{63}{2}$ | 1 | 3 |
| Walworth | 178 | 184 |  | 107 | 140 | 106 | 2 | 7 |
| Washburn | 48 | 36 |  | 47 | 28 | 9 | 2 | 7 |
| Washington | 125 | 118 |  | 96 | 80 | 6 ? | 3 | 2 |
| Waukesha | 299 | 207 | 1 | 150 | 200 | 100 | 5 | 12 |
| Waupaca | 220 | 187 |  | 140 | 159 | 302 | 4 | 2 |
| Waushara | 84 | 94 |  | 67 | 66 | 43 | 2 |  |
| Winnebago | 409 | 373 |  | 261 | - 332 | 177 | 6 | 6 |
| Wood | 153 | 124 |  | 141 | 93 | 41 | 1 | 1 |
| 'Total | 15,759 | 12,445 | 9 | 12,759 | 9,660 | 5,292 | 205 | 287 |

TABLE NO. 28.-SHOWING DEATHS BY COUNTIES DURING THE CALENDAR YEAR OF 1910, ARRANGED ACCORDING TO OOLOR, SEX, CONJUGAL GONDITION, AND AGE GROUPS.-Cont.

| County. | Age Grouping. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Under 2 mos. | Under 1 yr . | 1-4 | 5-9 | 10-19 | 20-2) | \%0-39 | 40-49 |
| Adams | 9 | 6 | 5 | 2 | 8 | 9 | 3 | 8 |
| Ashland | 42 | 24 | 26 | 6 | 22 | 51 | 40 | 47 |
| Barron | 57 | 20 | 28 | 7 | 18 | 23 | 17 | 23 |
| Bayfield | 22 | 24 | 25 | 15 | 11 | 7 | 13 | 13 |
| Brown | 126 | 96 | 61 | 21 | 26 | 52 | 46 | 50 |
| Buffalo | 16 | 12 | 9 | 5 | 6 | 8 | 12 | 7 |
| Burnett | 13 | 5 | 9 | 4 | 3 | ${ }_{6}^{6}$ | 8 | 6 |
| Calumet | 14 | 7 | 13 | 2 | 8 | 7 | 9 | 15 |
| Chippewa | 43 | 34 | 23 | 20 | 54 | 54 | 39 | 29 |
| Clark ... | 40 | 23 | 22 | 8 | 10 | 12 | 10 | 18 |
| Columbia | 36 | 11 | 20 | 5 | 19 | 18 | 21 | 33 |
| Crawford | 28 | 8 | - 15 |  | 7 | 8 | 13 | 10 |
| Dane | 83 | 50 | - 45 | 15 | 28 | 84 | 68 | 78 |
| Dodge | 66 | 35 | 17 | 5 | 12 | 33 | 20 | 38 |
| Door | 31 | 13 | 14 | 6 | 12 | 10 | 13 | 11 |
| Douglas | 51 | 53 | 54 | 19 | 25 | 59 | 54 | 72 |
| Dunn . | 27 | 14 | 13 | 8 | 18 | 21 | 7 | 23 |
| Eau Claire | 30 | 9 | 21 | 19 | 24 | 32 | 23 | 29 |
| Florence .. | 4 | 1 | 3 | 2 |  | 3 | 1 | 3 |
| Fond du Lac | 57 | 41 | 19 | 30 | 20 | 35 | 39 | 3.3 |
| Forest | 13 | 6 | 9 | 3 | 4 | 5 | 5 | 3 |
| Grant | 49 | 24 | 24 | 7 | 24 | 19 | 24 | 18 |
| Green | 13 | 17 | 12 | 1 | 5 | 17 | 13 | 14 |
| Green Lake | 15 | 8 | 12 | 5 | 9 | 9 | 9 | 3 |
| Iowa | 29 | 18 | 10 | 7 | 8 | 13 | 9 | 14 |
| Iron ..... | 11 | 18 | 12 | 5 | 5 | 7 | 4 | 5 |
| Jackson | 21 | 12 | 11 | 2 | 11 | 6 | 7 | 12 |
| Jeflerson | 38 | 23 | 11 | 8 | 16 | 29 | 20 | 21 |
| Juneau | 20 | 14 | 11 | 15 | 12 | 11 | 7 | 9 |
| Kenosha | 62 | 51 | 44 | 5 | 11 | 23 | 23 | 34 |
| Kewaunce | 23 | 20 | 14 | 11 | 11 | 11 | 6 | 4 |
| La Crosse | 39 | 36 | 33 | 16 | 21 | 61 | 37 | 59 |
| Lafayette | 19 | 15 | 4 |  | 12 | 11 | 12 | 10 |
| Langlade | 30 | 16 | 16 | 4 | 6 | 4 | 13 | 4 |
| Lincoln | 37 | 30 | 26 | 91 | 11 | 16 | 6 | 17 |
| Manitowoc | 66 | 37 | 24 | 12 | 18 | 29 | 34 | 30 |
| Marathon | 93 | 92 | 80 | ${ }^{3 / 7}$ | ${ }_{24}^{44}$ | 511 | 35 | 41 |
| Marinette | 44 | 42 | 33 | 14 | 20 | 24 | 29 | 25 |
| Marquette | 13 | 10 | 4 |  | 7 | 9 | $\overline{5}$ | 10 |
| Milwauke | 819 | 868 | 552 | 198 | 279 | 544 | 487 | 541 |
| Monroe | 30 | 40 | 27 | 8 | 23 | 23 | 16 | 23 |
| Oconto | 37 | 20 | 25 | 8 | 13 | 12 | 14 | 18 |
| Oneida | 10 | 14 | 7 | 8 | 5 | 13 | 14 | 11 |
| Outagamie | 67 | 52 | 43 | 8 | 23 | 43 | 30 | 41 |
| Ozaukee | 8 | 10 | ${ }_{7}^{6}$ | 2 | 6 | 14 | 13 | 11 |
| Pepin . | 5 | 4 | 7 | $\stackrel{2}{5}$ | 4 <br> 8 | $\stackrel{2}{9}$ | ${ }_{14}^{2}$ | 4 .13 |
| Pierce |  | 15 13 13 |  | ${ }_{6}^{6}$ | 11 | 17 | 11 |  |
| Polk .. | 21 54 | 13 31 | 13 30 | 6 14 | 11 20 | ${ }_{25}$ | 19 | 16 |
| Portage | 54 5 | 31 20 | 30 15 | $\begin{array}{r}14 \\ 3 \\ \hline\end{array}$ | 20 3 | 11 | ' 7 | ${ }_{6}$ |
| Pracine | 56 | 86 | 61 | 20 | 29 | 59 | 64 | 61 |
| Richland | 22 | 12 | 11 | 2 | 5 | 9 | 14 | 12 |
| Rock | 5 | 64 | 30 | 36 | ${ }_{9}^{6}$ | 22 | 43 | 34 9 |
| Rusk | 19 | 5 | 4 | 5 | 9 | 7 | 5 | 9 |
| St. Croix | 28 | 22 | 12 | 1 | 8 | 17 | 10 | 17 |
| Sauk | 35 | 22 | 10 | 3 | 8 | 19 | 12 | $\stackrel{3}{5}$ |
| Sawyer | 6 | 4 4 4 | 7 | $\stackrel{2}{10}$ | 4 13 4 4 | $\begin{array}{r}7 \\ 18 \\ \hline\end{array}$ | 8 20 8 | 23 |
| Shawano | 41 79 | 43 45 | 24 40 | 10 15 | 13 22 | 18 50 | 20 44 | 23 48 |
| Sheboygan | 15 | 45 13 | 5 | 4 | 2 | 6 | 12 | ${ }^{6}$ |
| Trempealeau | 24 | 20 | 15 | 4 | 10 | 10 | $\stackrel{9}{9}$ | 10 |
| Vernon .... | 32 | 26 | 25 | 3 | 12 | 21 | 18 | 11 |

TABLE NO 28.-SHOWING DEATHS BY COUNTTES DURING THE CALENDAR YEAR OF 1910, ARRIANGED ACOCORDING TO ICOLOR, SEX, CONJUGAL CONDITION, AND AGE GROUPS.-Cont.

| County. | Age Grouping. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Under <br> 2 mos. | $\begin{gathered} \text { Under } \\ 1 \mathrm{jr} . \end{gathered}$ | 1-4 | 5-9 | 10-19 | 20-29 | 30-9 | 40-49 |
| Vilas | 3 | 6 | 4 |  |  | 4 | 5 | 2 |
| Walworth | 23 | 10 | 13 | 8 | 1,5 | 21 | $1{ }_{1}$ | 37 |
| Washburn | 15 | 6 | 11 | 4 |  | 6 | 5 | 2 |
| Washington | 23 | 20 | 13 | 7 | 8 | 17 | 14 | 12 |
| Waukesha | 48 | 23 | 19 | 9 | 16 | 34 | 4.5 | 37 |
| Waupaca | ${ }_{24}^{43}$ | 15 | 23 | 7 | 14 | 20 | 23 | 27 |
| Winnebago | 24 | 13 | 11 | $\stackrel{2}{6}$ | 7 | 8 | 9 | 11 |
| Wood .... | 58 | 31 | 14 | 6 7 | 11 | 46 18 | 72 9 | 72 |
| Total | 3,175 | 2,600 | 1,953 | 777 | 1,209 | 2,019 | 1,848 | 2,067 |

TABLE NO. 28. $\rightarrow$ SHOWING DEATHS BY COUNTIES DURING THE CALENDAR YEAR OF 1910, ARRANGED ACCORDING TO COLOR, SEX, CONJUGAL CONDI.「IION, AND AGE GROUPS.-Oont.

| Counts: | Age Grouping. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 50-59 | 60-59 | 70-79 | 80-89 | 90-99 | $100+$ | $\begin{aligned} & \text { Age } \\ & \text { nn- } \\ & \text { k: ovn. } \end{aligned}$ |
| Adams | 7 | 11 | 10 | 8 | 2 |  | 2 |
| Ashland | 34 | 27 | 18 | 12 | 3 |  | 3 |
| Barron | 20 | 36 | 45 | 18 | 3 |  | 1 |
| Bayfie?d | 8 | 11 | 13 | 6 | 1 |  |  |
| Brown | 62 | 89 | 88 | 54 | 18 |  |  |
| Buffalo | 10 | 17 | 32 | 19 | 4 | .... | i |
| Burnett | 8 | 9 | 11 | 5 | 2 |  |  |
| Calumet ${ }^{\text {Chippewa }}$ | 15 | 21 | 27 | 19 | 5 |  |  |
| Clark | 23 25 | 31 21 | 42 47 | 36 21 | 6 3 |  | 1 |
| Coumbia | 34 | 45 | ¢9 | 72 | 9 | 1 | 2 |
| Crawford | 12 | 21 | 38 | 27 | 2 | 1 |  |
| Dane | 93 | 119 | 139 | 114 | 16 | 1 | $\ddot{2}$ |
| Dodge | 38 | 58 | 102 | 76 | 7 | 2 | 3 |
| Door | 12 | 17 | 28 | 16 | 1 | ....... | 2 |
| Fouglas | 53 | 32 | 28 | 17 |  |  | 1 |
| Dunn | 18 | 29 | 37 | 29 | 2 |  | 3 |
| Fau Claire | 40 | 60 | 69 | 35 | 9 |  |  |
| Florense | 2 | 4 | 2 |  | 1 |  |  |
| Fond du Lac | 64 | 74 | 101 | 83 | 11 | 1 | 2 |
| Forest | 5 | 4 | 1 | 4 |  |  | 1 |
| Grant | 33 | 46 | 84 | 63 | 13 |  | 2 |
| Green | 26 | 19 | 38 | 3 | 4 |  |  |
| Green Lake | 17 | 17 | 38 | 25 | 5 |  |  |
| Iowa | 22 | 31 | 35 | 33 | 4 |  |  |
| Iron | 5 | 3 | 2 | 2 |  |  | 1 |
| Jackson | 12 | 19 | 33 | 15 | 4 |  | 2 |
| Jefferson | 23 | 52 | 79 | $6{ }^{6}$ | 12 | 1 |  |
| Juneau | 29 | 25 | 45 | 33 | 6 | 1 | i |
| Kenosha | 33 | 35 | 22 | $¢ 9$ | 4 |  | 5 |
| Kewaunee | 12 | 15 | 31 | 27 | 4 |  |  |
| La Crosse | 59 | 75 | 83 | 68 | 6 |  | i |
| Lafayette | 18 | 15 | 38 | 32 | 12 |  |  |

TABLE NO. 28.-SHOWING DEATHS BY COUNTIES DURING THE CALENDAR YEAR OF 1910, ARRANGED ACCORDING TO COLOR, SEX, CONJUGAL CONDITION, AND AGE GROUP.-CON.

| Counts. | Age Grouping. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 50-53 | 60-39 | 70-79 | 80-89 | $90-99$ | $100+$ | $\begin{gathered} \text { Age } \\ \text { un- } \\ \text { kuown. } \end{gathered}$ |
| Langlade ...... | 14 | 17 | 15 | 17 | 3 |  | 2 |
| Lincoln . | 23 | 13 | 19 | $\stackrel{9}{9}$ | 1 |  |  |
| Manitowoc | 35 | $4 \pm$ | ${ }_{63} 63$ | 76 | 10 |  | 1 |
| Marathon | 42 | 65 | 63 | 38 |  | 1 |  |
| Marinette | 31 | ¢6 | 40 | 13 | 5 |  |  |
| Marquette | 11 627 | 15 649 | 21 591 | $\begin{array}{r}24 \\ 350 \\ \hline\end{array}$ | 3 59 |  | 3 |
| Milwaukee | 627 30 | 649 35 | 591 57 | 350 44 | 59 7 | 4 | $\stackrel{2}{3}$ |
| Oncida . | 15 | 9 | 5 | 1. |  |  |  |
| Out gamie | 58 | 75 | 90 | 60 | 9 | 1 | 1 |
| Ozaukee | 16 | 20 | 27 | 16 | 2 |  |  |
| Pepin .. | 4 | 17 | 10 | 11 | 6. |  |  |
| Pierce ... | 25 | 35 | 48 | 37 | 6 |  |  |
| Polk ... | 13 | 20 | 33 | 19 | $\stackrel{2}{8}$ |  |  |
| Portage | 34 | 39 | 46 | $\stackrel{37}{8}$ | 8 | 2 |  |
| Price ... | 8 | ${ }_{64}^{2}$ | 10 103 | 8 69 |  |  | 3 |
| Racine | 71 | 64 22 | $\begin{array}{r}103 \\ 35 \\ \hline\end{array}$ | 69 20 | 9 3 | 1 | 3 |
| Richland | 14 | 22 53 | 35 77 | 20 116 | 3 107 |  | 9 |
| Rock | 5 7 | 11 | 77 8 | 116 7 | 107 1 | 13 | 1 |
| Rusk .... | 7 24 | 11 | -888888 | 7 8 8 | 1 |  | 1 |
| St. Croix | 24 24 | 35 59 | 87 | 49 | 10 |  | 1 |
| Sawyer | 8 | 12 | 5 | 2 |  |  |  |
| Shawano | 21 | 31 | 32 | 31 | 2 |  | 1 |
| Sheboygan | 52 | 71 | 104 | 68 | 9 |  | 3 |
| Taylor | 12 | 12 | 19 | 7 |  |  |  |
| Trempealeau | 16 | 26 | 33 | 47 | 5 |  |  |
| Vernon | 18 | 84 | 54 | 42 | 12 |  | 2 |
| Vilas | 7 | 3 | 2 | 1 |  |  |  |
| Walworth | 24 | 52 | 62 | 65 | 13 | 1 | 1 |
| Washburn | 5 | 6 | 11 | 6 |  |  |  |
| Washington | 24 | 27 | 38 | 34 | 5 |  | ${ }^{3}$ |
| Waukesha | 51 | 65 | 85 | 53 | 13 |  | 9 |
| Waupaca | 28 | 59 | 88 | 49 | 9 | 1 | 1 |
| Waushara | 10 | 19 | 29 | 29 | 4 |  | 2 |
| Winnebago | 74 28 | 93 28 | 126 24 | 101 22 | 15 2 |  | 1 |
| Total | 2,455 | 2,9:6 | 3,730 | 2,742 | 526 | 33 | 93 |

TABLE NO. 29.-SHOWING DEATHS FROM CERTAIN DISEASES BY MONTHS FROM JANUARY, 1909, TO DECEMBER 31, 1910.


TABLE NO. 29.-SHOWING DEATHS FROM OERTAIN DISEASES BY MONTHS FROM JAN-
UARY, 1909, TO DECEMBER 31, 1910.-Cont.


TABLE NO. 29.-SHOWING DEATHS FROM CERTAIN DISEASES BY MONTHS FROM JANUARY 1, 1909 TO DECEMBER 31, 1910.-Cont.


## TABLE NO. 29.-SHOWING DEATHS FROM CERTAIN DISEASES BY MONTHS FROM JANUARY 1, 1909 TO DECEMBER 31, 1910.-Cont.



TABLE NO．29．－SHOWING DEATHS FROM CERTAIN DISEASES BY MONTHS FROM JAN－ UARY， 1909 TO DECEMBER 31， 1910.

| Disease． | Calendar year of 1909. |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 言 | 号 | 云 |  |  | 3 |  |  | $\begin{aligned} & \dot{3} \\ & \stackrel{0}{0} \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  |  |
| Ill defined Diseases： |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 187 Ill defined organic disease ．．．．． | 14 |  | 2 | 1 |  |  | 4 | 1 | 1 | 2 |  | 1 | 2 |  |
| 188 Sudden death ．．．．．．．．．．．．．．．．． | 60 | 2 | 5 | 6 | 3 |  | 6 | 2 | 4 | 6 | 5 | 4 | 7 | ．．． |
| 189 Cause of death not specified or ill defined | 748 | 71 | 61 | 63 | 6.6 | 69 | 44 | 65 |  | 79 | 60 | 57 | 40 | 8 |
| 190 Stillbirths ．．．．．．．．．．．．．．．．．．． | 1，490 | 129 |  | 129 | 123 | 102 | 119 | 118 |  | 95 | 121 | 95 | 110 | 41 |

＇TABLE NO．29．－SHOWING DEATHS FROM OERTATN DISEASES BY MONTHS FROM JAN－ UARY 1， 1909 TO DECEMBER 31， 1910.

| Disease． | Calendar year of 1910. |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | $\underset{\sim}{\underset{\sim}{c}}$ | $\begin{gathered} \dot{B} \\ \stackrel{B}{B} \end{gathered}$ | $\underset{\vdots}{\Xi}$ |  |  |  |  |  |  |
| －General Diseases： |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 Typhoid fever | 558 | 56 | 30 | 54 | 21 | 37 | 45 | $40^{\circ}$ | 34 | 56 | 03 | 64 | 49 |  |
| 2 Typhus fever | 2 |  |  |  | 1 |  | 1 |  |  |  |  |  |  |  |
| 3 Relapsing fever |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 Malaria | 1 |  |  |  |  |  |  |  | 1 |  |  |  |  |  |
| 4a Including Malarial cachexia |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 Smalipox <br> 6 Measles | － |  | 1 |  |  |  |  | 2 |  |  |  |  |  |  |
| ${ }_{7}^{6}$ Measles Scarlet fever | 158 <br> 304 | 6 31 | ${ }_{3}^{7}$ | ${ }_{38}^{12}$ | ${ }_{33}^{13}$ | 24 | 40 | 21 | 8 | ${ }^{6}$ | 1．） | 4 | 13 |  |
| 8 Whooping cough | 304 200 | 310 | 30 8 | 19 | 18 | 46 | 18 | 18 | 13 | 15 28 | $\stackrel{1}{9}$ | 17 10 | 117 |  |
| 9 Diphtheria ．．．．． | 429 | 34 | 28 | $3)$ | 32 | 36 | 31 | 37 | 27 | 18 | 56 | 49 | 51 |  |
| 10 Influenza | 187 | 21 | 28 | 45 | 35 | 17 | 10 | 2 | 1 |  | 5 | 7 | 16 |  |
| 11 Miliary fever．． | 1 |  |  |  |  |  |  |  |  | 1 |  |  |  |  |
| 12 Asiatic cholera |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 14 Dysentery ．．．．．． | 144 | 3 | 3 | 2 | 1 | 2 | 3 |  | 7 |  | T | 1 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 17 Leprosy ．．．． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 18 Erysipelas ．．．． | 71 | 10 | 6 | 17 | 5 | 10 | 1 | 7 | 1 | 4 | 2 | 4 | 4 |  |
| 19 Other epidemic diseases．． | 2 | 1 |  | 1 |  |  |  |  |  |  |  |  |  |  |
| 20 Purulent infection and septi－ chaemia | 148 | 9 | 11 | 18 | 9 | 21 | 12 | 17 | 12 | 7 | 8 | 11 | 13 |  |
| 21 Glanders |  |  |  |  |  |  |  |  |  | 7 | 8 | 11 | ， 3 |  |
| 22 Anthrax |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ${ }_{24}^{28}$ Rabies | 4 |  |  | 1 |  |  |  |  |  | 1 |  |  | 1 |  |
| 24 Tetanus 25 Mycoses | 27 | 1 | 1 | 2 | 2 |  | 3 | 8 | 4 | 2 | 2 | 1 | 1 |  |
| 25 Mycoses | 5 | 1 |  |  | 2 |  |  |  |  |  | I |  | 1 |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 29 Acute miliary tuberculos：s． | 2，031 | 163 | 170 6 | 215 1 | 176 | 181 3 | 184 2 | 164 4 | 169 3 | 154 1 | 175 2 | 151 | 162 |  |
| 30 Tuberculous meningitis ．． | 110 | 14 | 13 | 14 | 9 | 12 | 7 | 8 | 3 | 8 | 9 | 3 | 10 |  |
| 31．Abdominal tuberculosis | 51 | ， | 5 | 5 | 8 | 3 | 5 | 10 |  | 3 | 2 | 2 | 2 |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 34 Tuberculosis of other organs． | 119 | 9 | 9 | 9 | 11 | 6 | 9 | 9 | 15 | 8 | 11 | 14 | 9 |  |
| 35 Disseminated tuberculosis | 43 | 2 | 9 |  | 2 | 4 | 8 | 9 |  | 8 | 1 | 14 | 9 |  |

TABLE NO. 29.-SHOWING DEATHS FROM OERTAIN DISEASES BY MONTHS FROM JANUARY 1, 1909 TO DECEMBER 31, 1910.

| Disease. | Calendar year of 1910. |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | $\frac{\text { 关 }}{\dot{2}}$ | $\stackrel{\text { N }}{\substack{\mathrm{L}}}$ | $\underset{\underset{\Xi}{ \pm}}{\stackrel{\rightharpoonup}{\Xi}}$ | $\underset{3}{5}$ |  |  | $\begin{aligned} & \dot{\tilde{y}} \\ & \frac{0}{0} \\ & 0 \\ & 0 \end{aligned}$ |  |  |  |
| 36 Rickets | 11 | 1 | 1 |  | 2 | 2 | 3 |  | 2 |  |  |  |  |  |
| 37 Syphilis | $4 \overline{1}$ |  | 7 | 4 | 3 | 2 | 4 |  | 4 | 8 | 5 | 3 | 5 |  |
| 38 Gonococcus infection | 1 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |
| 39 Cancer of the buccal cavity. | 133 | 11 | 10 | 9 | 9 | 12 | 16 | 15 | 5 | 16 | 12 | 7 | 11 |  |
| 40 Cancer of the stomach, liver | 756 | 54 | 55 | 65 | 6.7 | 68 | 41 | 62 | 77 | 77 | $6 \overline{5}$ | 61 | 64 |  |
| 41 Cancer of peritonaeum, intes- <br> tines, rectum $\ldots \ldots \ldots \ldots .$. | 176 | 18 | 15 | 18 | 15 | 17 | 19 | 8 | 14 | 17 | 13 | 8 | 14 |  |
| 42 cancer of female genital organs | 157 | 14 |  | 17 | 14 | 16 | 11 | 15 | 8 | 16 | 9 | 11 | 17 |  |
| 43 Cancer of breast... | 105 | 6 | 7 | 10 | 7 | 6 | 11 | 10 | 4 | 13 | 7 | 11 | 13 |  |
| 44 Cancer of the skin. | 32 | 4 | 4 | 3 | 2 | 3 | 1 | 3 | 1 | 5 | 1 | 3 | 2 |  |
| 45 Cancer of other organs and organs not specified. | 180 | 5 | 15 | 21 | 11 | 19 | 26 | 10 | 18 | 13 | 17 | 15 | 10 |  |
| 46 Other tumors ................. | 132 | 17 | 8 | 11 | 11 | 8 | 16 | 10 | 6 | 14 | 8 | 10 | 13 |  |
| 47 Acute articular rheumatism... | 103 | 10 | 7 | 14 | 10 | 6 | 6 | 7 | 10 | 11 | 10 | 10 | 2 |  |
| 48 Chronic rheumatism and gout | 118 | 8 | 8 | 16 | 8 | 13. | 9 | 13 | 5 | 12 | 7 | 9 | 10 |  |
| 49 Scurvy | 2 | 1 |  |  |  |  |  |  |  |  |  |  | 1 |  |
| 50 Diabetes | 276 | 24 | 27 | 27 | 20 | 25 | 25 | 9 | 26 | 16 | 27 | 30 | 20 |  |
| 51 Exophthalmic goitre | 34 | 1 | 1 | 2 | 2 |  |  | 6 | 9 | 4 | 2 | 1 | 6 |  |
| 52 Addison's disease | 5 |  | 2 | 1 |  |  |  |  |  |  |  | 1 | 1 |  |
| 53 Leuchaemia | 42 | 1 | 4 | 6 | 5 | 3 | 4 | 2 | 2 | 2 | 7 | 2 | 4 |  |
| 54 Anaemia, chlorosis | 148 | 19 | 9 | 12 | 15 | 13 | 16 | 7 | 10 | 10 | 10 | 10 | 8 |  |
| 550 Other general diseases. | 14 | 1 | 1 | 2 |  | 3 | 2 | 1 |  | 1 | 1 | 2 |  |  |
| 56 Alcoholism (acute or chronic) | 131 | 13 | 7 | 12 | 13 | 10 | 10 | 4 | 8 | 15 | 14 | 12 | 13 |  |
| 67 Chronic lead poisoning.......... | 2 |  |  |  |  |  | 1 |  |  |  |  | 1 |  |  |
| 58 Other chronic occupation poisonings | 1 |  |  |  |  |  |  |  | 1 |  |  |  |  |  |
| 59 Other chronic poisonings...... | 6 |  | 2 | 1 | 1 |  | 1 |  |  |  | 1 |  |  |  |
| Diseases of the nervous system and organs of special sense: <br> 60 Encephalitis | 39. | 1 | 3 | 6 | 2 | 3 | 4 | 3 . | 5 | 3 | 3 | 3 | 3 |  |
| 61 Simple meningitis | 478 | 41 | 37 | 42 | 40 | 41. | 39 | 35 | 62 | $5 \%$ | 30 | 21 | 34 |  |
| 62 Locomotor ataxia | 33 | 2 | 3 | 2 | 1 | 5 | 6 | 2 |  | 3 | 2 | 5 | 2 |  |
| 63 Other diseases of spinal cord.. | 92 | 8 | 10. | 7 | 10 | 6 | 4 | 6 | 5 | 13 | 8 | 11. | 4 |  |
| 64 Cerebral hemorrhage, apoplexy | 1,351 | 118 | 121 | 138 | 124 | 119 | 117 | 88 | 84 | 97 | 104 | 115 | 126 |  |
| 65 Softening of the brain... | 41 | 2 | 3 | 4 | 3 | 7 | 5 | 4 | 1 | 4 | 4 | 3 | 1 |  |
| $66 \begin{gathered}\text { Paralysis without specified } \\ \text { cause }\end{gathered}$ | 377 | 37 | 28 | 35 | 28 | 20 | 36 | 21 | 40 | 29 | 37 | 35 | 31 |  |
| 67 General paralysis of insane.... | 132 | 13 | 9 | 10 | 7 | 20 | 12 | 7 | 8 | , | 7 | 13 | 17 |  |
| 68 Other forms of mental alienation | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| 69 Epilepsy ........ | 115 | 5 | 10 | , | 16 | 6 | 11 |  | 5 | 13 | 12 | 13 | 7 | 1 |
| 70 Convulsions (nonpuerperal) | 12 | 1 |  | 1 |  | 2 | 1 | 1 | 2 | 1 | 2 | 1 |  |  |
| 71 Convulsions of infants.. | 574 | 46 | 50 | 73 | 37 | 54 | 52 | 41 | 49 | 43 | 46 | 37 | 46 |  |
| \%2 Chorea | 9 | 3 |  |  |  | 1 | 1 | , |  |  | 1 |  | $\stackrel{2}{2}$ |  |
| 73 Neuralgia and neuritis. | 31 | 3 | 5 | 2 | 4 | 4 | 2 | 2 | 2 | 2 | 2 | 1 | 2 |  |
| 74 Other diseases of nervous system | 124 | 9 | 8 | 12 | 12 | 4 | 16 | 11 | 19 | 7 | 6 | 11 | 9 | $\ldots$ |
| 75 Diseases of the eyes and their annexa | 2 | 1 |  |  |  |  | 1 |  |  |  |  |  |  |  |
| re Diseases of the ears........... | 13 | 1 | 2 |  | 2 |  | 2 |  | 1 | 3 |  | 1 | 1 |  |
| Diseases of Oirculatory System: 77 Pericarditis | 32 | 2 | 5 | 3 | 2 | 2 |  | 3 | 4 | 3 | 2 | 2 | 4 |  |
| 78 Acute endocarditis | 216 | 18 | 15 | 21 | 29 | 19 | 17 | 21 | 8 | 15 | 16 | 13 | 24 |  |
| 79 Organic diseases of the heart | 1,6688 | 152 | 112 | 143 | 160 | 155 | 1331 | 103 | 142 | 130 | 146 | 136 | 155 | 1 |
| 80 Angina pectoris | 153 | 13 | 11 | 15 | 13 | 14 | 11 | 12 | 12 | 9 | 15 | 14 | 14 |  |
| 81 Diseases of arteries, atheroma, aneurysm, etc. | 405 | 33 | 34 | 37 | 34 | 30 | 34 | 27 | 32 | 31 | 31 | 39 | 43 |  |
| 82 Embolism and thrombosis.... | 100 | 5 | 3 | 7 | 7 | 12 | 9 | 6 | 14 | 4 | 9 | 13 | 11 |  |
| 83 Diseases of the veins.......... | 18 | 1 | 3 |  | 2 | 1 | 2 | 1 | 4 | 1 | 2 | 1 |  |  |
| 84 Diseases of the lymphatic system | 17 | 3 |  | 5 | 3 | 1 |  |  |  | 1 | 1 | 1 | 2 |  |

TABLE NO. 29.-SHOWING DEATHS FROM CERTAIN DISEASES BY MONTHS FROM JANUARY 1, 1909, TO DECEMBER 31, 1910.-Cont.

| Disease. | Calender year of 1910 . |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\stackrel{\oplus}{\approx}}{\underset{\sim}{\infty}}$ | $\underset{\sim}{\approx}$ $\underset{\Xi}{\Xi}$ $\underset{\sim}{\varpi}$ |  |  | 容 | \% | - | $\stackrel{5}{5}$ | ¢ |  | $\left\lvert\, \begin{aligned} & \text { a } \\ & \text { d } \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0\end{aligned}\right.$ | $\begin{aligned} & \dot{8} \\ & \text { む } \\ & \text { Eg } \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  |
| 85 Hemorrhage and other diseases of circulatory system........ | 25 | 2 |  | 5 | 2 | 1 | 2 | 2 | 2 |  | 2 | 2 | 4 |  |
| Diseases of the Respiratory System: 85 Diseases of the nasal fossae.... | 5 | 3 |  | 1 |  | 1 |  |  |  |  |  |  |  |  |
| 87 Diseases of the larynx........ | 35 | 3 | 5 | 6 | 1 | 4 | 3 | 2 | 1 | 2 | 3 | 2 | 3 | $\cdots$ |
| 88 Diseases of the thyroid body... | 2 |  |  |  |  | 1 |  |  |  |  |  |  | 1 |  |
| 89 Acute bronchitis .............. | 313 | 26 | S0 | 43 | 35 | 28 | 26 | 12 | 9 | 11 | 13 | 28 | 52 |  |
| 90 Chron:c bronchitis | 213 | 27 | 25 | 26 | 16 | 25 | 21 | 10 | 6 | 12 | 14 | 12 | 1.9 |  |
| 91 Brencho-r neumonia | 529 | 56 | 59 | 65 | 54 | 63 | 41 | 11 | 18 | 22 | 33 | 42 | 63 |  |
| 92 Pneumonia ...... | 1,724 | 215 | 188 | 213 | 177 | 192 | 103 | E8 | 55 | 561 | 81 | 144 | 24.5 |  |
| 93 Pleurisy | 62 | 3 | 4 | 6 | 5 | 7 | 5 | 5 | 4 | 4 | 7 | 5 | 7 |  |
| 94 Pulmonary congestion, pulmonary apoplexy | 137 | 12 | 6 | 17 | 12 | 10 | 15 | 10 | 6 | 11 | 12 | 12 | 14 | . |
| 95 Gangrene of the lung.......... | 1 | $\ldots$ |  |  |  |  |  |  | 1 |  |  |  |  |  |
| 96 Asthma ........................ | 89 | 7 | 14 | 9 | 6 | 11 | $\stackrel{+}{4}$ | $\stackrel{\square}{5}$ | 3 | 9 | 7 | 5 | 9 |  |
| 97 Pulmonary Emnhysema ..... | 30 | 3 | 5 | 5 | 2 | 2 | 1 | 2 | 3 | 3 | 1 | 2 | 4 |  |
| 98 Other diseases of respiratory system | 59 | 6 | 2 | 6 | 6 | 5 | 2 | 4 | 6 | 7 | 5 | 7 | 3 | $\ldots$ |
| Diseases of Digestive System: <br> 99 Diseases of the mouth and annexa $\qquad$ | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 100. Diseases of the pharynx. | 31 | 5 | 4 | 3 | 2 | 2 | 1 | 3 | 3 | 1 | 4 | 2 | 1 |  |
| 101 Diseases of the oesophagus.... | 3 | 1 |  |  |  | 1 |  | 1 |  |  |  |  |  |  |
| 102 Ulcer of the stomach.......... | 111 | 11 | 13 | 8 | 8 | 7 | 11 | 5 | 8 | 10 | 9 | 7 | 14 |  |
| 103 Other diseases of the stomach | 251 | 26 | 18 | 22 | 19 | 19 | 17 | 21 | 20 | 20 | 91 | 27 | 18 |  |
| 104 Diarrhea and enteritis (under 2 years) | 1,503 | 60 | 41 | 83 | 65 | 50 | 88 | 140 | 349 | 399 | 133 | 47 | 47 | 1 |
| 105 Diarrhea and enterit 106 Ankylostomiasis | 354 | 12 | 12 | 7 | 12 | 14 | 8 | 31 | 82 | 101 | 51 | 14 | 10 | .... |
| 107 Intestinal parasites | 2 |  |  |  |  | 1 |  | 1 |  |  |  |  |  |  |
| 108 Appendicitis and typhlitis.... | 241 | 21 | 22 | 20 | $2 \hat{3}$ | 22 | 16 | 18 | 22 | 21 | 17 | 25 | 11 |  |
| 109 Hernias, intestinal obstructions | 276 | 23 | 33 | 18 | 18 | 19 | 24 | 24 | 20 | 29 | $26{ }^{1}$ | 23 | 19 |  |
| 110 Diseases of the intestines..... | 108 | 12 | 7 | 8 | 8 | 6 | 5 | 12 | 16 | 10 | 8 | 10 | 6 |  |
| 111. Acute yellow atrophy of liver.. | 5 | 1 |  | 2 |  |  |  | 1 | 1 | 10 |  |  | 1 | $\ldots$ |
| 112 Hydatid tumor of liver........ | 1. |  |  | 1 |  | .... |  |  |  | ... |  |  | 1 | $\ldots$ |
| 113 Cirrhosis of the liver........... | 221 | 18 | 19 | 21 | 23 | 17 | 17 | 20 | 22 | 17 | 22 | 14 | 11 |  |
| 114 Biliary calculi .................. | 5 |  | 1 |  | 1 | 1 |  |  |  | 2 |  |  |  |  |
| 115 Other diseases of the liver.. | 234 | 23 | 12 | 19 | 19 | 17 | 22 | 27 | 161 | 14 | 23. | 25 | 17 |  |
| 116 Diseases of the spleen ........ | 10 | 1 | 1 |  |  |  | 2 | 1 | 1 | 2 | 2 | 2 |  | $\ldots$ |
| 117 Simple peritonitis (nonpuer peral) | 124 | 10 | 12 | 11 | 11 | 10 | 8 | 9 | 10 | 9 | 9 | 11 | 14 |  |
| 118 Other diseases of digestive system | 85 | 9 | S | 4 | 8 | $4$ | 3 | 3 | 12 | 8 | 13 | 7 | 6 |  |
| Nonvenereal Diseases of Genito. Urinary System and Annexa: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 119 Acute nephritis ................ | 285 | 29 | E0 | 34 | 25 | 28 | 17 | 23 | 16 | 17 | 22 | 28 | 16 |  |
| 120 Bright's disease ............... | 1,052 | 88 | 97 | 84 | 84 | 77 | 105 | 76 | 87 | 96 | 90 | 78 | 89 |  |
| 121 Chyluria ...................... | 1,002 |  |  |  |  |  | 10. | 16 | 87 | 0 | 0 | 7 | 8 | . $\cdot$ |
| 122 Other diseases of kidneys and annexa | 57 | 2 | 3 | 6 | 7 | 3 | 4 | 5 | 6 | 4 | 7 | 6 |  | $\ldots$ |
| 126 Calculi of the urinary passages | 9 | 1 | 1 | 6 | $\ldots$ | 1 | . | 1 | 1 | 3 | 7 | 6 | 1 | .... |
| 124 Diseases of the bladder..... | 93 | 7 | 8 | 9 | 3 | 7 | 6 | 7 | 6 | 10 | 15 | 9 | 6 | $\ldots$ |
| 125 Diseases of urethra, urinary abscess, etc. |  |  |  |  | 3 |  |  | 7 | 6 | 10 | 15 | 9 | 6 | . . . |
| 126 Diseases of the prostate...... | 56 | 7 | 7 | 5 | 7 | 2 | 6 | 4 | 5 | 5 | 3 | 3 | 3 |  |
| 127 Nonvenereal diseases of male genital organs ............... <br> 128 Utcr:ne hemorrhage (nonpuerperal) | 1 | 7 | 7 | 5 | 7 |  | 6 | 4 | 5 | 5 | 3 | 3 | 1 | $\cdots$ $\cdots$ $\cdots$ |
| 129 Uterine tumor (noncancerous) | 6 | 1 | 1 |  |  |  |  |  | 2 |  |  |  | 2 | $\cdots$ |
| 130 Other diseases of the uterus.. | 9 |  |  | 3 | 2 |  |  |  | 1 | 2 |  | 1 |  | $\ldots$ |

TABLE NO. 29.-SHOWING DEATHS FROM CERTAIN DISEASES BY MONTHS FROM JAN UARY 1, 1909, TO DECEMBER 31, 1910.-Cont.


TABLE NO．29．－SHOWING DEATHS FROM CERTAIN DISEASES BY MONTHS FROM JAN－ UARY 1，1909，TO DECEMBER 31，1910．－Cont．

| Disease． | Calendar Year of 1910. |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\frac{\dot{3}}{\frac{\mathrm{E}}{\mathrm{x}}}$ | 家 | 关 | 楀 | － | 范 | $\begin{aligned} & \dot{c} \\ & \stackrel{0}{c} \\ & \frac{0}{g} \\ & \frac{1}{2} \\ & \frac{2}{n} \end{aligned}$ |  | $\begin{gathered} \dot{\vdots} \\ \vdots \\ \vdots \\ 0 \\ \vdots \\ \vdots \\ \vdots \end{gathered}$ | $\begin{aligned} & \dot{\Xi} \\ & \frac{\dot{I}}{\Xi} \\ & \dot{y} \\ & \vdots \end{aligned}$ |  |
| 164 Poisoning by food． | 26 | 2 | 2 | 2 | 1 | 1 | 5 | 1 | 2 | 3 | 3 | 1 | 3 |  |
| 165 Other acute poisonings | 30 | 2 |  |  | 3 | 1 | 1 | 12 | 4 | 2 | 1 |  | 4 |  |
| 166 Conflagration ．．．．．．．．．．． | 85 | 10 | 8 | 6 | 4 | 6 | 10 | 8 | 4 | 5 | 10 | 2 | 5 |  |
| 167 Burns（conflagration excepted） | 29 | 5 |  | 3 | 4 | 2 | 2 | 1 |  | 1 | 2 | 3 | 6 |  |
| 163 Absorption of deleterious gases | 18 | 2 |  | 1 | 1 | ${ }^{2}$ | 1 |  |  |  | 5 5 | 17 | 4 |  |
| 169 Accidental drowning ．．．．．．．．．． | 216 | 2 | 5 | 7 | 19 | 13 | 46 | 40 | 31 | 19 | 10 | 17 | 4 | 3 |
| 170 Traumatism by firearms．．．．． | 68 | 6 | 5 | 1 | 4 | 1 | 3 | 4 | 5 | 8 | 11 | 13 | 7 |  |
| 171 Traumatism by cutting or pier－ cing instruments | 37 | 6 | 4 | 2 |  | 2 | ， | 2 | 3 | 3 | ${ }_{2}^{2}$ | 5 | 10 |  |
| 172 Traumatism by fall．．．．．．．．．．．． | 154 | 5 | 9 | 14 | 14 | 14 | 10 | 13 | 17 | 14 | 13 | 21 | 10 |  |
| 173 ＇Traumatism in mines and quar－ | 10 | 1 |  |  |  | 1 |  | 1 |  | 2 | 3 | 2 |  |  |
| 174 Traumatism by machines．． | 42 | 2 | 3 | 9 | 7 | 5 | 3 | 1 | 2 | 2 | 4 | 1 | 3 |  |
| 175 Traumatism by other crush－ | 342 | 28 | 22 | 26. | 24 | 27 | 32 | 33 | 29 | 34 | 32 | 2.5 | co |  |
| 176 Injuries by animals．．．．．．．．．．．．． | 40 | 1 | 1 | 1 | 7 | 8 | 6 | 2 | 8 | 2 | 1 | 3 |  |  |
| 177 Starvation | 2 |  |  | 1 |  |  |  |  |  | 1 |  |  |  |  |
| 178 Excessive cold | 17 | 5 | 4 | 1 |  | 2 |  |  |  |  |  | 1 | 4 |  |
| 179 Effects of heat | 40 | 1 | ．． | ．．． | $\cdots$ | 1 | 18 | 13 | 6 |  |  |  |  | 1 |
| 180 Lightning ．．． | 7 |  |  |  |  |  |  | 3 | 3 |  | 1 |  |  |  |
| 181 Electricity（lightning excepted） | 17 |  |  | 1 | 1 | 1 | 1 | 3 | 3 | 5 | 1 | 1 |  |  |
| 182 Homicide by firearms．．．．．．．．．． | 22 | 1 |  | 3 |  | 4 | 2 |  | 6 | 2 | 1 | 2 | 1 |  |
| 183 Homicide by cutting or pier－ cing instruments | 6 |  |  | 1 |  |  |  | 1 | 2 | 1 |  |  |  |  |
| 184 Homicide by other means．．．．． | 13 | 3 | 2 | 1 | 2 | 1 | 1 |  |  | 2 |  |  |  | 1 |
| 185 Fractures（cause not specified） | 124 | 8 | 15 | 14 | 4 | 13 | 13 | 14 | 13 | 12 | 10 | 8 | 8 | 2 |
| 186 Other external violence．．．．．．．． | 99 | 6 | 7 | 9 | 9 | 7 | 10 | 6 | 12 | 9 | 10 | 4 | 10 |  |
| Ill defined Diseases： |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 187 Ill defined organic disease | 29 | 1 | 3 | 5 | 2 | 1 | 3 | 2 | 2 | 2 | 3 | 2 | 3 |  |
| 188 Sudden death | 70 | 4 | 4 | 8 | 9 | 4 | 3 | 4 | 3 | 9 | 8 | 4 | 10 |  |
| 189 Cause of death not specified or ill－defined | 374 | 46 | 28 | 27 | 19 | 29 | 23 | 15 | 32 | 51 | 35 | 34 | 30 | 5. |
| 190 Stillbirths | 1，414 | 111 | 110 | 112 | 97 | 112 | 95 |  | 141 | 133 | 115 | 109 | 134 | 23 |

TABLE NO．30．－SHOWING DEATHS FROM EACH DISEASE BY AGE GROUPS FOR 1009 AND 1910.

| Name of Diseases． | Age Grouping． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | （1） | （1） | $\underline{1}$ | 0 | 0 $\vdots$ 0 | \％i | 䫆 | aid <br> 1 <br> $\vdots$ | 呇 | 0 0 0 8 | \％ | －8 | \％ | ＋ |  |
| I General Diseases： <br> Typhoid fever |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Typhoid fever <br> Typhus fever | 3 | 7 | 30 | 46 | 175 | 275 | 173 | 116 | 52 | 21 | 7 | 1 | $\cdots$ | 4 | $\ldots$ |
| Relapsing fever |  | ． |  | ．．． |  |  |  |  |  |  |  |  |  |  |  |
| Malaria ．．．．．．．． |  |  |  | 1 |  |  | 1 | 2 | 2 | 1 |  |  |  |  |  |
| Smallpox | 5 | 1 |  | 1 | i | $\ddot{2}$ | 1 | 3 | 2 | 1 |  | 1 |  |  |  |
| Measles | 11 | 81 | 116 | 42 | 15 | 8 | 2 | 2 | 1 |  |  |  |  |  |  |
| Scarlet fever | 2 | 37 | 313 | 194 | 80 | 13 | 11 | 4 | 1 | ．．． |  |  |  |  | 1 |
| Whooping cough | 67 | 199 | 104 | 15 | 2 | 3 | 2 | 5 |  |  |  |  |  |  |  |
| Diphtheria and croup | 10 | 53 | 307 | 253 | 121 | 33 | 15 | 40 | 3 | 1 | ${ }^{2}$ |  |  |  | 2 |
| ；Influenza ．．．．．．．．．．．．． | 19 | 24 | 13 | 5 | ， | 15 | 11 | 16 | 32 |  | 118 | 80 | 10 |  |  |

TABLE NO. 30.-SHOWING DEATHS FROM EACH DISEASE BY AGE GROUPS FOR 1909 AND 1910.-Cont.

| Name of Diseases. | Age Grouping. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | - |  | 0 <br>  <br> 0 | \%i | ¢ | ¢ i ¢ | io | \% | \% | $\stackrel{0}{1}$ | \% | $\stackrel{1}{3}$ |  |
| Asiatic cholera |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cholera nostras ............. | 4 | 8 | 4 | 1 | 1 |  | 2 | 1 | 1 |  | 2 |  | 1 |  |  |
| Dysentery ................. | 8 | 56 | 46 | 2 | 1 | 4 |  | 4 | 7 | 15 | 45 | 36 | 4 |  | 1 |
| Plague .. | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Yellow fever |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Leprosy ... |  |  |  |  |  |  |  | 11 |  |  |  |  |  |  |  |
| Other epidemic diseases..... | 19 | 12 1 | 2 | 1 | 2 | 10 | 7 | 10 | 19 | 20 | 20 | 11. | 2 |  |  |
| Purulent infection and sep tichaemia | 34 | 15 | 7 | 11 | 23 | 42 | 41 | 40 | 33 | 39 | 23 | 6 |  |  | 2 |
| Glanders ................... |  |  | 7 |  |  | 42 | 41 | 40 | 33 | 39 | 23 | 6 |  |  | 2 |
| Anthrax |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |
| Rabies |  |  |  |  | 1 |  |  |  | 2 | $\ddot{2}$ |  |  |  |  |  |
| Tetanus | 10 |  | 1 | 10 | 23 | 6 | 6 | 3 | 5 |  | 1 |  |  |  |  |
| MycosesPellagra |  |  |  |  | 2 | 1 |  | , |  | 1 | 2 |  |  |  |  |
|  |  |  | 1 | 1 |  |  |  |  | 1 |  |  |  |  |  |  |
| Beriberi $\ldots . . . . . . . . . . . . . . . .$. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Tuberculosis of the lungs.Acute miliary tuberculosisT'uberculous meningitis | 3 | 44 | 38 | 21. | 407 | 1,266 | 892 | 589 | 400 | 294 |  | 26 | 1 |  | 9 |
|  | 1 | 6 55 | 5 | 2 | 17 23 | 19 | 20 | 13 | 4 | 24 | 1 3 |  |  |  |  |
| 'Iuberculous meningitis .... Abdominal tuberculosis ... Potts' disease | 4 | 55 7 | 58 | 23 | 12 | 25 | 12 | 10 | 20 | 13 | 1 6 |  |  |  | 1 |
|  | 1 |  | 2 | 1 | 6 | 8 | 1 | 2 | 2 | 2 |  |  |  |  |  |
| White swelling |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Tuberculosis of other organs | 2 | 5 | 7 | 6 | 24 | 42 | 36 | 19 | 19 | 19 | 14 | 4 |  |  | 1 |
| Disseminated tuberculosis <br> Rickets |  | 2 | 5 | 1 | 16 | 23 | 14 | 13 | 4 | 7 | 1 |  |  |  |  |
|  | 1 | 10 | 3 |  |  | 2 |  |  |  |  |  |  |  |  |  |
| Syphilis <br> Gonoco | 33 | 8 | 2 |  | 1 | 5 | 8 | 7 | 8 | 5 | 1 |  |  |  |  |
|  |  | 1 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |
| Gonococcus infection Gancer and other malignant tumors of the buccal cavity | 1 |  |  | 1 |  |  | 8 | 18 | 51 | 56 | 74 | 46 | 5 |  |  |
| Cancer and other malignant tumors of the stomach, liver |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 1 |  | 1 |  | 2 | 3 | 37 | 182 | 360 | 450 | 343 | 88 | 4 |  | 2 |
| Cancer and other malignant |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| tumors of the peritonaeum, intestines, rectum |  |  |  | 1 |  | 6 | 17 | 43 | 82 | 88 | 73 | 20 | 2 |  |  |
| Cancer and other malignant tumors of the female genital organs $\qquad$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | 5 | 17 | 64 | 77 | $6 \pm$ | 34 |  |  |  |  |
| Cancer and other malignant tumors of the breast.... |  |  |  |  |  | 1 | 19 | 51 | 41 | 44 | 35 | 19 | 2 | 1 |  |
| Cancer and other malignant tumors of the skin....... |  | 1 |  |  |  |  |  | 5 | 7 | 3 | 10 | 7 | 1 |  |  |
| Cancer and other malignant |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| tumors of other organs and of organs not specified | 2 | 3 | 2 | 3 | 5 | 7 | 20 | 58 | 79 | 97 | 10 ? | 37 | 1 |  | 1 |
| Other tumors (tumors of |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |
| excepted) | 5 | 4 | 7 | 5 | 11 | 17 | 24 | 32 | 57 | 41 | 33 | 22 |  |  |  |
| Acute articular rheumatism |  | 3 | 6 | 13 | 54 | 17 | 11 | 13 | 17 | 12 | 8 | 3 |  |  |  |
|  |  | 1 | 1 | 8 | 28 | 13 | 8 | 26 | 32 | 46 | 52 | 25 | 4 |  | 1 |
| Scurvy |  | 1 |  |  |  |  |  |  |  |  |  | 1 |  |  |  |
| Diabetes $\ldots . . . . . . . . . . . . . . . .$. | 1 | 1 | 13 | 17 | 56 | 45 | 30 | 42 | 101 | 110 | 87 | 21 |  |  | 1 |
| Exophthalmic goitre ...... | 1 |  |  | 1 | 1 | 13 | 13 | 24 | 10 | 7 | 4 |  |  |  | 1 |
|  |  |  |  |  |  | 3 | 3 | 5 | 3 | 1 |  |  | 1 |  |  |
| Addison's disease......... Leuchaemia | 1 | 1 | 4 | 2 | ${ }_{6}^{6}$ | 9 | 8 | 15 | 8 | 14 | 6 |  |  |  |  |
| Anaemia, chlorosis <br> Other general diseases. | 6 | 11 | 5 | 5 | , | 30 | 34 | 47 | 53 | 64 | 22 | 3 | 2 |  |  |
|  | 8 | 3 | 1 | 3 | 1 | 1 |  | 1 | 1 | 3 | 3 |  |  | 1 |  |
| Alcoholism (acute or chronic) |  |  |  |  |  | 16 | 44 | 74 | 52 | 31 | 6 | 2 |  |  |  |
| Chronic lead poisoning..... Other chronic occupation poisonings <br> Other chronic poisonings.. |  |  |  |  |  |  | 1 |  | I |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | 3 | 2 | 4 | 1 | 2 |  |  |  |  |

TABLE NO．30．－SHOWING DEATHS FROM EAOH DISEASE BY AGE GROUPS FOR 1900 AND 1910．－C＂Ont．

| Name of Diseases． | Age Grouping． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | － | $\begin{aligned} & 0 \\ & 1 \\ & 1 \end{aligned}$ | $\stackrel{9}{1}$ | 21 | ¢ | $\xrightarrow{1}$ | 会 | 8 1 8 8 | － | \％ |  | $\stackrel{+}{8}$ | 星沯 |
| II．Diseascs of the Nervous Sys－ tem and of the Organs of Special Sense： |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 10 | 12 | 11 |  | 4 | 3 | 30 |  | ${ }_{36}^{1}$ |  |  |  |  |  |  |
| Simple Meningitis ．．．．．．．．．．． 7 | 71 | 244 | 254 | 98 | 100 | 54 | 30 6 | 32 12 | 36 25 | 15 | 21 | 4 | 1 |  | $\ldots$ |
| Locomotor ataxia |  |  |  |  | 1 | 1 | 6 |  | 25 | 15 |  |  |  |  |  |
| Other diseases of the spinal cord | 2 | 14 | 14 | 11 | 10 | 6 | 10 | 16 | 15 | 23 | 16 | 2 |  |  | 1 |
| Cerebral hemorrhage，apo－ plexy | 27 | 6 | 6 | 8 | 17 | 42 | 59 | 165 | 349 | 570 | 784 | 459 | 52 | 1 | 9 |
| Softening of the brain．．．．．． |  |  |  | 1 |  |  |  | 8 | 9 | 18 | 27 | 12 | 1 |  |  |
| Paralysis without specified cause | 14 | 5 | 6 | 2 | 10 | 12 | 25 | 56 | 91 | 155 | 238 | 142 | 16 | 1 | ．．．． |
| General paralysis of the in－ sane $\qquad$ |  |  |  |  | 2 | 21 | 45 | 45 | 55 | 34 | 22 | 5 |  |  | 1 |
| Other forms of mental alienation $\qquad$ |  | 1 | 1 | 2 | 3 | 5 | 3 | 6 | 2 | 5 | 16 | 5 |  |  | 1 |
| mpilepsy ．．．．． | $\cdots$ | 5 |  | 17 | 34 | 49 | 38 | 33 | 18 | 12 | 16 | 5 | 2 |  |  |
| Convulsions（nonpuerperal） | 8 | 5 | 3 | 3 | 3 | 5 | 5 | 4 | 1 | 3 |  |  |  |  | 38 |
| Convulsions of infants．．．．． | 78 | 33 | 129 | i |  |  |  |  |  | 1 |  |  |  |  | 38 |
| Chorea ．${ }^{\text {a }}$ ．．．．．．．．．．．．．．． |  |  | 1 | 1 | 1 | 2 | 4 | 3 | 11 | 9 | 9 | 7 | 1 |  | 1 |
| Neuralgia and neuritis．．．．． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Other diseases of the ner－ vous system | 12 | 16 | 29 | 8 | 27 | 27 | 23 | 25 | 41 | 28 | 23 | 15 | 1 | 1 | ．．．． |
| Diseases of the eyes and their annexa $\qquad$ |  |  | 1 |  |  |  |  | 2 |  |  |  | 1 |  |  |  |
| Diseases of the ears．．．． | 3 | 6 | 7 | 1 | 2 | 4 |  | 1 | 5 | 1 | 1 |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pericarditis $\begin{aligned} & \text { Prute endocarditis } \\ & \text { Acut．．．．．．．．}\end{aligned}$ | $\cdots$ | 1 | 4 | 30 | 37 | 38 | 35 | 38 | 58 | 79 | 105 | 36 | 2 |  | 2 |
| Organic diseases of the heart | 9 | 19 | 14 | 20 | 77 | 103 | 192 | 259 | 411 | 718 | 926 | 443 | 3 | 2 | 10 |
| Angina pectoris ．．．．．．．．．．．．．． atheroma，aneurysm，etc． | 3 | 1 | 5 |  |  | 6 | 11 | 21 | 41 | 85 | 76 | 32 | 4 |  | 1 |
|  | ， | 1 | 2 |  |  | 13 | 10 | 31 | 56 | 155 34 | 284 | 227 20 | $\stackrel{29}{1}$ |  | 2 |
|  | Embolism        <br> Diseases of the veins（vari－  $\cdots$      |  |  |  | 2 | 12 | 19 | 27 | 43 | 34 | 48 | 20 | 1 |  |  |
| Diseases of the veins（vari－ ces，haemorrhoids，phlebi－ tis，etc．） |  |  | 1 |  | 2 | 2 | 7 | 8 | 3 | 9 | 9 | 1 |  |  |  |
| Diseases of the lymphatic system（lymphangitis，etc．） | ¢ 1 | 3 | 5 |  | 2 | 2 |  | 3 | 3 | 3 | 2 |  |  |  |  |
| Hemorrhage：other diseases of the circulatory system | S 16 | 1 |  | 1 | 1 | 7 | 6 | 5 | 13 | 7 | 3 | 3 |  |  |  |
| IV．Diseases of the Respiratory System： |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Diseases of the nasal fossae |  | 11 | 23 | 8 | 5 | 4 | 4 | 1 | 1 | 3 | － 4 | $\cdots$ |  |  |  |
| Diseases of the larynxoidDiseases of the thyroid |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| body | － 1 |  |  | 9 |  | 7 | 1 | 3 | 9 | 30 | 59 | 65 | 2 |  | 1 |
| Acute bronchitis <br> Chronic bronchitis | ． $\begin{array}{r}127 \\ 1\end{array}$ | 227 9 | 75 9 | 1 2 2 | 10 3 | 4 | $\stackrel{1}{3}$ | 10 | 33 | 17 | 231 | 132 | 20 |  | 1 |
| Broncho pneumonia ．．．．．．． | 123 | 364 | 245 | 26 | 15 | 11 | 11 | 15 | 20 | 60 | 97 | 60 | 8 |  | 1 |
|  | 294 | 520 | 321 | 98 | 129 | 174 | 221 | 253 | 279 | 366 | 512 | 296 | 44 | 1 | 10 |
| Pneumonia | 1 | 1 | 13 | 10 | 3 | 11 | 10 | 13 | 23 | 15 | 23 | 12 | 3 |  | 1 |
| Pulmonary congestion，pul monary apoplexy ．．．．．．．． | － 28 | 18 | 13 | 9 | 10 | 17 | 12 | 26 | 23 | 32 | 56 | 34 | 7 | 1 | 1 |
| Gangrene of the lung．．．．．．．Asthma |  |  |  |  |  |  |  |  | 27 | 43 | 55 | 39 |  | 1 |  |
|  |  |  | $\stackrel{5}{5}$ | 2 3 | －${ }^{3}$ |  |  | － 4 | 2 |  | 6 10 |  | 1 |  |  |
| Other diseases of the res |  | 2 | 5 |  |  |  |  |  |  |  |  |  |  |  |  |
| Other diseases of the res piratory system（tubercu－ losis excepted） | ． 8 |  | 8 |  |  |  | 10 | 10 | 11 | 13 | 13 |  |  |  | 1 |

TABLE NO. 30.-SHOWING DEATHS FROM EAOH DISEASE BY AGE GROUPS FOR 1906


TABLE NO. 30.-SHOWING DEATHS FROM EACH DISEASE BY AGE GROUPS FOR 1909 AND 1910.-Cont.

|  | Age Grouping. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Name of Diseases. |  |  | - |  |  | \% | \% |  | in | ¢ 8 | \% | ¢ | 8 | $\stackrel{+}{8}$ | 䢒 |
| VII. The Puerperal State. Accidents of pregnancy.... Puerperal haemorrhage .... Other accidents of labor.. <br> Puerperal septichaem:a <br> Puerperal albuminuria and convulsions <br> Puerperal phlegmasia, alba dolens, embolus, sudden death................. <br> Following childbirth (not otherwise defined) <br> Puerperal diseases of the breast |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 1 |  |  |  | 3 | 12 | $\stackrel{3}{47}$ | 2 |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | 5 | 2 |  |  |  |  |  |  |  |
|  | 1 |  |  |  | 16 | 92 | 75 | 16 |  |  |  |  |  |  | 2 |
|  |  |  |  |  | 8 | 35 | 17 | 3 |  |  |  |  |  |  |  |
|  |  |  |  |  | 8 | 35 | 17 | 3 |  |  |  |  |  |  |  |
|  |  |  |  |  | 3 | 39 |  | 16 |  |  |  |  |  |  |  |
|  |  |  |  |  | 3 | 39 | 36 | 16 |  |  |  |  |  |  |  |
| VIII. Diseases of the skin and of the Cellular Tissue. Gangrene Furuncle |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 1 | 1 |  | 1 | 1 | 2 | 3 | 8 | 29 | 47 |  | 4 |  | 2 |
|  |  | 3 | 1 |  | 2 | 1 |  | 1 | 2 | 2 | 1 | 3 |  |  |  |
| Acute abscess ............ | 11 | 11 | 11 | 4 | 8 | 21 | 6. | 7 | 17 | 11 | 11 | , |  |  |  |
| Other diseases of the skin and annexa ............... |  | 11 | 4 | 1 | 1 | 2 | 5 |  |  | 3 | 4 |  |  |  |  |
| IX. Diseases of the bones and of the Organs of Locomo tion. <br> Diseases of the bones (tuberculosis excepted) .... |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 3 | 18 | 14 | 6 | 6 | 5 | 2 | 4 | 2 | 5 | 3 | 1 |  |  |  |
| Diseases of the joints (tuberculosis and rheumatism excepted) ............ |  | 1 |  |  |  |  |  | 2 | 2 3 | 1 | ${ }^{3}$ | 1 |  |  |  |
| Amputations .............. |  |  | 1 |  | 2 | 4 | 1 | 2 | 1 | 1 | 1. | 1 |  |  |  |
| Other diseases of the organs of locomotion...... |  |  |  |  | 2 | 4 | 1 | 2 |  | 1 |  | 1 |  |  |  |
| X. Malformations |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Congenital malformations (stillbirths not included). | 217 | 39 | 8 | 4 | 1 | 2 | 2 |  | 1 |  |  |  |  |  |  |
| X1. Diseases of Early Infancy. Congenital debility, icterus and sclerema ............. | 844 | 102 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Other diseases peculiar to early infancy |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lack of care. | 19 | 16 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| XII. Old Age. Senility |  |  |  |  |  |  |  |  | 9 | 118 | 937 | 1925 | 472 | 22 | O. |
| XIII. Affections produced by External Causes. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | 1 | 11 | 38 | 30 | 33 | 34 | 16 | 8 | 1 |  | 1 | 1 |
| Suicide by asphyxia..... |  |  |  |  |  | 1 | 4 | 6 | 5 | 2 | 1 |  |  |  | 1 |
| strangulation ........... |  |  |  | 1 | 2 | 11 | 31 | 24 | 40 |  |  |  |  |  |  |
| Suicide by drowning |  |  |  |  | 4 | 11 | ${ }^{3}$ | 8 | 4 | 25 | 10 | 1 | 1 |  | 7 |
| Suicide by firearms.... |  |  |  |  | 5 | 33 | 26 | 22 | 22 | 13 |  |  |  |  |  |
| Suicide by cutting or piercing instruments......... |  |  |  |  | 5 | 3 2 | 26 | 11 | 22 | 10 | 2 | 5 | 1 |  | 1 |
| Suicide by jumping from high places |  |  |  |  |  |  |  |  | 3 | 10 | 2 |  |  |  |  |
| Suicide by crushing |  |  |  |  | 1 | 1 | 1 | 1 |  |  |  |  |  |  |  |
| Other suicides .... |  |  |  |  | 1 | 2 |  |  |  |  |  |  |  |  |  |
| Poisoning by food. | 3 | 10 | 20 | 8 | 5 | 1 | 1 | 3 | 1 | 3 |  |  |  |  |  |
| Other acute poisonings.. | 4 | 4 | 17 | 1 |  | 1 | 4 |  | 11 | ${ }_{3}$ | 2 | 2 |  |  |  |

TABLE NO．30．－SHOWING DEATHS FROM EACH DISEASE BY AGE GROUPS FOR 1909 AND 1910．－Cont．

| Name of Diseases． | Age Grouping． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 范 | $\pm$ | 1 | $\stackrel{9}{1}$ | \％ | 冎 | Or <br> $\substack{1 \\ 1 \\ 7 \\ \hline \\ \\ \hline}$ | 冎 | 8 <br> 1 <br> 8 <br> 8 | \％ | － | 81 | $\stackrel{+}{8}$ | 晨号 |
| Conflagration | 2 | 14 | 63 | 16 | 12 | 13 | 18 | 9 | 9 | 11 | 13 | 5 |  |  | 1 |
| Burns cepted） （conflagration ex－ |  |  |  | 5 | 2 | 4 | 6 | 4 | 1 | 1 |  | 2 |  |  | 1 |
| Absorption of deleterious |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| gases（conflagration ex－ | 1 |  |  |  | 1 | 5 | 3 | 5 | 1 | 1 |  | 4 | 1 |  | 2 |
| Accidental drowning ．．．．．．． | 1 | 1 | 31 | 38 | 96 | 87 | 42 | 41 | 37 | 17 | 5 | 1 | 2 |  | 7 |
| Traumatism by firearms．．．． |  |  | 4 | 11 | 56 | 29 | 28 | 22 | 8 | 2 |  | 1 |  |  |  |
| Traumatism by cutting or piercing instruments ．．．．． |  |  | 2 |  | 3 | 12 |  | 13 | 4 | 3 | 2 | 1 |  |  |  |
| Traumatism by fall．．．．．．．． | 2 | 2 | 6 | 4 | 14 | 39 | 28 | 30 | 37 | 40 | 38 | 28 | 11 |  | 1 |
| Traumatism in mines and quarries |  |  |  | 1 | 1 | 11 | 8 | 5 | 2 | 2 |  |  |  |  | 2 |
| Traumatism by machines．．． |  |  | 1 | 2 | 14 | 22 | 17 | 12 | 17 | 1 |  |  |  |  |  |
| Traumatism by other crush－ ing（vehicles，railroad， |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| landslides，etc．）．．．．．．．．．．． |  | 1 | 19 | 27 | 52 | 141 | 124 | 107 | 71 | 57 | 22 | 5 |  |  | 24 |
| Injuries by animals |  | 1 | 2 | 7 | 6 | 8 | 13 | 7 | 13 | 7 | f | $\stackrel{5}{2}$ |  |  | ． |
| Starvation ．． | ， |  |  |  |  |  | 3 |  |  |  | 1 |  |  |  |  |
| Excessive cold |  |  |  |  |  | 3 | ${ }_{6}^{6}$ | 7 | 3 | 11 | － | 2 |  |  | i |
| Effect of heat． Lightning | 6 |  | 2 | 1 | 2 3 | 10 | 7 | 9 | 5 | 11 | 6 | 2 |  |  | 1 |
|  |  |  |  |  | 3 6 | 6 9 | 4 2 | 2 9 | 2 | 1 |  |  |  |  |  |
| Homicide by firearms．．．．．．． |  | 1 |  |  |  | 6 | 6 | 11 | 3 | 1 |  |  |  |  | 1 |
| Homicide by cutting or piercing instruments ．．．．． |  |  | 1 | 2 | 3 | 3 | 2 | 5 |  |  |  |  |  |  |  |
| Homicide by other means．． | 5 | 1 | 1 |  | 2 | 3 | 1 | 5 | 1 |  | 1 |  |  |  | 1 |
| Fractures（cause not spe－ ciffied） |  |  | 5 | 5 | 16 | 37 | 25 | 27 | 28 | 22 | 31 | 53 | 8 |  |  |
| Other external violence．．．．．． | 18 | 17 | 13 | 7 | 19 | 21 | 19 | ¢5 | 19 | 15 | 13 | ${ }_{1} 4$ | 6 |  | 3 |
| IV．Ill－defined Diseases： |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ill－defined organic disease．． | 2 | 1 |  | 1 | 2 |  | 2 | 5 | 1 | 5 | 31 | 11 | 1 |  |  |
| Sudden death ．．．．．．．．．．．．． | 6 | 5 |  |  | 3 | 7 | 10 | 17 | 12 | 30 | 31 | 7 | 2 |  |  |
| Clause of death not specified or ill－defined | 397 | 292 | 54 | 6 | 12 | 17 | 27 | 46 | 60 | 80 | 80 | 34 | 3 |  | 14 |

TIABLE NO. 31.-SHOWING DEATHS FROM EACH COUNTY ARRANGED ACCORDING TO I'HE CAUSE OF DEAT'H FOR EACH YEAR.

| County. | Typhoid Fever. |  |  | Typhus Fever. |  |  | Relapsing lever. |  |  | Malaria. |  |  | Smallpox. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { ial } \end{aligned}$ | 190 | ${ }^{1910}$ |  |  |  | $\left\|\begin{array}{c} \mathrm{To} \\ \text { tal } \end{array}\right\|$ | 909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { Tal } \end{aligned}$ | 1905 | 1910 | Total. |
| Adams | 1 | 1 | 2 |  |  |  |  |  |  |  |  |  |  |  |  |
| Ashland | 15 | 48 | 63 | ... |  |  |  |  |  |  |  |  |  |  |  |
| Barron | 7 | 5 | 12 |  |  |  |  |  |  |  |  |  |  |  |  |
| Bayfield | 4 |  | 4 |  |  |  |  |  |  | 1 |  | 1 |  |  |  |
| Brown | 9 | 12 | 21 |  |  |  |  |  |  |  |  |  |  |  |  |
| Buffalo |  | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| Burnett |  | 2 | 2 | $\ldots$ |  |  |  |  |  |  |  |  |  |  |  |
| Calumet |  | 2 | 2 |  |  |  |  |  |  |  |  |  |  |  |  |
| Chippewa | 3 | 6 | 9 |  |  |  |  |  |  |  |  |  |  |  | 3 |
| Clark ... | 5 | 6 6 | 11 |  |  |  |  |  |  |  |  |  | 1 |  | 1 |
| Columbia | 4 | $\stackrel{6}{2}$ | 7 |  |  |  |  |  |  | 1 |  | 1 |  |  |  |
| Crawford | 4 | 2 13 | ${ }_{17}^{6}$ |  |  |  |  |  |  | 2 |  | 2 |  |  |  |
| Dodge | 6 | 1 | 7 |  |  |  |  |  |  |  |  |  |  |  |  |
| Door | 2 | 4 | 6 |  |  |  |  |  |  |  |  |  |  |  |  |
| Douglas | 14 | 34 | 48 | $\cdots$ |  |  |  |  |  |  |  |  |  |  |  |
| Dunn | 4 | 1 | 5 | $\cdots$ |  |  |  |  |  |  |  |  | 2 |  | 2 |
| Eau Claire | 8 | 8 | 16 | .. |  |  |  |  |  |  |  |  | 1 | 1 | 2 |
| Florence .- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fond du Lac. | 6 | 4 | 10 |  |  |  |  |  |  |  |  |  |  |  |  |
| Forest |  | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| Grant | 3 | 2 | 5 |  |  |  |  |  |  |  |  |  |  |  |  |
| Green |  | 1 | 2 |  |  |  |  |  |  | 1 |  | 1 |  |  |  |
| Green Lake | 4 |  | 4 |  |  |  |  |  |  |  |  |  |  |  |  |
| Iowa | 1 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| Iron | 2 |  | 3 | $\ldots$ |  |  |  |  |  |  |  |  |  |  |  |
| Jackson | 1 | 2 | 3 | $\ldots$ |  |  |  |  |  |  |  |  |  |  |  |
| Jefferson | 3 | 1 | 4 |  |  |  |  |  |  |  |  |  |  |  |  |
| Juneau. | 3 7 | 3 7 | ${ }^{6} 14$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Kenosha | 7 2 | 7 | 14 2 |  |  |  |  |  |  |  |  |  |  |  |  |
| La Crosse | 7 | $\ddot{9}$ | 16 |  |  |  |  |  |  |  |  |  |  |  |  |
| Lafayette | 1 | 2 | 3 |  |  |  |  |  |  |  |  |  |  |  |  |
| Langlade | 3 | 3 | 6 | $\cdots$ | $\ldots$ |  |  |  |  |  |  |  |  | 1 | 1 |
| Lincoln | 7 | 4 1 | 11 |  |  |  |  |  |  |  |  |  |  |  |  |
| Manitowoc | 1 | 21 | 30 |  |  |  |  |  |  |  |  |  |  |  |  |
| Marathon | 7 | 11 | 18 |  |  |  |  |  |  |  |  |  |  |  |  |
| Marquette |  | 2 | 2 |  |  |  |  |  |  |  |  |  |  |  |  |
| Milwaukee | 91 | 206 | 297 | $\cdots$ | 2 | 2 |  |  |  |  | 1 | 1 | 1 |  | 1 |
| Monroe | 5 | 3 | 8 | ... |  |  |  |  |  |  |  |  |  |  |  |
| Oconto | 2 | $\stackrel{2}{7}$ | 4 | $\cdots$ |  |  |  |  |  |  |  |  | 1 |  | 1 |
| Oneida | 9 |  | 16 |  |  |  |  |  |  |  |  |  |  |  |  |
| Outagamie | 1 | 10 5 | 11 |  |  |  |  |  |  |  |  |  |  |  |  |
| Ozaukee | 2 | 5 1 | 6 3 |  |  |  |  |  |  |  |  |  | 1 |  | 1 |
| Pepin | 2 1 | 4 | 3 5 |  |  |  |  |  |  |  |  |  |  |  |  |
| Polk | 5 | 8 | 13 |  |  |  |  |  |  |  |  |  |  |  |  |
| Portage | 2 | 3 | 5 |  |  |  |  |  |  |  |  |  |  |  |  |
| Price |  | 2 | 2 |  |  |  |  |  |  |  |  |  |  | 1 | 1 |
| Racine | 10 | 24 | 34 |  |  |  |  |  |  |  |  |  |  |  |  |
| Richland | 1 | 1 | $\stackrel{2}{10}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Rock | 6 | 4 | 10 |  |  |  |  |  |  |  |  |  |  |  |  |
| Rusk | 4 | 1 | 5 |  |  |  |  |  |  |  |  |  |  |  |  |
| St. Croix | 2 |  | 8 | $\cdots$ |  |  | .... | … |  |  |  |  |  |  |  |
| Sawk ... | 7 | 1. | 8 |  |  |  |  |  |  |  |  |  |  |  |  |
| Sawyer Shawano | 3 | 3 | 6 |  |  |  |  |  |  |  |  |  |  |  |  |
| Sheboygan | 9 | 8 | 17 |  |  |  |  |  |  |  |  |  | 2 |  | 2 |
| Taylor |  | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| Trempealeau |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Vernon ..... | 5 | 5 | 10 | . |  |  |  |  |  |  |  |  |  |  |  |
| Vilas .... |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Walworth | 5 | 4 | 9 |  |  |  |  |  |  |  |  |  |  |  |  |
| Washburn | 1 | 2 | 3 |  |  |  |  |  |  |  |  |  |  |  |  |
| Washington |  | 4 | 4 |  |  |  |  |  |  |  |  |  |  |  |  |

TABLE NO. 31.-SHOWING DEATHS FROM IACH COUNTY ARRANGED ACCORE:ING TO "IHE" CAUSE OF DEATH FOR EACH YEAR.-COnt.

| Counts. | Typhoid Fever. |  |  | Typhus Fever. |  |  | Relapsing Fever. |  |  | Malaria. |  |  | Smallyox. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal. } \end{aligned}$ | 1909 |  |  |  |  |  | 1909 |  |  | ,909 | 1910 | $\xrightarrow{\text { To- }}$ |
| Waukesha | 4 3 3 | 5 2 | 9 5 |  |  |  |  |  |  | 1 |  | 1 | 1 |  | 1 |
| Waushara | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Winnebago | 12 | 12 | 24 |  |  |  |  |  |  |  |  |  |  |  |  |
| Wood | 3 | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 352 | 558 | 910 |  |  | 2 | $\cdots$ |  |  | 6 | 1 | 7 | 13 | 3 |  |

TABLE NO. 31.-SHOWING DEATHS FROM EACH COUNTY ARRANGED ACCORDING I'O THE CAUSE OF DEA'TH FOR EACH YEAR.-COnt.

| County | Measles. |  |  | scarlet Fever. |  |  | Whooping Cough. |  |  |  | Diphtheria and Croup. |  |  |  | Influenza. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1909 | $/ 1910$ | $0\left\|\begin{array}{c} \mathrm{To} \\ \text { tal. } \end{array}\right\|$ | 1909 | /1910 |  |  | 1909 | 1910 | $0 \left\lvert\, \begin{aligned} & \text { To- } \\ & \text { tal. } \end{aligned}\right.$ |  | 1909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal } \end{aligned}$ |  | 91910 | $\begin{gathered} \mathrm{To} \\ \mathrm{tal} \end{gathered}$ |
| Adams |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ashland |  | 1 |  |  |  |  |  | 5 | 1 | 6 |  | 6 | 4 | 10 | 2 | 1 | 3 |
| Barron |  | 3 | 3 | 8 | 3 |  |  | 2 | 2 | - 4 |  | 3 | 3 | 6 | 3 | 2 | 5 |
| Bayfield Brown |  | 7 | 7 | - | - |  |  |  |  | 1 | 6 | 6 | 10 | 16 |  | 2 | 5 |
| Brown Buffalo | 1 |  |  | 8 | 11 | 19 |  |  | 2 | 2 | 2 | 27 | 14 | 41 | 2 |  | 4 |
| Burnett | 1 | 1 |  |  |  |  |  |  |  |  |  | $\stackrel{2}{5}$ | 1 | 3 |  | 3 | 3 |
| Calumet | 2 |  | 2 | 1 |  | ${ }_{1}^{2}$ |  | 1 | $\stackrel{2}{2}$ | 3 2 |  |  | 4 | 9 | 1 |  | 1 |
| Chippewa | 3 | 4 | 7 |  | 1 |  |  | $\cdots$ | 2 | 2 6 |  | $\begin{aligned} & 3 \\ & 1 \end{aligned}$ | $\cdots$ | 3 6 | 1 |  | 1 |
| Clark | 2 |  | 2 | $\cdots$ | 1 |  |  | 1 | 4 | 5 |  |  | 5 3 3 | 6 10 | 2 3 | 8 4 | $\stackrel{10}{7}$ |
| Coltimbia |  | 1 | 1 |  | 1 | 1 |  | 3 | 3 | 6 | 1 | 1 | 7 | 8 | 11 | 4 | ${ }^{7} 5$ |
| Crawford |  | 1 | 1 |  |  |  |  |  | 1 | 1 |  | , |  | 1 | 8 | 2 | 15. |
| Dane | 1 | 2 | 3 |  | 1 | 1 |  | 4 | 8 | 12 |  | 6 | 5 | 11 | 10 | 10 | 20 |
| Dodge | 2 | 2 | 4 | 3 |  | 3 |  | 9 |  | 9 |  | 4 | 2 | 6 | 2 | 3 | 5 |
| Dour ${ }^{\text {Dous }}$ | 2 |  | 2 | 1 | 1 | 2 |  |  | 3 | 3 |  | 1 | 2 | 3 |  | 1 | 1 |
| Dunn | 1 | 5 | 6 | 24 2 2 | 8 | ${ }_{3}{ }_{3}^{2}$ |  | 10 | 3 | 13 |  | 10 | 14 | 24 |  |  |  |
| Eau Claire | 2 | 2 | 4 | 2 2 | 1. | 3 5 |  |  |  | 3 |  |  | 5 | 6 | 1 |  | 1 |
| Florence. |  | 2 | 4 | 2 |  | 5 |  |  |  |  |  | 5 | 9 | 14 | 4 | 3 | 7 |
| Fond du L | 1 | 6 | 7 | 3 | i | 4 |  | 4 | 1 | 5 |  |  |  | 17 |  |  | 7 |
| Forest |  |  |  |  | 1 |  |  |  |  | 5 |  | 3 | 1 | ${ }_{6}$ | 3 | 4 | 7 |
| Grant |  | 3 | 3 | 2 |  | 2 |  | 1 | 3 | 4 |  | 1 | 8 | 9 | 5 | 3 | 8 |
| Green Lake |  | 3 | 4 |  |  |  |  | 1 |  | 1 |  | 1 |  | 1 |  |  |  |
| Iowa .... | 1 | 3 | 1 |  |  | 7 |  | ${ }^{5}$ |  | 5 |  | 1 | 3 | 4 |  | 2 | 2 |
| Iron |  |  |  | 1 | 2 | 3 |  | 2 | 1 | 3 |  |  | 6 | ${ }^{6}$ | 2 | 1 | 3 |
| Jackson |  |  |  | 2 | 2 | 4 |  | 4 |  | 4 | 11 6 |  | 6 | 17 7 | 1 |  | 5 |
| Jefferson | 1 | 1 | 2 |  | 1 | 2 |  |  | 2 | $\stackrel{4}{2}$ |  | 5. | 5 | ${ }^{7}$ | $\stackrel{2}{2}$ | 3 2 | 5 |
| Juneau |  | 2 | 2 |  | 3 | 3 |  | 2 |  | 2 | 1 | 1 | 7 | 8 | 5 | 1 | 6 |
| Kenosha | 3 | 2 | 5 | 2 | 1 | ${ }_{3}^{3}$ |  |  | 5 | 5 | 1 | 1 | 2 | 3 | 3 | 2 | 5 |
| La Crosse |  |  |  | 4 | 12 8 | 16 |  | 5 | 1 | 6 | 4 | 4 | 3 | 7 | 1 |  | 1 |
| Lafayette |  | 4 | 4 | 2 | 8 | 10 |  |  |  |  | 2 | 2 | 2 | 4 |  | 4 | 4 |
| Langlade |  | 1 | 1 | 1 | $\ldots$ | 1 |  | 1 | 3 | 4 4 4 |  |  |  |  | 10 | 2 | 12 |
| Lincoln |  | 7 | 7 | 1 | 13 | 14 |  | 4 |  | 4 | 1 | 7 | 2 | ${ }^{3}$ | 1 |  | I |
| Manitowoc | 5 | 7 | 5 | 5 | 5 | 10 |  | 8 | 4 | ${ }_{12}$ | 4 |  |  | 11 6 | 1 | $\stackrel{2}{2}$ | 3. |
| Marathon |  |  |  | 18 | 55 | 73 |  | 3 3 | 13 | 16 | 4 | ${ }^{4}$ | 23 | $\begin{array}{r} 6 \\ 30 \end{array}$ | ${ }_{6}^{6}$ | 1 | $\stackrel{8}{7}$ |
| Marinette |  | 2 | 2 | 3 | 9 | 12 |  | 4 | 8 | 12 | 8 | 8 | 4 | 12 | 6 | 1 | 7 <br> 3 |
| Marquette |  |  |  |  |  |  |  | 2 |  | 2 | 2 |  |  | 2 | 2 | 3 | 6 |
| Monroe . | 64 | 35 | 99 | 214 | 923 | 306 |  | 85 | 47 | 82 | 125 |  | 1612 | 86 | 22 | 23 | 45. |
| Oconto |  | 5 | 5 | 1 | 3 3 3 | 3 |  | 7  <br> 5 1 | 13 | 20 | 1 | 11 | 11 | 12 | 6 | 7 | 13 |
| Oneida |  | 1 | 1 | 1 | 6 | 4 |  |  | 7 | 12 | 7 | 1 | 1 | 8 |  | 3 | 3 |
| Outagamie |  | 3 | 3 | 1 | 6 7 | 8 |  | 3 | ${ }^{3}$ | ${ }_{12}$ | 5 |  |  | 1 8 |  |  | ${ }_{6}^{2}$ |

TABLE NO. 31.-SHOWING DEATHS FROM EACH COUNXY ARRANGED ACCORDLNG TO "INE CAUSE OF DEATH FOR EAOH YEAR.-Cont.

| county. | Measles. |  |  | Scarlet Fever. |  |  | Whooping Cough. |  |  | Diphtheria and Croup |  |  | Influenza. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1909 | 1910 |  |  | 1910 |  | 1909 | 1910 | To- tal. | 1909 | 1910 | To- tal. | 1909 |  | $\left\{\begin{array}{l} \text { To- } \\ \text { tal. } \end{array}\right.$ |
| Ozaukee | 3 |  | 3 | 1 | 1 | 2 |  |  |  |  |  |  |  | 1 | 1 |
| Pepin .. |  |  |  |  | 2 | 2 | 1 |  | 1 |  | 2 | 2 | 4 | 2 | 6 |
| Pierce | 1 | 1 | 2 | 1 |  | 1 | 4 |  | 4 | 9 | 1 | 10 | 4 | 1 | 5 |
| Polk | 1 |  | 1 | 1 |  | 1 | $\ldots$ | 6 | 6 | 3 | 4 | 7 | 1 |  | 1 |
| Portage | 1 |  | 5 | 2 | 3 | 5 | 8 | 1 | 9 | 7 | 6 | 13 | 7 | 2 | 9 |
| Price |  | 2 | 2 |  | 1 | 1 |  | 2 | 2 | 4 | 2 |  |  |  |  |
| Racime | 8 | 10 | 18 | 2 | 5 | 7 | 1 | 10 | 11 | 9 | 9 | 18 | 11 | 11 | 22 |
| Richland |  |  |  | 1 |  | 1 | 2 | 1 | 3 |  |  |  | 4 | 1 |  |
| Rock |  | 3 | 3 | 1 | 3 | 4 | 5 | 2 | 7 | 4 | 2 | 6 | :2 | 7 | 19 |
| Rusk |  | 2 | 2 | 1 |  | 1 | 1 | i. | 1 |  | 3 | 3 | $\ldots$ | 2 | $\stackrel{ }{2}$ |
| St. Croix |  |  |  | 1 | 3 | 4 | 6 | 1 | 7 | 2 | 3 | 5 |  |  |  |
| Sauk |  | 1 | 1 | 1 | 3 | 4 | 2 | 3 | 5 | 2 | 2 |  | 4 | 7 | 11 |
| Sawyer |  | 2 | 2 | 1 |  | 1 | 2 |  | 2 | 1 |  | 1 |  |  |  |
| Shawano. | 2 |  | 2 | , | 2 | 9 | 2 | 1 | 3 | 19 | 7 | 17 |  | 2 | $\stackrel{2}{2}$ |
| Sheboygan | 1 | 4 | 5 | 4 | 3 | 7 |  |  |  | 13 | $\stackrel{7}{2}$ | 20 | 1 |  | 1 |
| Taylor | 2 |  | 2 | 1 |  | 1 | 3 |  | 3 | 5 | 2 | 7 | 1 | 1 | $\stackrel{2}{2}$ |
| Trempealeau |  | 2 | 2 |  | 1 | 5 |  | 1 | 1 | 5 | 4 | $\stackrel{9}{5}$ | 2 | ${ }_{6}^{6}$ | 4 |
| Vernon |  | 2 | 2 | 2 | 3 | 5 |  |  |  | 2 | 2 | $\stackrel{5}{2}$ | 2 | 2 | 4 |
| Vilas ... |  |  |  |  |  |  |  |  | 1 | ${ }_{2}^{2}$ |  | 2 4 |  |  |  |
| Waiworth Washburn |  |  |  |  |  | 1 | 1 | 4 | 5 | 2 | 2 1 | 1 | 8 | 1 | $\stackrel{11}{\square}$ |
| Washburn |  | 1 3 | 1 <br> 3 | 1 | 4 | 1 | 2 | 1 | 3 | 2 | 1 | 1 | 6 | $\stackrel{1}{2}$ | $\stackrel{3}{8}$ |
| Waukesha | 4 |  | 4 | 3 | 1 | 4 | 6 | 1 | 7 | 5 | 2 | 7 | 8 | 3 | 11 |
| Waupaca |  |  |  |  | 2 | 2 | 2 | 3 |  | 4 | 1 | 5 | 2 | 3 | 5 |
| Waushara | 3 |  |  | 5 | 1 | 6 |  | 1 | 1 | 6 | 2 | 8 | 2 | 6 | 8 |
| Winnebago |  | 12 | 12 |  | 1 | 1 | 3 | 5 | 4 | , | 10 | 19 | 3 | 4 | 7 |
| Wood | 2 | 1 | 3 |  | 1 | 1 | 4 | 5 | 9 | 2 |  | 2 |  | 1 | 1 |
| Total | 120 | 158 | 278 | 352 | 304 | 656 | 197 | 200 | 397 | 411 | 429 | 840 | 219 | 187 | 403 |

Z ${ }^{2} B L E$ NO. 31.-SHOWING DEATHS FROM EACH COUNIY ARRANGED ACEORDING TO THE CAUSE OF DEATH FOR EACH YEAR.-Cont.

| County | Miliars Fever. |  |  | Asialic Cholera. |  |  | Cholera <br> Nostras. |  | Insentery. |  |  | Plague. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1909 | 1910 | To- <br> tal. | 1909 | 1910 | Tol | 190: | $910 \begin{gathered} \text { Too } \\ \text { tal. } \end{gathered}$ | 1909 | 1910 |  | 190. | $1910 \begin{aligned} & \text { To- } \\ & \text { tal. }\end{aligned}$ |
| Adams |  |  |  |  |  |  | 1 | 1 | 1 | 1 | 2 |  |  |
| Ashland |  |  |  |  |  |  |  |  | 2 | 1 | 3 |  |  |
| Barron |  |  |  |  |  |  |  |  |  | 1 | 1 |  |  |
| Bayfield |  |  |  |  |  |  |  |  | 2 |  | ${ }_{11}^{2}$ |  |  |
| Brown |  |  |  |  |  |  |  |  | 3 | 8 | 11 |  |  |
| Buffalo |  |  |  |  |  |  |  |  |  | 1 | 1 |  |  |
| Burnett |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Calumet |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Chippewa |  |  |  |  |  |  |  |  |  | 1 | 1 |  |  |
| Clark .... |  |  |  |  |  |  |  |  | 1 | 1 | $\frac{2}{5}$ |  |  |
| Columbia |  |  |  |  |  |  |  |  | 3 | 2 | 5 <br> 3 |  |  |
| Dane .. |  |  |  |  |  |  |  |  |  | 7 | 11 |  |  |
| Dodge |  |  |  |  |  |  |  |  | 2 | 6 | 8 |  |  |
| Door |  |  |  |  |  |  |  |  | 1 |  | 1 |  |  |
| Douglas |  |  |  |  |  |  | $\cdots$ |  | 1 | 1 | 2 |  |  |
| Dunar .... |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Eav Claire |  | 1 | 1 |  |  |  | ... | .... | 1 | 1 | 2 |  | .... $\cdot$. |
| Florence . ${ }^{\text {Fe. }}$ |  |  |  |  |  |  |  |  |  |  | 10 |  |  |
| Eond du Lac. Forest |  |  | . |  |  |  |  |  |  |  |  |  |  |
| Grant |  |  |  |  |  |  | 1 | … 1 |  | 3 | 3 |  | . |

TABLE NO' 31.-SHOWING DEATHS FROM EACH 'COUNTY ARRANGED ACOORDING "TO THE CAUSE OF DEAI'H F'OR EACH YEAR.—Cont.


TABLE NO. 31.-SHOWING DEATHS FROM EACH COUNTY ARRANGED ACCORDING TO THE CAUSE OF DEATH FOR EAOH YEAR.-Cont.


TABLE NO. 31--SHOWING DEATHS FROM EAOH COUNTY ARRANGED AOCORDING 'TO' THE CAUSE OF DEATH FOR EACH YEAR.-COnt.

| County. | Yellow Fever. |  |  | Leprosy. |  |  | Erysipelas. |  |  | Other epidemic diseases. |  |  | Purulent infection septichaemia. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1909 |  | $\begin{aligned} & \text { To- } \\ & \text { tal. } 19 \\ & \hline \end{aligned}$ |  | 1910 | $\left\lvert\, \begin{aligned} & \text { To- } \\ & \text { tal. } \end{aligned}\right.$ |  | 1910 | $\left\lvert\, \begin{gathered} \text { To } \\ \text { tal. } \end{gathered}\right.$ | 1909 | 1910 | Total. | 1909 | 1910 | $\left.\right\|_{\text {To- }} ^{\text {tal. }}$ |
| Washington .. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Waukesha |  |  |  |  |  |  | 2 |  | ${ }_{2}^{1}$ |  |  |  | 2 |  | 4 |
| Waupaca . |  |  |  |  |  | $\cdots$ | 3 | 1 | 2 4 4 |  | 1 | 1 | 2 | 2 <br> 3 | 4 |
| Winnebago. |  |  |  |  |  | ... | ${ }_{8}^{2}$ | 2 | 2 | … |  |  | 1 | 2 | 3 |
| wood ...... |  |  |  |  |  |  | 8 | 2 | 5 | .... | .... | $\ldots$ | 6 | 7 | 13 |
| Total |  |  | - |  |  |  |  |  |  |  |  |  | 2 | 2 | 4 |
| Total |  |  | ... |  |  | 1 | 67 | 71 | 138 |  | 2 | 5 |  | 148 | 316 |

TABLE NO. 31.-SHOWING DEATHS FROM EACH OOUNTY ARRANGED AGCORDING TO THE CAUSE OF DEATH FOR EACH YEAR.-CONt.


TABLE NO. 31.-SHOWING DEATHS FROM EACH COUNTY ARRANGED ACCORDING TO THE. CAUSES OF DEATH FOR EACH YEAR.-Cont.

| County. | Glanders. |  | Anthrax. |  |  | Rabies. |  |  | Tetanus. |  |  | Mycoses. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $1909 \mid 1910$ | $\left\lvert\, \begin{aligned} & \mathrm{ToO}-1 \\ & \text { tal. } \end{aligned}\right.$ | 19091 | 1910 | To- tal. | 1909 |  |  | 1909 | 1910 | $\left\|\begin{array}{l} \mathrm{To}- \\ \mathrm{tal} \end{array}\right\|$ | 1909 | 1910 | Total. |
| Monroe |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Oconto |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Oneida |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Outagamie |  |  |  |  |  | 1 |  | 1 | 2 | $\ldots$ | 2 |  |  | $\ldots$. |
| Ozauke |  |  |  |  |  |  |  |  |  | 1 | 1 |  |  |  |
| Pepin |  |  |  |  |  |  |  |  | 1 |  | 1 |  |  |  |
| Pierce Polk |  |  |  |  |  |  |  |  | 1 | 1 | 1 |  |  |  |
| Portage |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |
| Price ... |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Racine |  |  |  | . |  |  |  |  |  | 2 | 2 |  |  |  |
| Richland |  |  |  | ... |  |  |  |  |  |  |  |  |  |  |
| Rock |  |  |  |  |  |  |  | ... | i | 4 | 5 |  |  |  |
| Rusk |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sauk ... |  |  |  |  |  |  |  |  |  |  |  | 1 |  | i |
| Sawyer ... |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Shawano Sheboygan |  |  |  |  |  |  |  | .... | 1 2 | 1 | 1 |  |  |  |
| Taylor |  |  |  |  |  |  |  |  | 2 | 1 | 3 |  |  |  |
| Trempealeau |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Vernon |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Vilas |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Walworth |  |  |  |  |  |  |  |  | 1 |  | 1 |  |  |  |
| Washburn |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Washington |  |  |  |  |  |  |  |  |  | 2 | 2 |  |  |  |
| Waukesha |  |  |  |  |  |  |  |  | 1 |  | 1 |  |  |  |
| Waupaca |  |  |  |  |  |  |  |  | 2 | 1 | 3 |  |  |  |
| Waushara |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |
| Winnebago |  |  |  |  |  |  | 2 | 2 | $\cdots$ |  | 1 |  |  |  |
| Wood | .... |  |  |  |  |  |  |  | 1 |  | 1 |  |  |  |
| Total |  |  | 1. | ... | 1 | 1 | 4 | 5 | 38 | 27 | 65 | 3 | 5 | 8 |

TABLE NO. 31.-SHOWING DEATHS FROM EACH COUNTY ARRANGED ACCORDING TO THE CAUSES OF DEATH FOR EACH YEAR.-Cont.


TABLE NO．31．－SHOWING DEATHS FROM EAOH COUNTY ARRANGED ACCORD－ ING TO＇THE CAUSES OF DEATH，FOR EACH YEAR．

| Counts． | Pellagra． |  |  | Beriberi． |  |  | Tuberculosis of the lungs． |  |  | Acute miliary tuberculosis． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \circ .0 \\ & \text { O. } \\ & \hline 10 \end{aligned}$ | $\stackrel{\dot{\theta}}{\underset{\sim}{2}}$ |  | 苞 | $\stackrel{\dot{\theta}}{\stackrel{0}{0}}$ | $\begin{aligned} & \text { సi } \\ & \stackrel{0}{0} \end{aligned}$ | 兑 | $\stackrel{\dot{\sigma}}{\stackrel{\rightharpoonup}{\sigma}}$ |  | 守 | \％ |  |
| Dodge |  |  |  |  |  |  | 38 | 38 | 76 | 1 |  | 1 |
| Door |  |  |  |  |  |  | 13 | 8 | 21 |  |  |  |
| Douglas |  |  |  |  |  |  | 37 | 52 | 89 |  |  |  |
| Dunn |  |  |  |  |  |  | 20 | 19 | 39 |  |  |  |
| Eau Claire |  |  | ．．． |  |  | ．．．． | 33 | 28 | 61 | ．．．．． | 1 | 1 |
| Florence ．．．． |  |  |  |  |  |  | 2 |  | 2 |  |  |  |
| Fond du Lac |  |  |  |  |  |  | 50 3 | 47 2 | 97 |  | 2 | 2 |
| Grant |  |  |  |  |  |  | 34 | 30 | 64 |  |  |  |
| Green | 1 |  | 1 |  |  |  | 13 | 16 | 29 |  |  |  |
| Green Lake |  |  |  |  |  |  | 14 | 13 | 27 |  |  |  |
| Iowa |  |  |  |  |  |  | 25 | 24 | 49 |  |  |  |
| Iron |  |  |  |  |  |  | 5 | 1 | 6 | 1 |  | 1 |
| Jackson |  |  |  |  |  |  | 15 | 11 | 26 |  |  |  |
| Jefferson |  |  |  |  |  |  | 28 | 33 | ${ }_{6}^{61}$ |  | 1 | 1 |
| Juneau |  |  |  |  |  |  | 12 | 17 | 29 36 |  | 1 | 1 |
| Kewaunce |  |  |  |  |  |  | 18 | 12 | 30 | 1 |  | 1 |
| La Crosse |  |  |  |  |  |  | 47 | 48 | 95 | 1 |  | 1 |
| Lafayette |  |  |  |  |  |  | 11 | 12 | 23 | 2 | 2 | 4 |
| Langlade |  |  |  |  |  |  | 8 | 6 | 14 | 1 |  | 1 |
| Lincoln ． |  |  |  |  |  |  | 18 | 9 | 27 | 1 |  | 1 |
| Manitowoc |  |  |  |  |  |  | 33 | 36 | 69 |  |  |  |
| Marathon |  |  |  |  |  |  | 29 | 39 | 68 | 1 |  | 1 |
| Marinette |  |  |  |  |  |  | 31 | 33 | 64 |  |  |  |
| Marquette | ．．． | ．．． | ．．． | ．．． |  | ．．．． | 8 | 8 | 16 | 1 |  | ． 1 |
| Milwauke |  | ．．． |  |  |  |  | 481 | 544 | 1，025 | 19 | 11 | 30 |
| Monroe |  |  |  |  |  | $\cdots$ | 15 | 26 | 41 |  |  |  |
| Oconto |  |  |  |  |  |  | 23 10 | 15 | 38 |  | 1 | 1 |
| Outagamie | ．．． | ．． | ．． |  |  |  | 47 | 46 | 93 | i | 1 | 1 |
| Ozaukee |  |  |  |  |  |  | 13 | 9 | 22 | 1 |  | 1 |
| Pepin |  |  |  |  |  |  | 2 | 2 | 4 | 1 |  | ． 1 |
| Pierce |  | 1 | 1 |  |  |  | 19 | 12 | 31 |  | 2 | 2 |
| Polk ．． |  |  | ．．． |  |  | $\ldots$ | 13 | 13 | 26 | $\ldots$ | 1 | 1 |
| Portage |  |  |  |  |  | $\cdots$ | 32 | 24 | 56 |  | 3 | 3 |
| Price Racine |  |  |  |  |  | $\ldots$ | 5 58 5 | 6 59 | 111 |  |  | 1 |
| Richland |  |  | $\ldots$ |  |  |  | 18 | 16 | 34 | 1 |  | 1 |
| Rock |  |  |  |  |  |  | 43 | 37 | 80 | 2 | 3 | 5 |
| Rusk |  |  |  |  |  |  | 7 | 6 | 13 |  | 1 | 1 |
| St．Croix |  |  |  |  |  | ． | 14 | 18 | 32 |  |  |  |
| Sauk ．．．． |  |  |  |  |  | $\ldots$ | 26 | 20 | 46 |  |  |  |
| Sawyer |  |  |  |  |  | ．．．． | 4 | 6 | 10 |  |  |  |
| Shawano ． |  |  | ．． |  |  |  | 27 | 17 | 44 |  | 1 | 1 |
| Sheboygan Taylor | ． | ． | $\cdots$ | ．．． |  |  | $\begin{array}{r}42 \\ 3 \\ \hline\end{array}$ | 47 | 89 | 1 |  | 1 |
| Taylor ．．．．． |  |  |  |  |  |  | 3 | 6 | 9 |  |  |  |
| Trempealeau |  | $\cdots$ | ．． |  |  |  | 29 | 14 | 43 |  |  |  |
| Vernon |  |  |  |  |  |  | 23 | 31 | 54 |  | 1 | 1 |
| Wilas ．．．． |  |  |  |  |  |  | 11 | 3 | 4 | 1 |  | 1 |
| Walworth |  |  |  |  |  |  | 11 | 20 | 31 | 1 | 1 | 2 |
| Washburn |  |  |  |  |  |  | 3 | 6 | 9 |  |  |  |
| Washington |  |  |  |  |  |  | 18 | 13 | 31 |  |  |  |
| Waukesha |  |  |  |  |  |  | 37 | 47 | 84 |  |  |  |
| Waupaca |  |  |  |  |  |  | 21 | 22 | 43 | 1 | 1 | 2 |
| Waushara |  |  |  |  |  |  | 6 | 9 | 15 |  | 3 | 3 |
| Winnebago |  |  |  |  |  |  | 59 | 52 | 111 | 1 | 1 | 2 |
| Wood |  |  |  |  |  |  | 21 | 13 | 34 |  |  |  |
| Total | 1 | 2 | 3 |  |  |  | 2，086 | 2，031 | 4，117 | 49 | 44 | 93 |

TABLE NO．31．－SHOWING DEATHS FROM EACH COUNTY ARRANGED ACCORD－ ING TO I＇HE CAUSES OF DEATH，FOR EACH YEAR．－Cont．

| County． | Tubercular meningitis． |  |  | Ablominal tuberculosis． |  |  | Pott＇s disease． |  |  | White swelling． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \％ | $\stackrel{\circ}{\circ}$ | \％ |  | $\dot{\underset{\Xi}{\dot{E}}}$ | － | 守 | 家 | 苞 | $\begin{aligned} & \text { B. } \\ & \stackrel{8}{2} \end{aligned}$ | $\stackrel{\circ}{\circ}$ | － |
| Adams |  | 1 | 1 |  |  |  |  |  |  |  |  |  |
| Ashland | 3 | 2 | 5 | 2 |  | 2 |  |  |  |  |  |  |
| Barron | 1 |  | 1 | 2 |  | 2 |  |  |  |  |  |  |
| Bayfield | 3 |  | 4 | 3 |  | 3 | 1 |  | 1 |  |  |  |
| Brown | 5 | 6 | 11 | 7 |  | 7 | 2 |  | 2 |  |  |  |
| Buffalo Burnett | 1 |  | 1 | 1 |  | 1 |  |  | ．．． |  |  |  |
| Calumet | 1 | 1 | 2 | 2 |  | 2 |  |  |  |  |  |  |
| －Chiprewa | 1 | 1 | 2 |  |  |  | 1 |  | 1 |  |  |  |
| Clark ．．． |  |  |  | 2 |  | 2 | 1 |  | 1 |  |  |  |
| Columbia | $i$ |  | i | 2 |  | 2 |  |  | 1 |  |  |  |
| Crawford | 2 | 2 | 4 | 3 |  | 3 | ．． |  |  |  |  |  |
| Dane ． | 2 | 2 | 4 | 2 |  | 2 |  |  |  |  |  |  |
| Dodge | 1 |  | 1 | 2 | i | 3 | 1 | $\ldots$ | 1 |  |  |  |
| Dour ${ }^{\text {Das }}$ | 6 | 2 | 8 | ${ }_{3}^{1}$ |  | 4 | 1 |  | 1 |  |  |  |
| Dunn ．． | 6 | 2 | 8 | $\stackrel{1}{2}$ | 1 | 4 2 2 | $\ldots$ |  |  |  |  |  |
| Eau Claire | 4 | 5 | 9 | 2 | 1 | 3 |  |  |  |  |  |  |
| Florence | 1 |  | 1 |  |  |  |  |  | ．．． |  |  |  |
| Fond du Lac． | 1 | 1 | 2 | 3 | 1 | 4 | ．． |  | $\ldots$ |  |  |  |
| Forest | 1 | 1 | 2 |  |  |  |  |  |  | ．．． |  |  |
| Grant | 1 |  | 1 | 1 | 2 | － | $\cdots$ |  | $\ldots$ |  |  |  |
| Green | 1 | 1 | 2 |  |  |  |  |  |  |  |  |  |
| Green Lake | 1 | 2 | 3 |  |  |  |  |  |  |  |  |  |
| Iowa |  | 1 | 1 | 1 |  | 1 |  |  | ．${ }^{\text {．}}$ |  |  |  |
| Iron | 1 |  | 1 | 1 |  | 1 |  |  | ． | ．． |  |  |
| Jackson |  |  |  |  |  |  |  |  | $\cdots$ |  |  |  |
| Jefferson | 2 |  | 2 |  |  | 2 | $\cdots$ |  | ． | $\ldots$ |  |  |
| Juneau | 1 | 1 | 2 | 2 | 2 | 4 |  |  | $\cdots$ |  |  |  |
| Kenosha | 1 |  | 1 | 2 | 1 | 3 |  |  |  |  |  |  |
| Kewaunee | 1 |  | 1 | 2 | 1 | 3 | 1 |  | 1 |  |  |  |
| La Crosse | 2 |  | 2 | 1 | ， | 1 | ．．． |  | ．． |  |  |  |
| Lafayette Langlade | 2 |  | 2 | 2 | 1 | 3 | ．． |  | ．．． |  |  |  |
| Lincoln | 2 |  | 3 | 2 | 1 |  |  |  |  |  |  |  |
| Manitowoc |  | 3 | 3 | 1 | 3 | 4 | 1 |  | 1 |  |  |  |
| Marathon | 2 |  | 3 |  | 2 | 2 |  |  |  |  |  |  |
| Marinette | 1 | 4 | 5 | 2 | 1 |  | 1 |  | 1 |  |  |  |
| Marquette |  | 1 | 1 | 1 |  | 1 |  |  |  |  |  |  |
| Milwaukee | 17 | 29 | 46 | 4 | 13 | 17 | 3 | 1 | 4 |  |  |  |
| Monroe | 1 | $\stackrel{2}{2}$ | 3 |  |  |  |  |  |  |  |  |  |
| Oconto | 1 | 2 | 3 |  |  |  |  |  | ． | $\ldots$ |  |  |
| Oneida ${ }^{\text {Onamie }}$ | 6 |  |  |  |  |  |  |  |  | $\cdots$ |  |  |
| Ozaukce ． | 2 |  | 2 | ．．．．． |  | $\cdots$ | $\ldots$ |  | ． | $\cdots$ |  |  |
| Pepin ．． |  |  |  |  | 1 | 1 | $\ldots$ |  | $\ldots$ | $\cdots$ |  |  |
| Pierce |  | 2 | 2 |  |  |  | $\cdots$ | 3 | 3 | $\cdots$ |  |  |
| Polk ． |  | 1 | 1 |  | $\cdots$ | 1 | $\cdots$ |  |  |  |  |  |
| Portage | 1 | 1 | 2 |  |  |  |  |  |  |  |  |  |
| Price |  |  |  |  | 1 | 1 |  |  |  |  |  |  |
| Racina | 5 | 4 | 9 | 1 |  | 1 | 1 |  | 1 |  |  |  |
| Richland |  | 1 | 1 | 1 | 1. | 2 | $\ldots$ |  |  |  |  |  |
| Rock |  | 3 | 3 | 1 | 2 | ， | ．．． |  |  |  |  |  |
| Rusk |  |  |  |  |  |  |  |  |  |  |  |  |
| St．Croix | 2 |  | $\stackrel{2}{2}$ | ${ }_{2}^{2}$ |  | 2 | 1 |  | 1 |  |  |  |
| Sawyer |  |  | 2 | 2 |  | 2 |  |  |  |  |  |  |
| Shawano | 2 |  | 3 | 2 | 2 |  |  |  |  |  |  |  |
| Sheboygan | 6 |  | 13 | 2 |  | 2 | 1 | 1 | 2 |  |  |  |
| Taylor ．．．．． |  | 1 | 1 |  |  |  |  |  |  |  |  |  |
| Trempealeau | 3 |  | 3 | 3 | 1 |  |  |  |  |  |  |  |
| Wernon ．．．． | 1 |  | 5 |  | 1 |  |  | 1 | 1 |  |  |  |

TABLE NO. 31.-SHOWING DEATHS FROM EACH COUNTY ARRANGED ACOOREING TO I'HE C'AUSES OF DEATH, FOR EACH YEAR.-C'Ont.


TABLE NO. 31.-SHOWING DEATHS FROM EACH COUN'IY ARRANGED ACCORDING TO THE CAUSES OF DEATH FOR EACH YEAR.-Cont.

| County | Tuberculosis of other organs. |  |  | Disseminated tuberculosis. |  |  | Rickets. |  |  | Syphilis. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \dot{8} \text { 8. } \\ & \text {. } \end{aligned}$ | 옹 |  | $\underset{-0}{8}$ | $\stackrel{\dot{\square}}{\stackrel{\circ}{-}}$ | - | \% | $\stackrel{\circ}{9}$ | 范 | \% | $\stackrel{\circ}{9}$ | $\underset{\sim}{ \pm}$ |
| Adams |  |  |  |  | 1 | 1 | 1 | . | 1 |  |  |  |
| Ashland | 4 | 2 | ${ }^{6}$ |  |  |  |  |  |  | 1 |  |  |
| Barron | 1 | 1 | 2 | ..... | ..... | ..... |  |  |  |  |  |  |
| Bayfield | 2 | 7 | 9 | 2 |  | 2 |  |  |  | 5 | 14 | 1 |
| Buffalo |  | 2 | 2 |  |  |  |  |  |  |  | 14 | 1 |
| Burnett |  | 1 | 1 |  |  | . | 1 |  | 1 |  |  |  |
| Calumet |  | 2 | 2 |  |  |  |  |  |  |  |  |  |
| Chippewa |  | 2 | 2 | 1 |  | 1 |  |  |  |  |  |  |
| Clark ... | 1 |  | 1 | 1 |  | 1 | ..... |  |  |  |  |  |
| Columbia |  | 4 | 4 | 3 |  | 3 | ..... |  |  |  |  |  |
| Crawford |  |  |  |  |  |  |  |  |  |  |  |  |
| Dane | 2 | 10 | 12 | 2 |  | 2 |  |  |  |  |  |  |
| Dodge |  | 4 | 5 | 1 |  | 1 |  | $\ldots$ |  |  |  |  |
| Door |  |  | 6 | 1 |  | 1 |  |  |  |  |  |  |
| Douglas Dunn | 2 | 4 | 6 1 | 1 | i | 1 |  |  |  |  |  | 2 |
| Eau Claire | 2 | 1 | 3 |  | 1 | 1 |  |  |  |  | $x$ | 1 |
| Florence |  |  |  |  |  |  |  |  |  |  |  |  |
| Fond du Lac. | 1 | 1 | 2 |  |  |  |  |  |  |  |  |  |
| Forest | 1 |  | 1 |  |  |  |  |  |  |  |  | 1. |
| Grant | 2 |  | 2 |  |  |  |  |  |  |  |  |  |
| Green Green Lake | 1 |  | $1$ | 1 |  | 1 | .... |  | . |  |  |  |
| Green Lake |  |  | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |  | 1 | 1 |  |  |  |  |  | 1 |
| Iron. |  |  |  |  |  |  |  |  |  |  |  |  |
| Jackson |  | 2 | 2 |  | 1 | 1 |  |  |  |  |  |  |
| Jefferson |  | 4 | 4 |  |  |  |  |  |  |  |  |  |
| Juneau |  |  | 1 |  |  |  |  |  |  |  |  |  |

TABLE` NO. 31.-SHOWING DEATHS FROM EACH COUNTY ARRANGED AOCORDING TO THE CAUSES OF DEATH FOR EACH YEAR.-Cont.


TABLE NO. 31.-SHOWING DEATHS FROM EACH COUNTY ARRANGED ACCORDING TO THE CAUSES OF DEATH, FOR EA:OH YEAR.-CONt.

| County. | Gonococeus infection. |  |  | Cancer and other malignant tumors of the buccal cavity. |  |  | Cancer and other malignanttumor's of the stomach, liver. |  |  | Cancer and other malignant tumors of the peritonaeum, intestines, rectum. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 合 | $\dot{9}$ | $\begin{aligned} & \text { ت } \\ & \text { ت } \\ & \text { E } \end{aligned}$ | 8. | $\dot{\theta}$ | $\begin{aligned} & \text { J } \\ & \stackrel{0}{0} \\ & \text { ᄐ } \end{aligned}$ | $\begin{aligned} & \dot{8} \\ & \text { B. } \end{aligned}$ | $\stackrel{\dot{0}}{\stackrel{\rightharpoonup}{9}}$ | \% $\stackrel{0}{0}$ H | 守 | $\stackrel{0}{0}$ | $\begin{aligned} & \text { تّ } \\ & \stackrel{0}{0} \\ & \text { H, } \end{aligned}$ |
| Adams |  |  |  |  |  |  | 4 | 2 | 6 | 1 | 2 | 3 |
| Ashland |  |  |  |  | 1 | 1 | 8 | 4 | 12 | 1 | 2 | 3 |
| Barron |  |  |  | 1 | 3 | 4 | 4 | 6 | 10 | 3 | 2 | 5 |
| Bayfield |  |  |  |  |  |  | 3 | 1 | 4 | 1 |  | 1 |
| Brown |  |  |  | 1 | 4 | 5 | 27 | 33 | 60 | 6 | 6 | 12 |
| Buff alo |  |  |  | 1 | 2 | 3 | 7 | 5 | 12 |  | 2 | 2 |
| Burnett |  |  |  | 1 | 1 | 2 | 2 | 4 | 6 | 2 |  | 2 |
| Calumet |  |  |  |  |  |  | 5 | 12 | 17 |  | 1 | 1 |
| Chippewa |  |  |  | 2 | 1 | 3 | 14 | 7 | 21 |  | 3 | 3 |
| Clark |  |  |  | 1 |  | 1 | 7 | 6 | 13 | 1 | 3 | 4 |
| Columbia |  |  |  |  | 2 | 2 | 10 | 14 | 24 | 6 | 2 | 8 |
| Crawford |  |  |  |  |  |  | 7 | 3 | 10 | 1 | 2 | 3 |
| Dane |  |  |  | 6 | 6 | 12 | 23 | 27 | 50 | 6 | 3 | 9 |
| Dodge |  |  |  | 3 | 2 | 5 | 20 | 23 | 43 | 3 | 5 | 8. |
| Door |  |  | . | 1 | 1 | 2 | 5 | 7 | 12 | 3 |  | 3 |
| Douglas | .. |  |  | 2 | 5 | 7 | 8 | 8 | 16 |  | 2 | 2 |
| Dunn |  | .. |  | 3 | 1 | 4 | 10 | 9 | 19 |  |  |  |
| Eau Claire |  |  |  |  | 8 | 8 | 10 | 12 | 22 | 1 | 3 | 4 |
| Florence . |  |  |  |  |  |  |  | 1 | 1 |  |  |  |
| F'ond du Lac | 1 | .. | 1 | 2 | 1 | 3 | 14 | 27 | 41 | 6 | 9 | 15 |
| Forcst |  |  |  |  | 1 | 1 | 1 |  | 1 |  |  |  |
| Grant | $\ldots$ | . |  | 4 | 3 | 7 | 11 | 9 | 20 | 3 | 4 | 7 |
| Green |  |  |  | 2 | 4 | 6 | 3 | 8 | 11 | 2 | 2 | 4 |
| Green Lake |  | $\cdots$ |  | 2 | 1 | 3 | 10 | 7 | 17 |  | 1 | 1 |
| Iowa |  | .. |  |  |  |  | 7 | 4 | 11 |  | 3 | 3 |
| Iron ... | . |  |  |  |  |  |  | 2 | 2 |  |  |  |
| Jackson |  | $\cdots$ |  | 2 |  | 2 | 4 | 7 | 11 |  |  |  |
| Jefferson |  |  |  | 1 | 1 | 2 | 13 | 9 | 22 | 5 |  | $\ddot{5}$ |
| Juneau |  |  |  |  |  |  | 3 | 9 | 12 | 3 |  | 3. |
| Kenosha |  |  | $\cdots$ | 3 | 1 | 4 | 10 | 10 | 20 |  | $\stackrel{2}{2}$ | 2 |
| Kewaunee |  |  |  | 2 | 1 | 3 | 5 | 6 | 11 |  | 2 | 2 |
| La Crosse |  |  |  | 3 | 5 | 8 | 17 | 25 | 42 | 2 | 1 | 3 |
| Lafayette |  |  |  | 4 | 4 | 8 | 4 | 5 | 9 | 4 | 1 | 5 |
| Langlade |  |  |  | 1 | 1 | 2 | 4 | 4 | 8 | 1 | 1 | 2 |
| Lincoln . |  |  |  | 1 | 1 | 2 | 4 | 4 | 8 | 1 |  | 1 |
| Manitowoc |  |  |  | 5 | 1 | 6 | 20 | 16 | 36 | 3 | 2 | 5 |
| Marathon |  |  |  | 2 | 2 | 4 | 19 | 14 | 33 | 4 | 1 | 5 |
| Marinette |  |  |  | 1 | 3 | 4 | 17 | 5 | 22 | 3 | 1 | 4 |
| Marquette |  |  |  | 1 |  | 1 | 5 | 4 | 9 | 1 | 1 | 2 |
| Milwaukee | 1 | 1 | 2 | 25 | 32 | 57 | 144 | 150 | 274 | 25 | 43 | 68 |
| Monroe . |  |  |  | 3 | 4 | 7 | 5 | 9 | 14 | 2 | 5 | 7 |
| Oconto |  |  |  |  | 2 | 2 | 10 | 10 | 20 |  | 2 | 2 |
| Oneida |  |  | ... |  | 1 | 1 | 5 |  | 5 | 1 | 2 | 3 |
| Outagamie |  |  |  | 3 | 3 | 6 | 14. | 18 | 32 | 3 | 5 | 8 |
| Ozaukee . |  |  |  | 3 | 1 | 4 | 3 | 4 | 7 | 1 | 2 | 3 |
| Pepin |  |  |  |  | 1 | 1 | 3 | 1 | 4 |  |  |  |
| Pierce |  |  | .. | 2 | 1 | 3 | 3 | 4 | 7 | 2 | 1 | 3 |
| Polk |  |  |  |  |  |  | 6 | 10 | 16 | 1 | 1 | 2 |
| Portage |  |  | ... | 2 | 2 | 4 | 8 | 8 | 16 | 3 | ${ }^{\text {a }}$ | 6 |
| Price |  |  |  |  |  |  | 4 | 2 | 6 |  |  |  |
| Racine |  |  |  | 1 | 1 | 2 | 16 | 24 | 40 | 2 | 11 | 13 |
| Richland | 1 |  | 1 | 1 | 1 | 2 | 6 | 2 | 8 |  | 2 | 2 |
| Rock |  |  | . | 8 | 3 | 11 | 22 | 20 | 42 | 3 |  | 10 |
| Rusk |  |  |  | 1 |  | 1 |  | 3 | 3 | 2 | 1 | 3 |
| St. Croix |  |  |  | 1 | 2 | 3 | 9 | 13 | 22 | 4 | 2 | 6 |
| Sauk |  | $\cdots$ |  | 2 | 2 | 4 | 5 | 15 | 20 | 1 | 4 | 5 |
| Sawyer . |  |  |  |  | 1 | 1 |  |  |  |  |  |  |
| Shawano |  |  |  |  |  |  | ${ }^{6}$ |  | $16$ |  |  | ${ }_{12}^{2}$ |
| Sheboygan Taylor |  | $\cdots$ |  | 2 | 1 | 3 | 18 5 | 30 5 | 10 | 9 | 3 | 12 1 |

TABLE NO．31．－SHOWING DEATHS FROM EACH COUNTY ARRANGED ACCORD． ING TO THE CAUSES OF DEATH，FOR EACH YEAR．－Cont．

| County． | Gonococcus infection． |  |  | Cancer and other malignant tu－ mors of the buc－ cal cavity． |  |  | Cancer and other malignant tu－ mors of the stom－ ach，liver． |  |  | Cancer and other malignant tu－ mors of the peri－ tonaeum．intes－ tines．rectum． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 莶 | $\stackrel{\dot{O}}{\stackrel{\circ}{5}}$ | ¢ | $\stackrel{\circ}{\circ}$ | $\stackrel{\dot{O}}{\stackrel{\circ}{-}}$ | － | 谷 | $\stackrel{\circ}{\circ}$ | \％ | － | $\stackrel{\circ}{\square}$ | － |
| Trempealeau |  |  |  | 1 | 2 | 3 | 7 | 12 | 19 | 2 |  | 2 |
| Vernon <br> Vilas |  |  |  |  |  |  | 10 | 6 | 16 |  |  |  |
| Walworth |  |  |  | 2 |  | 4 | 16 | 1 | 1 |  |  |  |
| W ashburn |  |  |  | 2 | 2 | 4 | 16 | 4 | 20 | 3 | 1 | 4 |
| Washington |  |  |  | 2 |  | 2 | 11 | 8 | 19 | 2 | 1 |  |
| Waukesha |  |  |  | 3 | ．．．．．． | 3 | 12 | 10 | 22 | 4 | 2 | 3 |
| Waupaca |  |  |  | ， | 1 | 3 | 7 | 6 | 13 | 3 | 2 | 7 |
| Waushara |  |  |  | 2 |  | 2 | 6 | 4 | 10 |  |  |  |
| Winnebago |  |  |  | ， | 3 | 6 | 18 | 17 | 35 | 8 |  | 9 |
| Wood ．．．．． |  |  |  |  |  |  | 7 | 10 | 17 | 1 | 2 | 3 |
| Total | 3 | 1 | 4 | 127 | 133 | 260 | 731 | 756 | 1，487 | 156 | 156 | 332 |

TABLE NO．31．－SHOWING DEATHS FROM EACH COUNTY ARRANGED ACCORD． ING TO THE CAUSES OF DEATH，FOR EAOH YEAR．－Cont．

| Countrs． | Cancer and other malignant tu－ mors of the fe－ male genital organs． |  |  | Cancer and othe malignart tu－ mor＇s of the heart． |  |  | Cancer and other malignant tu－ mors of the skin． |  |  | Cancer and other malignant tu－ mor＇s of ot her organs and of or－ gans not speci－ fied． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 8 | $\dot{\underset{\sim}{\partial}}$ |  | 宮 | $\stackrel{\circ}{3}$ | － | \％ | \％ | त | 合 | $\stackrel{\circ}{\square}$ | \＃ |
| Adams |  |  |  |  |  |  |  |  |  | 2 |  | 2 |
| Ashland Barron | 1 | 1 | 2 | 2 |  |  |  |  |  | 4 |  | 4 |
| Barron <br> Bayfield |  | 3 | 3 |  | 2 | 2 |  |  |  | 2 |  | 2 |
| Brown | 1 | 7 | 8 | $\ddot{2}$ | 1 | 3 |  |  |  | 1 | 4 | 10 |
| Buffalo | 2 |  | 2 |  | 2 | 2 |  |  |  | 2 | 2 | 4 |
| Burnett |  |  |  | 1 |  | 1 |  |  |  | 1 |  | 1 |
| Calumet | 2 |  | 2 | 1 | 1 | 2 |  |  |  | 3 | 2 | 5 |
| Chippewa |  | 4 | 4 | 1 |  | ， |  |  |  | 1 | 2 | 2 |
| Clark | 2 | 1 | 3 |  |  |  |  |  |  | 4 | 2 | 6 |
| Columbia |  | ， | 3 | 1 |  | 1 |  |  |  | 2 |  | 2 |
| Orawford |  |  |  |  | 1 | 1 |  |  |  |  | 1 | 1 |
| Dane | $\stackrel{2}{2}$ | 7 | ， | 3 | 5 | 8 |  |  |  | 13 | 4 | 17 |
| Dodge |  | 1 | 3 | 4 |  | 4 |  |  |  | 13 7 | ${ }^{1}$ | 12 |
| Douglas | 1 | 3 | 4 | 2 | 1 | 2 |  |  |  | 1 | 1 | 2 |
| Dunn ．．．．．．．．． |  | 3 | ${ }_{3}^{4}$ | 1 |  | 2 |  |  |  | 3 3 3 | 1 | 4 |
| Eau Claire | 4 | 3 | 7 | 4 | 6 | 10 |  |  |  | 3 7 | 1 | 4 13 |
| Florence $\ldots$ ．．．． |  |  |  |  |  |  |  |  |  | 1 |  | 1 |
| Fond du Lac． | 5 | 3 | 8 | 6 | 4 | 10 | 1 | 3 | 4 | 8 | 3 | 11 |
| Forest ${ }_{\text {Grant }}$ |  |  |  |  |  | 1 |  |  |  | 1 |  | 1 |
| Grant <br> Green | 1 |  | 3 | 3 | 1 | 4 |  |  |  | 11 | 8 | 19 |
| Green Green Lake $\ldots$ ．．． | 1 | $\therefore$ | $\stackrel{2}{2}$ | $\cdots \cdots$ | 1 | 1 |  |  |  | 5 | 3 | 8 |
| Iowa ．．．．． | 2 | 4 | 2 | 1 |  | 1 |  |  |  | 4 | 2 | 6 |
| Iron |  |  | 5 |  |  | 1 |  |  |  | 6 |  | 6 |

TABLE NO. 31.-SHOWING DEATHS FROM EACH COUNTY ARRANGED ACCORDING TO THE CAUSES OF DEATH, FOR EACH YEAR.-Cont.

| County | Cancer and other malignant tumors of the female genital organs. |  |  | Cancer and other malignant tumor's of the breast. |  |  | Cancer and other malignant tumors of the skin. |  |  | Cancer and other malignant tumors of other organs and of organs not: pecified. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\stackrel{\rightharpoonup}{\circ}$ | $\dot{\underset{\sigma}{\theta}}$ |  | 宝 | $\dot{E}$ | $\begin{aligned} & \text { تं } \\ & \stackrel{0}{0} \\ & \text { E. } \end{aligned}$ |  | $\stackrel{\dot{0}}{\dot{\sigma}}$ |  | 守 | $\dot{\theta}$ | F |
| Jackson | 3 |  | 3 | 1 |  | 1 |  |  |  | 3 | 2 |  |
| Jefferson | 4 | 3 | 7 | 2 | 1 | 1 |  | 1 | 1 | 5 | 2 | 7 |
| Juneau ...... | 2 |  | 2 |  | 1 | 1 |  |  |  | 1 | 1 | 2 |
| Kenosha . | 3 | 2 | 5 | 1 | 1 | 2 |  |  |  | 1 | $\stackrel{2}{2}$ | 3 |
| Kewaunee |  | 2 | 2 | 2 |  | 2 |  |  |  | 2 | 2 | 4 |
| La Crosse | 5 | 3 | 8 | 3 | 4 | 7 |  |  |  | 12 | 3 | 15 |
| Lafayette |  | 1 | 1 | 2 |  | 3 |  | 2 | 2 |  |  |  |
| Langlade |  | 2 | 2 |  |  |  |  |  |  | 2 | 1 | 3 |
| Lincoln ... |  | 2 | $\stackrel{2}{2}$ |  |  |  |  | 2 | 2 | 2 |  | 2 |
| Manitowoc | 1 | 1 | , | 1 | 2 | 3 |  | 3 | 3 | 3 | 2 | 5 |
| Marathon . | 6 |  | 6 | 2 | 1 | 3 | .... | 2 | 2 | 6 | 2 | 8 |
| Marinette | 3 | 2 | 5 | 1. | 1 | 2 |  | 1 | 1 | 1 | 1 | 2 |
| Marquette | 1 |  | 1 | 1 |  | 1 |  |  |  |  |  |  |
| Milwaukee | 26 | $3!$ | 57 | 25 | 17 | 42 |  | 3 | 3 | 43 | 38 | 81 |
| Monroe |  | 2 | 2 | 1 | 2 | 3 |  |  |  | 3 | 4 | 7 |
| Oconto | 2 |  | 2 | 2 | 2 | 4 |  |  |  | 1 | 1 | 2 |
| Oneida |  | 1 | 1 |  |  |  |  |  |  |  |  |  |
| Outagamit | 3 | 1 | 4 | 1 |  | 1 |  |  |  | 4 | 6 | 10 |
| Ozaukee . | 2 | 2 | 4 |  | 1 | 1 |  |  |  |  |  |  |
| Pepin |  |  |  |  |  |  |  |  |  |  | 1 | 1 |
| Pierce | 3 | 2 | 5 |  |  |  |  |  |  |  | 3 | 3 |
| Polk | 2 |  | 2 |  | 1 | 1 |  |  |  | 2 3 3 |  | 2 <br> 5 |
| Portage | 1 | 9 | 10 | 1 | 1 | 2 |  |  |  | 3 | 2 | 5 |
| Price |  |  |  | 2 |  | 2 |  |  |  | 1 |  | 11 |
| $\xrightarrow[\text { Rachine }]{\text { Rand }}$ |  | 3 1 | 3 | 2 | $\stackrel{2}{1}$ | 1 |  |  |  | 7 1 | 4 2 4 | 11 3 |
| Richland | 2 | 1 2 | 4 | 5 | 7 | 12 |  | 1 | 1 | 5 | 4 | ${ }_{9}$ |
| Rusk .... | 2 |  | 2 |  |  |  |  |  |  |  |  |  |
| St. Croix | 2 |  | 2 | 1 | 1 | 2 |  | 1 | 1 | 2 | 2 | 4 |
| Sauk . | 2 | 1 | 3 | 2 | 3 | 5 |  | 1 | 1 | 2 | 6 | 8 |
| Sawyer |  | 1 | 1 |  |  |  |  |  |  |  | 1 | 1 |
| Shawano | 1 |  | 1 | 1 | 2 | 3 |  | 2 | 2 | 4 | 4 | 8 |
| Sheboygan | 3 | 6 | 9 | 1 | 7 | 8 |  |  |  | 2 | 3 | 5 |
| Taylor ...... |  | 2 | 2 |  |  |  |  | 2 | 2 |  | 2 | $\stackrel{2}{2}$ |
| Trempealeau | 1 |  | 1 | 1 |  | , | 1 | 1 | 2 |  | 3 | 3 |
| Vernon ...... | 2 | 2 | 4 | 1 | 1 | , |  |  |  | 2 | 3 | 5 |
| Vilas ... |  |  |  |  |  |  |  |  |  |  |  |  |
| Walworth | 3 | 4 | 7 | 1 | 5 | 6 |  | 2 | 2 | 1 | 2 |  |
| Washburn . |  |  |  |  |  |  |  |  |  | 2 |  | 5 |
| Washington | 1 | 4 |  |  |  | 3 4 |  |  |  | $\stackrel{2}{2}$ | 3 3 3 | 5 |
| Waukesha ... | 4 | 3 7 | 7 8 | 1 <br> 2 | 3 1 | 4 |  |  |  | 2 | 3 2 2 | 5 6 |
| $\begin{aligned} & \text { Waupaca } \\ & \text { Waushara } . . . . \end{aligned}$ | 1 | 7 | 8 | 2 2 2 | 1 <br> 2 | 3 4 |  | 2 1 1 | 2 | 3 | 2 <br> 2 | 6 5 |
| Winnebago | 2 | 6 | 8 | 7 | 3 | 10 |  | 1 | 1 | 10 | 14 | 24 |
| Wood ..... | 2 | 3 | 5 | 1 |  | 1 |  |  |  | 1 | 1 | 2 |
| Total ... | 124 | 157 | 281 | 109 | 105 | 214 | 2 | 32 | 34 | 242 | 180 | 42: |

TABLE NO. 31.-SHOWING DEATHS FROM EACH OOUNTY ARRANGED ACCORDING TO THE CLAUSE OF DEATH FOR EACH YEAR.-Cont.

| Counts. | Other tumors. |  |  | Acute articular rheumatism. |  |  | Chronic rheumatism and gout. |  |  | Scurvy. |  |  | Diabetes. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1909 | 1910 | Total. | 1909 | 1910 |  | 1909 | 1911 | $\left\lvert\, \begin{gathered} \text { To- } \\ \text { tal. } \end{gathered}\right.$ | 1909 | 1910 | Total. | 1909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal. } \end{aligned}$ |
| Adams |  | 2 | 2 |  | 1 | 1 |  | 1 | 1 |  |  |  |  |  |  |
| Ashland | 2 | 3 | 5 | 1 | $\cdots$ | 1 |  |  |  |  |  |  |  | 1 | 1 |
| Barron | 3 | 1 | 4 | 2 | 1 | 3 |  | 2 | 2 |  |  |  | 8 |  | 12 |
| Bayfleld |  |  |  | 1 | 1 | 2 |  | 2 | 2 |  |  |  |  |  |  |
| Brown | 3 | 5 | 8 | 1 | 4 | 5 | 3 |  | 6 |  |  |  |  | 9 | 9 |
| Buffalo | 2 | 3 | 5 |  | 3 | 3 |  | 1 | 1 |  |  |  | 1 | 2 | 3 |
| Burnett |  |  |  | 1 | 1 | 2 | 1 | 2 | 3 |  |  |  |  | 3 | 3 |
| Calumet | 2 2 2 | 1 | 3 3 | 2 | 2 | 4 | 2 | 1 | \% |  |  |  | 3 | 3 |  |
| - Clark | 1 | 2 | 3 | 1 | 1 | 2 | 1 | 1 | 2 |  |  |  | 1 | $\stackrel{2}{2}$ | 3 3 3 |
| Columbia | 2 | 1 | 3 |  | 2 | 2 | 1 | 2 | 3 |  |  |  | 7 | 7 | 14 |
| Crawford |  | 1 | 1 | 2 |  | 2 | 3 | 1 | 4 |  |  |  |  |  | 1 |
| Dane |  | 9 |  | 2 | 5 | 7 | 6 | 3 | 9 |  |  |  | 8 | 13 | 21 |
| Dodge |  | 3 | 3 |  |  |  |  | 2 | 2 |  |  |  | 4 | 7 | 11 |
| Door |  |  |  | 1 | 1 | 2 |  | 1 | 1 |  | 1 | 1 | 1 | 1 | 2 |
| Douglas | 1 | 2 | 2 |  | 5 | 7 | 3 |  | 3 |  |  |  | 1 | 4 | 5 |
| Dunn ..... |  | 2 | 2 |  |  |  | 4 | 2 | 6 |  |  |  | 1 | 3 | 4 |
| Eau Claire Florence |  | 3 | 3 | 3 | 2 | 5 | 1 | 1 | 2 |  |  |  | 10 | 6 | 16 |
| Fond du Lac |  | 2 | 2 | 4 | $\cdots$ | 4 | 4 | 1 | 5 |  |  |  | 8 | 6 | 14 |
| Forest |  |  |  |  |  |  |  |  |  |  |  |  | 8 | 6 |  |
| Grant |  |  |  | 1 | 1 | 2 |  | 2 | 7 |  |  |  | 1 | 6 | 7 |
| Green |  |  |  |  |  |  | 2 | 1 | 3 |  |  |  | 1 | 5 | 6 |
| Green Lake |  |  |  | 2 | 1 | 3 | 2 | 2 | 4 |  |  |  | 3 | 2 | 5 |
| Iowa |  | 1 | 1 |  |  | ... | 2 | 1 | 3 |  |  |  | 3 | 4 | 7 |
| Iron ${ }^{\text {Jackson }}$ |  | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Jefferson | 2 | 5 | 7 | 2 | 1 | 1 | ${ }_{3}^{2}$ |  | $\begin{aligned} & 2 \\ & 6 \end{aligned}$ |  |  |  |  | $\stackrel{3}{5}$ | 10 |
| Juneau |  | 1 | 1 |  | 1 | 1 | 4 | 1 | 5 |  |  |  | 5 | 5 5 | ${ }^{10} 6$ |
| Kenosha |  | 1 | 1 | 2 |  | 2 | 2 | 3 | 5 |  |  |  | 2 | 5 3 | 6 5 |
| Kewaunee | 1 |  | 1 | 1 |  | 2 | 2 | 4 | 6 |  |  |  | 3 |  | 3 |
| La Crosse |  |  | 4 | 1 | 2 | 3 | 2 | 4 | 6 |  |  |  | 5 | 5 | 10 |
| Lafayette |  | 3 | 3 | ... | 2 | 2 | 3 | 1 | 4 |  |  |  | 5 | 1 | 4 |
| Langlade |  | 2 | 2 | $\ldots$ | 1 | 1 | 1 |  | 1 |  |  |  | 1 | 1 | 2 |
| Manitowoc | 4 | 1 4 4 | $\stackrel{2}{8}$ | 2 | 3 | $\cdots$ | 1 | 1 | 1 3 |  |  |  | 2 <br> 8 |  | $\stackrel{2}{10}$ |
| Marathon | 1 | 3 | 4 | 3 | 4 | 7 | 3 | 4 | 7 |  |  |  | ${ }_{10}^{8}$ | 3 | 10 |
| Marinette | 2 |  | 2 | 1 | 4 | 1 |  | 1 | 1 |  |  |  | 4 | 2 | 6 |
| Marquette | 3 |  | 3 |  |  |  | 1 | 1 | 2 |  |  |  | 1 | 2 | ${ }_{1}^{6}$ |
| Milwaukee | 37 | 23 | 60 | 8 | 20 | 28 | 15 | 19 | 34 |  |  |  |  |  | 94 |
| Monroe |  | 2 | 2 | 1 | 2 | 3 | 3 | 1 | 4 |  |  |  |  | 6 | 10 |
| Oconto |  | 1 | 1 | . | 3 | $\stackrel{3}{2}$ | $\ldots$ | 4 | 4 |  |  |  | 3 | 3 |  |
| Oneida |  |  |  |  | 2 | 2 |  |  |  |  |  |  |  | 2 | 6 2 |
| Outagamie | 3 | 8 | 11 |  | 2 | 2 | 5 | 2 | 7 |  |  |  | 6 | 8 | 14 |
| Ozaukee | 2 | 1 | 3 | 1 |  | 1 | 1 | 1 | 2 |  |  |  | ${ }_{2}^{6}$ | 2 | 4 |
| Pepin |  |  |  | 1 |  | 1 |  |  |  |  |  |  | 1 |  | 1 |
| Pierce Polk | 1 | 4 | 5 | 1 | 1 | 2 | 1 | 3 | 4 |  | 1 | 1 | 4 | 2 | , |
| Portage | 6 |  |  | 1 |  |  | . | 1 | 1 |  |  |  | 2 | 3 | 5 |
| Price ... |  | 1 | 1 |  | 1 | 4 |  |  |  |  |  |  | 1 | 4 | 5 |
| Racine | 9 | 3 | 12 | 1 | 8 | 9 |  | 5 | 5 |  |  |  |  | $1{ }^{1}$ | ${ }_{16}^{1}$ |
| Richland |  |  |  |  | 1 | 1 |  |  |  |  |  |  | 1 | 1 | $\begin{array}{r}16 \\ 2 \\ \\ \hline\end{array}$ |
| Rock | 4 | 1 | 5 | . | 1 | 1 | 8 | 3 | 11 |  |  |  | 3 | 12 | 15 |
| Rusk Croix | 2 |  | 1 | ... |  |  |  |  |  |  |  |  |  | 2 | 2 |
| Sauk ... | 2 | 3 | ${ }_{6}^{2}$ | $\cdots$ | 2 | 2 | 3 |  |  |  |  |  | 3 | 2 | 5 |
| Sawyer | 1 |  | 1 |  | 2 | 2 | 3 | 4 | 7 |  |  |  | 3 | 3 | ${ }^{6}$ |
| Shawano | 1 |  | 1 |  | i | 1 | 2 |  | 2 |  |  |  |  | 1 | 5 |
| Sheboygan | 1 | 2 | 3 | 2 | 2 | 4 | 2 | 4 | 6 |  |  |  |  | ${ }_{6}$ | 11 |
| Taylor ..... |  |  |  | 2 | 1 | 3 | 4 |  | 6 |  |  |  | ${ }_{1}$ | 6 3 3 | ${ }_{4}$ |
| Trempealeau | 5 |  | 5 |  |  |  |  |  |  |  |  |  | 3 | 2 | 5 |
| Vernon <br> Vilas | 1 |  | 1 | $\cdots$ | . | .. | 2 | i | 3 |  |  |  | 4 | 2 | 6 |
| Walworth | 2 | 3 | 5 |  | 3 | 3 |  |  |  |  |  |  | 2 |  | $\stackrel{2}{8}$ |
| W ashburn |  |  | 5 |  | 3 | 3 |  | 1 | 2 |  |  |  | 2 | 4 | 6 3 |

17-B. H.

TABLE NO. 31.-SHOWING DEATHS FROM EAOH OOUNTY ARRANGED AOCORDING TO THE CAUSE OF DEATH FOR EA'(YH YEAR.-Cont.

| County. | Other tumors. |  |  | Acute articular rheumatism, |  |  | Chronic rheumatism and gout. |  |  | Scurvy. |  |  | Diabetes. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1909 | 1910 | Total. | 190? | 1910 | Total. |  | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal. } \end{aligned}$ | 1909 | 1910 |  |  | :910 | To- |
| Washington | 2 | 1 | 3 |  |  |  | 3 | 2 | 5 |  |  |  | 4 | 2 |  |
| Waukesha | 4 | 5 | 9 |  |  |  | 4 | 2 | 6 |  |  | $\ldots$ | 9 | 11 | 20 |
| Waupaca | 3 | 3 | 6 | 1 |  | 1 | 5 | 1 | 6 |  |  |  | 4 | 4 | 8 |
| Waushara | 1 | . |  |  |  |  | - | 2 | 2 |  |  | ... | 5 | 1 | 6 |
| Winnebago | 5 | 4 | 9 | 1 | 4 | 5 | 1 | 4 | 5 |  |  |  | 7 | 8 | 15 |
| Wood | 1 |  | 1 |  | 1 | 1 | 1 |  | 1 |  |  |  | 1 | 2 | 3 |
| Total | 126 | 132 | 258 | 59 | 103 | 162 | 127 | 118 | 245 |  | 2 |  |  |  | 525 |

TABLE NO. 31.-SHOWING DEATHS FROM EACH COUNTY ARRANGED ACOORDING TO THE CAUSES OF DEATH, FOR EAACH YEAR.-COnt.

| County. | Exophthal mic goitre. |  |  | Addison's disease. |  |  | Leuchaemia. |  |  | Anaemia chlorosis. |  |  | Other general diseases. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1909 | \1910 | ${ }_{0} \text { Tho- }$ |  | 1910 |  |  | 1910 | To- | 1909 | /1910 |  | 1909 | 1910 | $\stackrel{\text { To- }}{\text { tal. }}$ |
| Adams |  |  |  |  |  |  | 1 |  | 1 | 1. | 1 | 2 |  |  |  |
| Ashland |  |  |  |  |  |  |  |  |  | 3 | 1 | 4 |  |  |  |
| Barron |  |  |  |  |  |  | 1 | .... | 1 | 2 | 2 | 4 |  | 1 | 1 |
| Bayfield Brown |  | 3 | 3 |  |  |  | 1 |  | 1 | 8 | 3 | 11 | 1 |  | 1 |
| Buffalo |  | 1 | 1 | 1 |  | 1 | 2 |  | 2 |  |  |  | 1 |  | 1 |
| Burnett |  |  |  |  |  |  | 2 |  | 2 |  | 2 | 2 |  |  |  |
| Calumet |  |  |  |  |  |  |  |  |  | 1 |  | 1 |  |  |  |
| Chippewa |  | . | . |  |  |  |  | 1 | 1 | 1 | 3 | 4 | 2 | 2 | 4 |
| Clark |  |  |  |  |  |  |  |  |  | 2 | 2 | 4 |  |  |  |
| Columbia | 1 | 1 | 2 |  |  |  | 1 |  | 1 |  | 1 | 1 |  |  |  |
| Orawford | 1 | 1 | 2 |  |  |  |  |  |  | 1 | 2 | 3 |  |  |  |
| Dane | 4 | 2 | ${ }_{5}^{6}$ |  | 2 | 2 | 1 | 2 | 3 | 5 | 8 | 13 |  | 1 |  |
| Dodge | 4 | 1 | 5 |  |  |  |  |  |  | 1 <br> 2 | 3 1 | 4 3 3 | 1 | 1 | 2 |
| Douglas | 1 | .. | 1 |  |  |  |  |  |  |  | 2 | 4 |  |  |  |
| Dunn |  |  |  |  |  |  |  |  |  | 1 | 4 | 5 |  |  |  |
| Eau Claire | 4 | 1 | 5 |  |  |  | ... | 1 | 1 | 3 | $\ldots$ | 3 |  | $\cdots$ | $\cdots$ |
| Florence |  |  |  |  |  |  |  |  |  | 1 |  | 1 |  |  |  |
| Fond du Lac Forest | 1 | 2 | 3 |  |  |  | 2 | 3 | 5 | 4 | 3 | 7 | 1 |  | 1 |
| Grant | 3 | 2 | 5 |  | 1 | i |  |  |  | 1 | 4 | 5 | 1 |  | 1 |
| Green . | 1 | .. | 1 |  |  |  |  |  | $\cdots$ | 2 |  | 2 |  |  |  |
| Green Lake |  |  |  | 1 |  | 1 |  |  |  | 1 | 3 | 4 |  |  |  |
| Iowa |  |  |  |  |  |  | 1 |  | 1 | 2 | 1 | 3 |  |  |  |
| Iron |  |  |  |  |  |  |  |  |  | 1 |  | 1 |  |  |  |
| Jackson |  |  |  |  | 1 | 1 |  | 1 | 1 |  |  |  |  |  |  |
| Jefferson |  | 1 |  |  |  |  |  | $\ldots$ | 1 |  | 2 | 5 |  | 1 | 1 |
| Juneau. | 1 | ... | 1 | $\cdots$ | . |  | 1 |  | 1 | 1 4 | 1 | 2 <br> 8 | 1 |  | 1 |
| Kenosha | 1 |  | 1 |  |  |  | .... | 1 | 1 | 4 | 4 | 8 |  |  |  |
| La Crosse | 2 |  | 2 |  |  |  |  | 1 | 1 | 2 | 5 | 7 | 1 |  | 1 |
| Lafayette | 1 | 1 | 2 |  |  |  |  |  |  | 1 | 1 | 2 |  |  |  |
| Langlade |  |  |  |  |  |  |  | 1 | 1 | 1 |  | 1 |  |  |  |
| Lincoln | 1 | 1 | 2 |  |  |  |  |  |  |  |  |  | 1 |  | 1 |
| Manitowoc |  |  |  | 1 |  | 1 | $\ldots$ |  |  |  | 2 | 2 | .... | ... | .... |
| Marathon |  | 1 | 1 | 1 | $\ldots$ | 1 | ... | ... | .... | 1 |  | 1 | $\cdots$ |  |  |
| Marinette | 1 |  | 1 |  |  |  | $\cdots$ |  |  | 1 | 1 | 2 |  |  | $\cdots$ |
| Marquette | 2 | $\cdots$ | . 8 | 1 | . | ${ }_{2}^{1}$ | 3 | 10 | 13 | $\ldots$ | 23 | 51 | 2 | 1 | 3 |

TABLE NO. 31- SHOWING DEATHS FROM EAOH OOUNTY ARRANGED ACGCORDING TO THE CAUSE OF DEATH FOR EACH YEAR.-Cont.

| County . | Exophthalmic goitre. |  |  | Addison's disease. |  |  | Leuchaemia. |  |  | Anaemia chlorosis. |  |  | Other general diseases. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\|1909\|$ |  |  | $1909$ | 1910 | $\left\lvert\, \begin{gathered} \text { To- } \\ \text { tal. } \end{gathered}\right.$ |  | 1910 |  |  | 1910 |  | 1909 | 1910 | To- tal. |
| Monroe | 1 |  | 1 | 1 |  | 1 | 2 |  | 2 | 1 | 2 | 3 |  |  |  |
| Oconto | 1 | 1 | 2 |  |  |  |  |  |  |  |  |  |  |  |  |
| Oneida |  |  |  |  |  |  |  |  |  | 1 |  | 1 |  |  |  |
| Outagamie <br> Ozaukee |  |  |  | 1 |  |  |  | 2 | 2 | 9 | 6 | 15 |  |  |  |
| Pepin . |  |  |  | 1 |  | 1 | 1 |  | 1 |  | 1 | 1. |  |  |  |
| Pierce |  |  |  |  |  |  | 3 |  | $\cdots$ |  |  | ${ }_{4}{ }^{1}$ |  |  |  |
| Polk |  | 1 | 1 | ... |  |  | 1 | 1 | 3 2 | 1 | 1 | 4 |  |  |  |
| Price Pre |  |  |  |  |  |  |  | 2 | 2 | 1 | 4 | 5 |  |  |  |
| Price .. |  |  |  |  | 1 | 1 |  |  |  |  | 1 7 | 1 |  |  |  |
| Richland |  | 1 | 1 |  |  |  | 1 | 7 | 1 | 1 | 7 | 9 1 |  |  |  |
| Rock |  |  |  |  |  |  |  |  |  | 1 | $\cdots$ | 10 |  |  |  |
| Rusk |  |  |  |  |  |  | 1 | 1 | 1 | 1 | ${ }^{6}$ | 10 |  |  |  |
| St. Croix | 1 |  | 1 |  |  |  | 1 |  | $\ldots$ | ${ }_{3}^{1}$ | $\cdots$ | 1 |  |  |  |
| Sauk |  |  |  | 1 |  | 1 |  | 1 | i |  | ${ }_{2}^{1}$ | 4 |  |  |  |
| Sawyer |  |  |  |  |  |  |  | 1 | 1 |  |  |  |  |  |  |
| Shawano |  |  |  |  |  |  |  |  |  | 2 |  |  |  |  |  |
| Sheboygan Taylor | 1 | 1 | 2 |  |  |  | 1 | 4 | 5 |  | 3 | 3 |  | 2 | $\ddot{2}$ |
| Trempealeau |  |  |  |  |  |  |  |  |  | 1 | 1 | 2 |  | 1 | 1 |
| Vernon |  | 1 | 1 |  |  |  |  | 1 | 1 | ${ }_{3}^{1}$ | 2 3 3 | 3 6 |  | 1 | 1 |
| Vilas |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ... |
| W alworth | 2 | 2 | 4 |  |  |  | 1 | 3 | 4 | 4 | 4 | $\ddot{8}$ |  | 1 | 1 |
| Washburn | 1 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| Washington | 1 |  | 1 |  |  |  | 1 |  | 1 |  |  |  |  |  |  |
| Waukesha | 1 | 1 | 2 |  |  |  | 1 | 2 | 3 |  | 4 | 7 |  |  |  |
| Waupaca |  |  |  |  |  |  | 1 | 1 | 2 | 3 | 3 | 6 |  |  |  |
| Waushara <br> Winnebago |  |  |  | 1 |  | 1 |  |  |  | 1 | 1 | 2 |  |  |  |
| Wood ..... |  |  |  |  |  |  | 1 |  | 1 | 2 2 2 | 7 2 | 9 4 |  | 1 | 1 |
| Total | 41 | 34 | 75 | 11 | 5 | 16 | 32 | 42 | 74 | 143 | 148 | 291 |  | 14 | 26 |

TABLE NO. 31.-SHOWING DEATHS FROM EACH COUNTY ARRANGED ACICORD. ING TO THE CAUSES OF DEATH, FOR EACH YEAR.-CONt.

| County | $\begin{aligned} & \text { Alcoholism } \\ & \text { (acute or } \\ & \text { chronic). } \end{aligned}$ |  |  | Chronic lead poisoning. |  |  | Other chronic occupation poisonings. |  |  | Other chronic poisonings. |  |  | Encephalitis. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1910 | $\left\lvert\, \begin{aligned} & \text { To- } \\ & \text { tal. } \end{aligned}\right.$ | 1909 | 1910 |  | 4909 | 1910 |  |  | 1910 | $\left\lvert\, \begin{gathered} \text { To- } \\ \text { tal. } \end{gathered}\right.$ | 1909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal. } \end{aligned}$ |
| Adams |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ashland | 6 |  | 6 |  |  |  |  |  |  |  |  |  | 1 |  | 1 |
| Barron Bayfield | 1 |  | 1 |  |  |  |  |  |  |  |  |  |  | 1 | 1 |
| Brown | 1 |  | 4 |  |  |  |  |  | - |  | ... | . |  | 3 | 3 |
| Buffalo | 1 | 1 | 1 |  |  |  |  |  |  |  | ... | . |  |  |  |
| Burnett | 1 |  | 1 |  |  |  |  |  |  |  | ... | . | , | . |  |
| Calumet | 2 |  | 2 |  |  |  |  |  |  |  | ... | ... |  |  |  |
| Chippewa |  | 1 | 1 |  |  |  |  |  | ... |  |  |  |  |  | 1 |
| Clark |  | 1 | 1 |  |  |  |  |  |  |  |  |  |  | 1 | 1 |
| Columbia Crawford | 3 | 2 | 5 |  |  |  |  |  |  |  |  |  |  | 1 | 1 |
| Dane | 3 | 6 | 9 |  |  |  |  |  |  | 1 |  |  |  |  |  |
| Dodge |  | 1 | 1 |  |  |  |  |  |  | 1 |  | 1 |  |  |  |

TABLE NO. 31.-SHOWTNG DEATHS FROM EAC"H COUNTY ARRANGED ACCORD. ING TO THE CAUSES OF DEATH, FOR EACH YEAR.-Cont.


TABLE NO. 31.-SHOWING DEATHS FROM EACH COUNTY ARRANGED ACICORDING TO THE CAUSES OF DEATH FOR EACH YEAR.-Cont.

| County. | Simple meningitis |  |  | Locomotor ataxia. |  |  | Other <br> diseases of the spinal cord. |  |  | Cerfbral hemorrhage, apoplexy. |  |  | Softening of the brain. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1910 |  |  | 1910 |  |  |  |  |  |  |  |  | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal. } \end{aligned}$ |
| Adams |  |  |  |  |  |  |  |  |  |  | 4 | 4 |  |  |  |
| Ashland | 16 | 13 | 29 | 1 | 1 | 2 | 2 | 1 | 3 | 12 | 10 | 22 | 1 | 1 | 2 |
| Barron | 4 | 1 | 5 |  |  |  |  | 1 | 1 | 2 | 8 | 10 | 1 |  | 1 |
| Bayfield | 5 | 4 | 9 | 1 |  | 1 |  | 1 | 1 | 2 | 2 | 4 |  | 1 | 1 |
| Brown | 33 | 25 | 58 | 1 | 1 | 2 |  | 3 | 3 | 38 | 40 | 78 |  | 1 | 1 |
| Buff alo | 3 | $\ldots$ | 3 | $\ldots$ | 1 | 1 | $\cdots$ | 1 | I | 8 | 6 | 14 |  | 1 | 1 |
| Burnett | 1 | 3 | 4 |  |  |  |  |  |  | 2 | 2 | 4 |  |  |  |
| Calumet | 4 | 4 | 8 |  | 1 | 1 | 1 |  | 1 | 7 | 16 | 23 |  | 2 | 2 |
| Chippewa | 6 | 10 | 16 |  | 1 | 1 |  | 2 | 2 | 7 | 10 | 17 |  |  |  |
| Clark | 3 | 5 | 8 |  | 1 | 1 | 1 |  | 1 | 9 | 11 | 20 |  |  |  |
| Columbia | 9 | 6 | 15 | 1 | 1 | 2 |  |  |  | 17 | 32 | 49 | 3 | 2 | 5 |
| Crawford | 1 |  | 1 |  |  |  |  | 1 | 1 | 7 | 11 | 18 |  |  |  |
| Dane | 16 | 16 | 32 | 2 | 1 | 3 | 1 | 4 | 5 | 53 | 70 | 123 | 2 | 1 | 2 |
| Dodge | 6 | 10 | 16 |  |  |  |  | 1 | 1 | 31 | 29 | 60 | 2 | 1 | 3 |
| Door | 5 | 3 | 8 |  |  |  |  |  |  | 3 | 7 | 10 |  |  |  |
| Douglas | 13 | 23 | 36 |  | 1 | 1 |  | 2 |  | 10 | 24 | 34 |  | 1 | 1 |
| Dunn ... | 1 | 4 | 5 |  |  |  | 1 | 2 | 3 | 13 | 15 | 28 |  |  |  |
| Eau Claire | 2 | 5 | 7 | 1 | 1 | 2 | 1 | 2 | 3 | 9 | 17 | 26 |  |  |  |
| Fond du Lace | 11 | 15 | 26 | 1 |  | 1 | 4 | 1 | 5 | 31 | 38 | 69 |  | 1 | 1 |
| Forest | 4 | ... | 4 |  |  |  |  |  |  | 2 |  | 2 |  |  |  |
| Grant | 13 | 8 | 21 |  |  |  | 2 | 1 | 3 | 19 | 30 | 49 | 3 | 5 | 8 |
| Green | 4 | 4 | 8 | 1 |  | 1 |  | 2 | 2 | 14 | 18 | 32 |  |  |  |
| Green Lake | 3 | 1 | 4 |  |  |  |  |  |  | 10 | 13 | 23 |  |  |  |
| Iowa ... | 3 | 1 | 4 |  |  | . |  |  |  | 18 | 14 | 32 | 1 | 1 | 2 |
| Iron | 2 | . | 2 |  |  |  |  |  |  |  |  | 1 |  |  |  |
| Jackson | 2 |  | 2 |  | 1 | 1 |  |  | $\stackrel{2}{5}$ | 14 | 11 | 25 | 1 |  | - |
| Jefferson | 7 | 4 | 11 | 1 | 1 | 2 | 1 | 4 | 5 | $\stackrel{26}{9}$ | 19 | 45 | 2 |  |  |
| Juneau | 1 | 1 | 2 |  |  |  | 1 | 1 | $\stackrel{2}{2}$ | 9 13 | 11 | 20 |  |  |  |
| Kenosha. | ${ }^{6}$ | 16 | 22 |  |  |  | 1 |  | 2 | 13 | 12 | 19 |  |  |  |
| Kewaunee | 2 5 | 5 | 8 10 |  |  |  | 4 | 2 4 | $\begin{aligned} & 2 \\ & 8 \end{aligned}$ | 31 | 12 | 19 | 1 |  | 1 |
| La Crosse <br> Lafayette | 5 | 5 2 2 | 2 | 1 | 2 | 3 | 2 |  | 2 | 11 | 8 | 19 | 1 |  | 1 |
| Langlade | 5 | 3 | 8 |  |  |  |  | 1 | 1 | 8 | 6 | 14 |  |  |  |
| Lincoln . | 1 | 4 | 5 | 1 |  | 1 |  | 1 | 1 | 10 | 12 | 22 |  |  |  |
| Manitowoc | 7 | 5 | 12 | 1 |  | 1 | 2 | 2 | 4 | 31 | 20 | 51 | 1 |  | 1 |
| Marathon | 8 | 7 | 15 | 2 |  | 2 | 3 | 2 | 5 | 22 8 8 | 22 | 4 |  |  |  |
| Marinette | 9 | 6 | 15 |  |  |  |  |  |  | 8 | 11 | 19 | 3 | 2 | 5 |
| Marquette | 3 | 4 | 7 |  |  |  |  | 14 | 20 | ${ }_{213}^{7}$ | 234 | 13 | 7 |  | 20 |
| Milwaukee | 92 | 104 | 196 | 6 | 6 |  | 6 | 14 | 20 | 213 | 234 | 447 | 7 | 13 | 20 |
| Monroe | 3 | 7 | 10 | 2 | .... | 2 | $\ldots$ |  | 1 | 10 |  | 18 |  |  |  |
| Oconto | 4 | 6 | $\begin{array}{r} 10 \\ 6 \end{array}$ |  |  |  |  | 2 | 2 | r | $\stackrel{8}{2}$ | 18 |  |  | 1 |
| Oneida ${ }^{\text {Outagamie }}$ | 5 8 | 1 | ${ }_{16}^{6}$ |  |  |  |  |  |  | ${ }_{12}^{2}$ | $\stackrel{2}{2}$ | $\begin{array}{r}4 \\ 34 \\ \hline\end{array}$ | 1 |  | 1 |
| Outagamie | 8 | 8 | 16 |  |  |  |  |  |  | 12 | 16 | 43 |  |  |  |
| Ozaukee | 3 | 3 | 6 |  |  |  |  |  |  | 27 | 16 | 4 |  | 1 | 1 |
| Pepin |  |  |  |  |  |  |  |  |  |  |  | 4 |  |  |  |
| Pierce | 6 | 5 | 11 |  |  |  |  |  |  |  |  |  |  |  |  |
| Polk | 13 | 4 | 7 | 1 |  |  |  | 1 | 1 | 11 | 10 | 21 |  |  |  |
| Portage | 13 | 5 | 18 |  | 1 |  |  |  |  | 14 | 18 | 32 |  |  |  |
| Price |  | 2 | 2 |  |  |  |  |  |  | 3 | 3 | 6 |  |  |  |
| Racine | 18 | 21 | 39 | 1 |  | 1 | 2 | 3 | 5 | 29 | 36 | 65 |  |  |  |
| Richland | 6 | 7 | 13 |  |  |  |  |  |  | 7 | 12 | 19 |  |  |  |
| Rock | 13 | 10 | 23 |  | 1 | 1 |  | 7 | 7 | 45 | 36 | 81 | ${ }^{3}$ |  | 1 |
| Rusk | 2 | 1 | ${ }_{15}^{3}$ |  |  |  |  |  |  |  | ${ }^{1}$ | ${ }_{41}^{1}$ |  |  | 1 |
| St. Crow | 8 | 6 3 | 15 |  |  |  |  | 1 3 | 2 3 |  | 24 | 41 |  | 1 | 1 |
| Sauk . | 8 | 3 1 | 11 |  | 2 1 | 3 |  | 3 | 3 | 18 | 1 | 46 2 2 |  |  |  |
| Shawano | 4 | 5 | 9 |  | - 1 | 1 |  |  |  | 19 | 12 | 31 | 1 | 1 | 2 |
| Sheboygan | 17 | 11 | 28 | 2 |  | 2 | 1 | 1 | 2 | 48 | 35 | 83 |  |  |  |
| Taylor | 1 |  | $\stackrel{1}{8}$ |  |  |  |  |  |  | 6 | 5 | 11 |  |  |  |
| Trempealeau | 5 | 3 | 8 |  |  |  |  | 1 | 1 | 18 | 13 | 31 | 1 | 1 | 2 |
| Vernon | 4 | 5 | 9 | 1 |  | 1 | 1 | 3 | 4 | 12 | 19 | 31 | 1 |  | 1 |
| Vilas | 1 | 2 | 3 |  |  |  |  |  |  | 1 | 6 | 7 |  |  |  |
| Walworth | 3 | 1 | 4 | 2 |  |  | 1 |  | 1 | ${ }^{21}$ | 28 | 49 8 | , | . | 2 |
| W ashburn | 3 | 2 | 4 |  |  |  |  |  |  | 6 | 2 | 8 |  |  |  |

TABLE NO. 31.-SHOWING DEATHS FROM EACH COUNTY ARRANGED AOCORDING TO THE CAUSES OF DEATH, FOR EACMF YEAR.—Cont.

| County . | Simple meningitis. |  |  | Locomotor ataxia. |  |  | Other diseases of the spinal cord. |  |  | Cerebral hemorrhage, apoplexy. |  |  | Softening of the brain. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1909 | 1910 |  |  | 1910 | $\left\lvert\, \begin{gathered} \text { To- } \\ \text { tal. } \end{gathered}\right.$ | 1909 | 1910 |  |  | 1910 |  | 1909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal. } \end{aligned}$ |
| Washington | 2 | 5 | 7 |  |  |  |  | 2 | 2 | 21 | 19 | 40 |  |  |  |
| Waukesha | 14 | 5 | 19 | 1 | 1 | 2 |  | 1 | 1 | 29 | 34 | 63 |  |  |  |
| Waupaca | 9 | 5 | 14 |  |  |  | 3 | 1 | 4 | 22 | 29 | 51 | 1 |  | 1 |
| Waushara | 1 | 2 | 3 | 1 |  | 1 | 1 | 2 | 3 | 11 | 9 | 20 |  |  |  |
| Winnebago | 10 | 9 | 19 | , | 1 | 1 | 1 | 2 | 3 | 32 | 39 | 71 |  |  |  |
| Wood | 7 | 6 | 13 |  |  |  | 1 | 1 | 3 | 10 | 10 | 20 |  | 2 | 2 |
| Total | 499 | 478 | 977 | 36 | 33 | 69 | 48 |  | 1140 | 1203 | 1351 | 2554 | 39 | 41 | 80 |

TABLE NO. 31.-SHOWING DEATHS FROM EACH COUNTY ARRANGED ACCORDING TO THE CAUSES OF DEATH FOR EAOH YEAR.-CCont.

| County. | Paralysis without specified cause. |  |  | General paralysis of the insane. |  |  | Other forms of mental alienation. |  |  | Epilepsy. |  |  | Convulsions. (Nonpuerperal) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1909 | 1910 | To- tal. | 1909 | 1910 | $\left\lvert\, \begin{gathered} \text { To- } \\ \text { tal } \end{gathered}\right.$ |  | 1910 | $\begin{array}{\|l} \text { To- } \\ \text { tal, } \end{array}$ | 1909 | 1910 | To- | 1909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal } \end{aligned}$ |
| Adams | 1 | 2 | 3 |  |  |  |  |  |  |  | 1. | 1 | 4 |  | 4 |
| Ashland | 1 | 3 | 7 |  |  |  | 1 |  | 1 | 1 | 1 | 2 | 4 |  | 4 |
| Barron | 3 | 7 | 10 |  |  |  |  |  |  |  |  |  | 1 |  | 1 |
| Bayfield | 2 | 1 | 3 |  |  |  |  |  |  |  | 2 | 2 |  |  |  |
| Brown | 11 | 3 | 14 |  | 1 | 1 | 1 |  | 1 | 5 | 4 | 9 | 2 |  | 2 |
| Buffalo | 5 | 5 | 10 |  |  |  |  |  |  | 1 | . | 1 |  | 1 | 2 |
| Burnett | 1 |  | I |  |  |  |  |  |  |  | 1 | 1 |  |  |  |
| Calumet | 1 | 1 | 2 |  |  |  |  |  |  | 3 | 1 | 4 |  |  |  |
| Chippewa | ${ }_{6}^{6}$ | 5 | 11 | 1 |  | 1 | 18 |  | 18 | 20 | 17 | 37 |  |  |  |
| Clark ${ }_{\text {Columbia }}$ | 2 7 | 6 4 | 8 |  |  |  |  |  |  | $\square$ | 1 | 1 |  |  |  |
| Crawford | 5 | 4 | 11 |  |  |  | 1 |  | 2 | $\stackrel{2}{1}$ | 4 | 6 |  |  |  |
| Dane | 16 | 12 | 28 | 7 | 26 | $3{ }^{1}$ |  |  |  | 3 | 4 | 7 | 1 |  | 1 |
| Dodge | 10 | 3 | 13 |  | 1 | 1 | ... |  |  | 2 | ${ }_{2}^{4}$ | 4 |  | 1 | 1 |
| Door | 3 | 2 | 5 |  |  |  |  |  |  | 4 |  | 4 |  |  |  |
| Douglas | 6 | 5 | 11 | 1 | 2 | 3 |  |  |  | 1 | 2 | 3 | 1 |  | 1 |
| Dunn | 2 |  | 3 |  |  |  |  |  |  | 2 | 1 | 3 |  | 1 | 1 |
| Eau Claire | 11 | 8 | 19 | 1 |  | 1 | 1 |  | 1 | 3 | 1 | , |  |  |  |
| Florence |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fond du Lac. | 11 | 16 | 27 | 4 | 3 | 7 |  |  |  | 1 | .... | 1 |  |  |  |
| Grant | 13 | 12 | 25 |  |  |  |  |  |  |  | 3 |  |  | 2 | 2 |
| Green | 6 | + | 12 |  |  |  |  |  |  | 2 | $\stackrel{ }{ }$ | 4 |  | 2 | . |
| Green Lake | 3 | 1 | 4 | 1 |  | 1 | 1 |  | 1 |  | 1 | 1 |  |  | $\therefore$ |
| Iowa | 8 | 4 | 12 | $\ldots$ | 1 | 1 |  |  |  | 2 | 2 | 4 |  |  |  |
| Iron |  |  |  |  |  |  |  |  |  | 1 | 1 | 2 |  |  |  |
| Jackson | 4 |  | 4 |  | 1 | 1 |  |  |  | 1 | 1 | 2 | 1 |  | i |
| Jefferson | 11 | 8 | 19 |  |  |  |  |  |  |  | 4 | 4 |  |  |  |
| Juncau | 6 | 7 | 13 |  | 1 | 1 | 1 |  | 1 | 2 | 1 | 3 |  |  |  |
| Kenosha | 2 | 2 | 4 |  |  |  |  |  |  |  | 2 | 2 |  |  |  |
| Kewaunce | 2 |  | 2 |  |  |  |  |  |  |  |  |  |  |  |  |
| La Crosse | 13 3 | 17 | 30 | 1 |  |  |  |  |  | 1 | 1 | 2 | 2 |  | 2 |
| Langlade | 3 | 4 | 4 |  |  |  |  |  |  | 1 | $\ldots$ | 1 |  |  |  |
| Lincoln | 1 |  | 1 |  |  |  |  |  |  | 1 |  | 1 |  |  |  |
| Manitowoc | 1 | 7 | 13 | 1 | 2 | 3 |  |  |  | 3 | 1 | 4 | 1 |  | 1 |

TABLE NO. 31.-SHOWING DEATHS FROM EACH COUNTY ARRANGED ACCORDING TO THE CAUSES OF DEATH FOR EACH YEAR.-COnt.

| County. | Paralysis without specified cause. |  |  | General paralysis of the insane. |  |  | Other forms of mental alienation. |  |  | Epilepsy. |  |  | Convulsions. (Nonpuerperal. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1909 | 1910 | Total. | 1909 | 1910 | Total. | 1909 | 1910 |  |  | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal. } \end{aligned}$ | 1909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal. } \end{aligned}$ |
| Marathon | 6 | 8 | 14 |  | 3 | 3 | 1 | $\ldots$ | 1 | 2 | 1 | 3 |  | 1 | 1 |
| Marinette | 6 | 5 | 11 | 1 | 1 |  |  |  |  |  | 1 | 1 |  |  |  |
| Marquette | 18 |  | ${ }_{1}^{1}$ |  |  |  | 2 |  | 2 | 17 | 11 | 28 | 1 | 2 | 3 |
| Milwaukee | 48 | 53 8 8 | 101 | 35 | 35 | 70 3 | 2 |  | 2 | 17 | ${ }_{3}^{1}$ | 3 | 1. |  |  |
| Monroe | 6 | 8 | 14 9 | 2 1 |  | 1 |  |  |  |  | 1 | 1 | 1 |  | 1 |
| Oconto | 4 | 5 | 9 1 | 1 |  | 1 |  |  |  | 2 | 1 | 2 |  |  |  |
| Oneida . |  | 1 | 19 | 1 |  | 1 |  |  |  |  | 1 | 1 | 1 |  | 1 |
| Outagamie | 5 | 14 | 19 1 |  |  | 3 |  |  |  | 1 | 1 | 2 |  |  |  |
| Ozaukee | 1 |  | 1 | 2 | 1 | 3 |  |  |  |  | 1 | 1 |  |  |  |
| Pepin | $\cdots$ | 1 | 1 |  | 1 | 1 |  |  |  | $\ddot{2}$ | 1 | 3 |  |  |  |
| Polk | 1 | 3 | 4 | 1 | 1 | 2 |  |  |  | 2 | 1 | 3 |  |  |  |
| Portage | 7 | 7 | 14 |  |  |  |  |  |  | 2 | ... | 2 |  |  |  |
| Price |  | 1 | 1 |  | 1 | 1 |  |  |  |  |  |  |  |  |  |
| Racine | 9 | 4 | 13 | 1 |  | 2 |  |  |  | 8 |  | 8 |  |  |  |
| Richland | 3 | 2 | 5 | 1 | 2 | 3 |  |  |  | 1 |  | 1 |  |  |  |
| Rock | 18 | 21 | 39 |  | 1 | 1 |  |  |  | 3 | 4 | 7 |  |  |  |
| Rusk |  |  |  |  |  |  |  |  |  |  | 1 | 1 |  |  |  |
| St. Croix | ${ }^{6}$ | 5 | 11 | \| 1 | 2 | 3 |  |  |  |  | 2 | 2 3 |  |  |  |
| Sauk | 10 |  | 19 |  |  |  |  |  |  | 2 | 1 | 3 |  |  |  |
| Shawyer |  |  | 7 | 2 |  | 2 |  |  |  | 1 | 1 | , |  |  |  |
| Sheboygan | 5 | 3 | 8 |  | 1 | 1 |  |  |  | 1 | 3 |  |  |  |  |
| Taylor ... |  | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| Trempealeau | 6 | 6 | 12 | 1 |  | 1 |  |  |  |  |  |  | 1 | 1 | 2 |
| Vernon . | 4 | + | 8 | 2 | 1 | 3 | 1 |  | 1 | 2 | 4 | 6 | 1 | ... | 1 |
| Vilas | 1 | 1 | 2 |  |  |  |  |  |  |  |  |  |  |  |  |
| Walworth | 7 | 8 | 15 | 2 | 1 | \| | ... |  |  | 4 | 4 | 8 |  |  |  |
| Washburn |  | 1 | 1 |  |  | . |  |  |  | 1 |  | 1 |  |  |  |
| Washington | 2 | 2 | 4 |  |  |  |  |  |  |  | 1 | 1 |  |  |  |
| Waukesha | 4 | 11 | 8 | $\stackrel{2}{3}$ | 6 3 | 6 |  |  |  | 3 3 3 | 4 1 | 7 |  | 1 | 1 |
| Waupaca | 15 4 | 11 10 | 26 14 | 3 1 1 | 3 | 6 2 |  |  |  | 3 2 2 | 1 | 4 |  |  |  |
| Waushara | $\stackrel{4}{4}$ | 10 <br> 13 | 14 | 21 | 31 | $\stackrel{2}{52}$ |  |  |  | 2 |  | 6 |  | 1 | 3 |
| Winnebago Wood | $\begin{array}{r}22 \\ 3 \\ 3 \\ \hline\end{array}$ | 13 5 | $\begin{array}{r}14 \\ 8 \\ \hline\end{array}$ | 21 | 31 | ${ }^{2}$ |  |  |  |  | 6 | 6 | 2 | 1 |  |
| Total | 396 | 377 | 773 | 98 | 132 | 230 | 30 | \| 1 | 31 | 1.25 | 115 | 240 | 24 | 12 | 36 |

TABLE NO. 31.-SHOWING DEATHS FROM EACH COUNTY ARRANGED ACOORDING TO THE CAUSE OF DEATH FOR EACH YEAR.-Cont.

| County. | Convulsions of infints. |  |  | Chorea. |  |  | Neuralgia and neuritis. |  |  | Other diseases of the nervous system. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1909 | 1910 | To- | 19.9 | 1910 | To- tal. | 1909 | 1910 | To- tal. | 1909 | 1910 | Total. |
| Adams | 2 | 3 | 5 |  |  |  |  |  |  | 2 |  |  |
| Ashland | 1 | 8 | 14 7 |  |  |  |  |  |  | 1 |  | 1 |
| Barron. | 1 | 6 4 | 7 |  |  |  |  |  |  | 1 |  | 1 |
| Bayfield | 1 19 | 4 19 | $\begin{array}{r}5 \\ 38 \\ \hline\end{array}$ |  |  |  |  |  |  | 1 |  | 3 |
| Buffalo | 1 | 1 3 | 4 |  |  |  |  |  |  |  |  |  |
| Burnett | 2 | 1 | 3 |  |  |  |  |  |  | 2 |  | . 2 |
| Calumet | 12 | 1 | 13 |  |  |  |  |  |  | 1 |  | 1 |
| Chippewa | 6 | 6 | 12 |  | 1 | 1 |  |  |  | 3 |  | 11 |
| Clark .... | - | 3 | 12 |  |  |  |  |  |  | 2 | 2 | 4 |

TABLE NO. 31.-SHOWING DEATHS FROM EACH COUNTY ARRANGED ACCORDING TO THE CAUSES OF DEATH FOR EACH YEAR.-Cont.

| County. | Convulsions of infants. |  |  | Chorea. |  |  | Neuralgia and neuritis. |  |  | Other diseases of the nervous system. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1909 | 1910 | To- | 1909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal. } \end{aligned}$ | 1909 | 1910 | To- tal. | 1909 | 1910 | Total. |
| Columbia | 1 | 1 | 2 |  |  |  |  |  |  |  |  |  |
| Crawford | 3 | 1 | 4 |  |  |  |  |  | 1 | 3 | 2 | 5 |
| Dane | 7 | 9 | 16 |  |  |  | $\cdots$ | 1 | 1 |  | 3 | 3 |
| Dodge | 10 | 14 | 24 |  |  |  | ..... | 1 | 1 | 8 | ${ }_{7}^{6}$ | 14 |
| Door | 5 | 6 | 11 |  |  |  |  | 1 | 1 | 1 | 7 | 8 |
| Douglas | 3 | 7 | 10 |  |  |  |  | 1 | 1 | 2 | 3 | $\stackrel{2}{5}$ |
| Dunn | 5 | 5 | 10 |  |  |  |  |  |  | 3 | 3 | ${ }_{3}$ |
| Eau Claire | 4 | 1 | 5 |  |  |  |  |  |  | 3 | 1 | $\stackrel{3}{2}$ |
| Fond du Lac. | 16 | 9 |  |  |  |  |  |  |  |  |  |  |
| Forest ....... | 16 | 9 | 25 |  | 1 | 1 |  |  |  | 9 | 5 | 14 |
| Grant | 5 | 6 | 11 |  |  | 1 |  |  |  | 1 |  | 1 |
| Green | 5 | 2 | 1 3 |  |  |  |  | 1 | 1 | 1 |  | 1 |
| Green Lake | 4 | 4 | 8 |  |  |  |  | 1 | 1 | 4 |  | 4 |
| Iowa | 4 | 6 | 10 |  |  |  |  |  |  | 1 |  |  |
| Iron . | 3 | 1 | 4 |  |  |  |  |  |  | 1 | 2 | 1 |
| Jackson | 8 |  | 12 |  |  |  |  |  |  |  | 2 | 2 |
| Jefferson | 6 | 4 | 10 |  | i | 1 |  | 1 | 1 | 1 |  | 1 |
| Juneau | 3 | 2 | 5 |  |  |  |  | 1 | 1 | 1 | 1 | 2 |
| Kenosha | 7 | 3 | 10 |  | 1 | 1 | 1 | 2 | 3 | 3 | 2 | $\stackrel{\square}{3}$ |
| Kewaunce | 3 | 5 | 8 | 1 |  | 1 |  |  |  | 2 | , | 3 |
| La Crosse | 4 | 10 | 14 |  |  |  |  |  |  | 2 | 4 | 6 |
| Lafayette | 3 | 4 | 7 |  |  |  | 1 | 1 | 2 | 2 |  | 2 |
| Langlade . | $\stackrel{2}{8}$ | 7 | 9 |  |  |  |  |  |  |  |  |  |
| Lincoln Manitowoc | 8 15 | 12 | 20 |  |  |  |  |  |  | 1 |  | 1 |
| Marathon . | ${ }_{36}^{15}$ | 14 38 | 29 74 |  |  |  |  |  |  |  | 2 |  |
| Marinette | 11 | $\begin{array}{r} \\ 7 \\ \hline\end{array}$ | 18 |  |  |  | 1 |  | 1 | 3 | 1 | 4 |
| Marquette | 4 | 7 | 11 |  |  |  |  |  |  | 1 | 1 | 2 |
| Milwaukee | 166 | 168 | 334 | 1 | 2 |  | 1 |  |  |  |  |  |
| Monroe | 2 | 7 | 9 | 1 |  |  | 1 | 6 | 7 |  | 13 | 35 3 4 |
| Oconto | 13 | 3 | 16 |  |  |  |  |  |  | 1 |  | 3 |
| Oneida | 6 |  | 6 |  |  |  |  |  |  | 2 | 2 | 1 |
| Outagamie | 19 | 12 | 31 |  |  |  | 1 |  |  | 6 |  | 1 |
| Ozaukee | 6 | 3 | - |  |  |  | 1 | 3 | 1 |  | 1 | 1 |
| Pepin | 2 | 1 | 3 |  |  |  |  |  |  | 2 |  | 2 |
| Pierce Polk | 4 | 1 | 5 |  |  |  |  | 2 | 2 | 3 |  | 3 |
| Portage | 12 |  | 4 |  |  |  | I |  | 1 | 1 | 2 | 3 |
| Price .. | 12 | 11 | 23 3 | 1 |  |  | 1 | 1 | 2 |  | 4 | 4 |
| Racine | 11 | 17 | 28 |  |  | 1 |  |  |  |  | 1 |  |
| Richland | 1 | 3 | 4 |  |  |  |  | 1 | 1 | 4 | 6 | 10 |
| Rock | 6 | 8 | 14 |  |  |  | 3 | 1 | 1 | 6 4 | 1 | ${ }^{7}$ |
| Rusk | 2 | 1 | 1 |  |  |  | 3 | 1 | 4 | 4 | 6 | 10 |
| St. Croix |  | 2 | 2 |  |  |  |  |  |  | 4 |  |  |
| Sauk | 8 | 10 | 18 |  |  |  | 1 | 1 | 2 | 4 | 1 | 3 |
| Sawyer | 2 | 1 | 3 |  |  |  |  |  |  |  |  |  |
| Shawano | 12 | 9 | 21 |  |  |  |  |  |  |  |  |  |
| Sheboygan | 15 | 22 | 37 |  |  |  | 1 |  | 1 | 2 | 4 | 6 |
| Taylor ..... | 7 | 2 | 9 |  |  |  |  | 1 | 1 | 1 | 1 | 2 |
| Trempealeau | 3 | 1 | 4 |  |  |  |  |  |  | 1 | 1 | 2 |
| Vernon | 4 | 3 | 7 |  | 1 | 1 | 1 |  | 1 | 2 | 3 | 5 |
| Walworth | 3 | 1 | 4 | 1 |  | 1 | 1 |  |  |  |  |  |
| Washburn |  |  |  |  |  |  |  |  | 2 | 4 | 1 | 8 |
| Washington | 5 | 6 | 11 |  |  |  |  |  |  |  |  |  |
| Waukesha | 6 | 6 | 12 |  | 1 | 1 | 1 |  | 1 | 6 | 3 | 9 |
| Waupaca | 4 |  | 11 |  |  |  |  | i | 1 |  | 5 |  |
| Waushara .... | 3 | 2 | 5 |  |  |  |  |  |  | 1 | 4 | 5 |
| Winnebago ... | 27 | 13 | 40 |  |  |  |  | 1 | 1 | 7 |  |  |
| Wood | 6 | 11 | 17 |  |  |  |  |  |  | 2 | 3 | 5 |
| Total | 604 | 5741 | 1,178 | 5 | 9 | 14 | 17 | 31 | 48 | 152 | 124 | 276 |

TABLE NO. 31.-SHOWING DEATHS FROM EACH COUNTY ARRANGED ACCORD ING TO THE CAUSES OF DEATH FOR EACH YEAR.—Cont.

| County. | Diseases of the eyes and their annexa. |  |  | Diseases of the ears. |  |  | Pericarditis. |  |  | Acute endocarditis. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1909 | 1910 | Total. | 1909 | 1910 | To- tal. | 1909 | 1910 | Total. | 1909 | 1910 | Total. |
| Adams |  |  |  |  |  |  |  |  |  |  | 1 | 1 |
| Ashland |  |  |  |  | 1 | 1 |  | 1 | 1 | 12 | 1 | 13 |
| Barron |  |  |  | 2 |  | 2 | 1 |  | 1 | 8 | 1 | 9 |
| Bayfleld |  |  |  |  |  |  |  |  |  | 1 |  | 1 |
| Brown |  |  |  |  |  |  | 1 | 2 | 3 | 17 | 4 | 21 |
| Buffalo |  |  |  |  |  |  |  |  |  | 4 |  | 4 |
| Burnett |  |  |  |  |  |  |  |  |  |  |  |  |
| Calumet . |  |  |  |  |  |  |  |  |  | 1 |  | i |
| Chippewa |  |  |  |  | 1 | 1 |  |  |  |  | 3 <br> 3 | 3 3 |
| Clark ... <br> Columbia |  |  |  |  |  |  | 1 | 1 | 2 |  | 3 <br> 3 | 3 3 |
| Columbia Crawford |  |  |  |  | 1 | 1 | 1 |  | 1 | 1 | 3 | 3 2 |
| Dane .. |  |  |  | 1 |  | 1 | 1 | 1 | 2 | 5 | 4 | 9 |
| Dodge |  |  |  |  |  |  |  | 1 | 1 | 4 | 2 | 6 |
| Door |  |  |  |  |  |  |  |  |  |  | 3 | 3 |
| Douglas |  |  |  | 1 |  | 1 | 1 |  | 1 |  |  |  |
| Dunn .. |  |  |  |  | 1 | 1 |  |  |  |  | 3 | 3 |
| Eau Claire |  |  |  | 1 |  | 1 | 1 | 1 | 2 | ... | 1 | 1 |
| Florence .... |  |  |  |  |  |  |  |  |  |  | 1 | 1 |
| Fond du La Forest |  |  |  |  |  |  | 1 |  | 1 | 10 | 6 | 16 |
| Forest $\qquad$ <br> Grant $\qquad$ |  |  |  |  | 1 | 1 | 3 |  |  | 1 2 | 3 | 1 |
| Green . |  |  |  | 1 | 1 | 1 | 3 |  | 3 | 2 | 3 2 | 5 |
| Green Lake |  |  |  |  |  |  |  |  |  |  | 2 | 2 |
| Iowa |  |  |  |  | 1 | 1 |  |  |  |  | 1 | 1 |
| Iron ... |  |  |  |  |  |  |  |  |  |  |  |  |
| Jackson |  |  |  |  |  |  |  |  |  |  | 1 | 1 |
| Jefferson |  |  |  | 1 |  | 1 | 1 | ...... | 1 | 1 | 2 | 3 |
| Juneau . |  |  |  |  |  |  |  |  |  |  |  |  |
| Kenosha |  |  |  |  |  |  |  |  |  | 7 | 4 | 11 3 |
| Kewaunce <br> La Crosse |  |  |  | 1 |  | 1 | 1 |  | 1 | 2 1 | 1 5 | 3 6 |
| Lafayette . |  |  |  |  |  |  |  |  |  | 4 | 1 | 5 |
| Langlade |  |  |  |  |  |  | 1 |  | 1 |  | 3 | 3 |
| Lincoln .... |  |  |  |  |  |  |  |  |  |  | 1 | 10 |
| Manitowoc <br> Marathon |  |  |  |  |  |  | 1 |  | 1 | 5 2 | 5 1 | 10 3 |
| Marinette . |  |  |  |  |  |  |  | 1 | 1 | 2 | 5 | 7 |
| Marquette |  |  |  |  |  |  |  |  |  |  | 1 | 1 |
| Milwaukee |  | 1 | 1 | 5 | 5 | 10 | 6 | 12 | 18 | 81 | 61 | 142 |
| Monroe |  |  |  |  |  |  |  | 1 | 1 | 2 | 1 | 3 |
| Oconto |  |  |  |  |  |  |  |  |  | 1 | 1 | 2 |
| Oneida ... |  |  |  |  |  |  |  |  |  |  |  |  |
| Outagamie | 1 |  | 1 | 1 | 1 | 2 |  |  |  |  | $\stackrel{2}{2}$ | 2 |
| $\begin{aligned} & \text { Ozaukee ... } \\ & \text { Pepin ..... } \end{aligned}$ |  |  |  |  |  |  | 1 | 1 | 2 | 1 | 2 | 3 |
| Pierce . |  |  |  |  |  |  |  | 1 | 1 | 2 |  | 1 |
| Polk .. |  |  |  |  |  |  |  | 1 | 1 | 1 | 3 | 4 |
| Portage |  |  |  |  |  |  |  | 1 | 1 | 5 | 2 | 7 |
| Price |  |  |  |  |  |  |  |  |  |  |  |  |
| Racine |  | 1 | 1 | 1 |  | 1 |  |  |  | 6 | 6 | 12 |
| Richland |  |  |  |  |  |  |  |  |  | 4 | 2 | 6 |
| Rock |  |  |  | 1 |  | 1 |  |  |  | 2 | 3 | 5 |
| Rusk ..... |  |  |  |  |  |  |  |  |  | 2 | $\stackrel{2}{2}$ | 4 |
| St. Oroix |  |  |  |  |  |  |  | 2 | 2 | 1 | 1 | 2 |
| Sauk . |  |  |  |  |  |  | 1 |  | 1 | 5 | 3 | 8 |
| Sawyer |  |  |  |  |  |  |  |  |  |  |  |  |
| Shawano | 1 |  | 1 | 1 |  | 1 |  | 1 | 1 | 3 | 1 | 4 |
| Sheboygan |  |  |  |  |  |  |  |  | 2 | 2 |  | 10 |
| Trempealeau |  |  |  |  |  |  |  |  |  |  | 2 | $\stackrel{2}{3}$ |
| Trempealeau |  |  |  |  |  |  |  |  |  | 2 | 1 | 3 |
| Vernon ... |  |  |  |  |  |  |  |  |  | 1 | 5 | 6 |
| Walworth |  |  |  |  |  | 1 |  |  |  | 1 |  | i |
| Washburn |  |  |  |  |  |  |  |  |  |  | 1 | 1 |

TABLE NO. 31.-SHOWING DEATHS FROM EACH COUNTY ARRANGED ACCORDING TO THE CAUSES OF DEATH FOR EACH YEAR.-Cont.

| County. | Diseases of the eyes and their annex. |  |  | Diseases of the ears. |  |  | Pericarditis. |  |  | Acute endocarditis. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1909 | 1910 | To- | 1909 | 1910 | Total. | 1909 | 1910 | To- tal. | 1909 | 1910 | To- |
| Washington |  |  |  |  |  |  |  |  |  | 7 | 7 | 14 |
| Waukesha |  |  |  |  |  |  | 1 | 1 | 2 |  | 8 | 17 |
| Waupaca. |  |  |  |  |  |  | 1 | 1 | 2 | 8 | 4 | 12 |
| Waushara |  |  |  |  |  |  |  |  |  | 2 |  | 2 |
| Winnebago |  |  |  | 1 |  | 1 | 1 |  | 1 | 8 | 14 | 22 |
| Wood ....... |  |  |  |  |  |  |  |  |  | 2 | 1 | 3 |
| Total | 2 | 2 | 4 | 18 | 13 | 31 | 26 | 32 | 58 | 252 | 216 | 468 |

TABLE NO. 31.-SHOWING DEATHS FROM EACH COUNTY ARRANGED ACCORDING TO THE CAUSES OF DEATH FOR EACH YEAR.-Cont.

| County. | Organic disease of the heart. |  |  | Angina pectoris, |  |  | Diseases of the arteries, atheroma, aneurysm, etc. |  |  | Embolism and thrombosis. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1909 | 1910 | Total. | 1909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal. } \end{aligned}$ | 1909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal. } \end{aligned}$ | 1909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal. } \end{aligned}$ |
| Adams | 3 | 1 | 4 |  |  |  |  |  |  |  |  |  |
| Ashland | 13 | 22 | 35 |  |  |  | 2 | 3 | 5 | 3 | 1 | 4 |
| Barron | 13 | 14 | 27 |  | 2 | 2 | 3 | 2 | 5 | ${ }_{2}^{3}$ | 1 | 3 |
| Bayfeld | $\begin{array}{r}4 \\ 2 \\ \hline\end{array}$ | 88 | 12 |  |  |  |  | 1 | 1 |  |  |  |
| Brown ${ }^{\text {Buffalo }}$ | 11 | 39 10 | 61 21 | 1 | 2 | 3 | 7 | 7 | 14 | 1 | 4 | 5 |
| Burnett | 11 | 10 2 | 21 3 |  | 1 | 1 | 3 | 1 | 4 |  |  |  |
| Calumet | 16 | 12 | 28 | 1 | 2 | 3 | $\ddot{2}$ | 1 | ${ }_{3}^{1}$ | 1 | 3 | 4 |
| Chippewa | 23 | 27 | 50 | 1 | 2 | 5 | 1 | 3 | 4 | 1 | 3 | 4 |
| Clark | 11 | 15 | 26 | 3 | 1 | 4 | 2 | 1 | 3 | 2 |  | 2 |
| Columbia | 22 | 22 | 44 | 1 | 8 | 9 | 9 | 6 | 15 | 2 | 3 | 5 |
| Crawford | 17 | 9 | 26 |  | 1 | 1 | 5 | 4 | 9 | 1 | 1 | 2 |
| Dane | 58 | 45 | 103 | 10 | 5 | 15 | 13 | 15 | 28 | 2 | 1 | 3 |
| Dodge | 35 | 45 | 80 | 2 | 2 | 4 | 7 | 16 | 23 | 8 | 4 | 12 |
| Door | 10 | 7 | 17 |  | 1 | 1 | 4 | 4 | 8 |  | 1 | 1 |
| Douglas | 24 | 17 | 41 | 1 | 1 | 2 | 5 | 6 | 11 | 3 | 2 | 5 |
| Dunn | 20 | 20 | 40 |  | 2 | 2 | 4 | 3 | 7 | 1 | 1 | 2 |
| Eau Claire | 21 | 26 | 47 | 7 | 4 | 11 |  | 5 | 9 |  | 2 | 2 |
| Florence ${ }^{\text {Fond }}$ du ..... |  | 1 | 1 |  |  |  |  |  |  |  |  |  |
| Fond du Lac.. | 25 | 33 | 58 | 4 | 5 | 9 | 13 | 9 | 22 | 1 | 2 | 3 |
| Grant | 28 | 25 | 53 |  | 1 | 1 | 20 | 13 | 13 |  | 1 | 1 |
| Green | 15 | 10 | 25 | 2 | 1 | 3 | 7 | 6 | 13 |  | 1 | 1 |
| Green Lake | , | 10 | 19 | 1 |  | 1 | 2 | 2 | 4 | 2 | - 3 | 5 |
| Iowa | 17 | 13 | 30 |  | 1 | 1 |  | 1 | 1 | 3 |  | 3 |
| Iron | 1 | 2 | 3 |  |  |  |  |  |  |  |  |  |
| Jackson | 14 | 7 | 21 |  | 2 | 2 | 1 | 4 | 5 |  |  |  |
| Jefferson | 27 | 38 | 65 |  | 1 | . | 10 | 8 | 18 | 4 |  | 4 |
| Juneau | 14 | 19 | 33 |  |  |  | 7 | 2 | 9 |  |  |  |
| Kenosha | 10 | 16 | 26 | 2 | 2 | 4 | 8 |  | 8 |  | 4 | 4 |
| Kewaunee . | 10 | 7 | 17 | 1 |  | 1 | 1 | 4 | 5 | 1 |  | 1 |
| La Crosse | 43 | 44 | 87 | 4 | 2 | 6 | 9 | 16 | 25 | 3 | 1 | 4 |
| Lafayette | 12 | 20 | 32 | 1 | 1 | 2 | 5 | 7 | 12 | 5 | 1 | 6 |
| Langlade | 5 | 15 | 20 | 2 | 6 | 8 | 1 | 1 | 2 |  |  |  |
| Lincoln ... | 8 | 12 | 20 | 4 |  | 4 | 2 |  | 2 |  | 1 | 1 |
| Manitowoc | 30 | 27 | 57 | 4 | 2 | 6 | 11 | 10 | 21 |  |  |  |

TABLE NO．31．－SHOWING DEATIHS FROM EACH COUNTY ARRANGED ACCORD－ ING TO THE CAUSES OF DEATH FOR EACH YEAR．－Cont．

| County． | Organic diseases of the heart． |  |  | Angina pectoris． |  |  | Diseases of the arteries，ather－ oma，aneurysm． etc． |  |  | Embolism and thrombosis． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1909 | 1910 | To－ tal． | 1909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal. } \end{aligned}$ | 1909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal. } \end{aligned}$ | 1909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal. } \end{aligned}$ |
| Marathon | 19 | 33 | 52 |  | 2 | 2 | 4 | 2 | 6 | 2 | 2 | 4 |
| Marinette | 25 | 29 | 54 |  |  |  | 4 | 3 | 7 |  | 1 | 1 |
| Marquette | 9 | 10 | 19 | 2 | 1 | 3 | 1 | 5 | 6 |  | 1 | 1 |
| Milwaukee | 354 | 368 | 722 | 25 | 28 | 53 | 102 | 113 | 215 | 23 | 22 | 45 |
| Monroe | 24 | 27 | 51 | 1 | 4 | 5 | 4 | 6 | 10 | 2 | 1 | 3 |
| Oconto | 9 | 10 | 19 | 2 |  | 2 | 4 | 5 | 9 |  | 1 | 1 |
| Oneida | 8 | 5 | 13 |  |  |  |  |  |  |  |  |  |
| Outagamie | 36 | 45 | 81 |  | 7 | 7 | 8 | 3 | 11 | 5 | 3 | 8 |
| Ozaukee | 6 | 13 | 19 | 4 |  | 4 | 5 | 1 | 6 |  |  |  |
| Pepin | 2 | 8 | 10 | 1 |  | 1 | 1 | 1 | 2 | 1 | 1 | 2 |
| Pierce | 16 | 30 | 46 | 1 | 1 | 2 | 2 | 2 |  |  | 1 | 1 |
| Polk | 15 | 14 | 29 | 1 | 2 | 3 | 2 | 4 | 6 |  |  |  |
| Portage | 17 | 20 | 37 |  | 1 | 1 | 5 | 7 | 12 | 1 |  | 1 |
| Price ．．． | 3 | 3 | 6 |  | 2 | 2 | 1 | 1 | 2 |  | 1 | 1 |
| Racine | 21 | 30 | 51 | 5 | 8 | 13 | 6 | 4 | 10 | 8 | 1 | 9 |
| Richland | 12 | 12 | 24 | 3 | 1 | 4 | 7 | 4 | 11 |  |  |  |
| Rock ．． | 41 | 41 | 82 | 3 | 6 | 9 | 7 | 11 | 18 | 3 | 6 | 9 |
| Rusk | 7 | 4 | 11 |  |  |  | 1 | 1 | 2 |  |  |  |
| St．＇Oroix | 17 | 22 | 39 | 1 | 1 | 2 | 4 | 1 | 5 | 3 | 1 | 4 |
| Sauk | 35 | 32 | 67 | 2 | 2 | 4 |  |  |  | 1 | 1 | 2 |
| Sawyer | 4 | 2 | 6 |  | 1 | 1 |  |  |  |  |  |  |
| Shawano ． | 12 | 20 | 32 | 1 | 1 | 2 | 3 | 1 | 4 |  | 2 | 2 |
| Sheboygan | 49 | 44 | 93 | 7 | 7 | 14 | 10 | 4 | 14 | 2 | 3 | 5 |
| T「aylor ．．．．． | 10 | 3 | 13 |  | 1 | 1 |  | 1 | 1 |  |  |  |
| Trempealeau | 18 | 12 | 30 | 4 |  | 4 | 1 |  | 1 |  | 1 | 1 |
| Vernon ．．． | 12 | 13 | 25 |  | 2 | 2 | 6 | 2 | 8 |  |  |  |
| Vilas ．．． | 3 | 1 | 4 |  | 1 | 1 |  |  |  |  |  |  |
| Walworth | 45 | 21 | 66 | 1 | 3 | 4 | 6 | 6 | 12 |  | 1 | 1 |
| Washburn ． | 2 | 4 | 6 | 2 |  | 2 |  |  |  |  |  |  |
| Washington | 12 | 9 | 21 | 1 |  | 1 | 2 | 4 | 6 | 3 | 1 | 4 |
| Waukesha ． | 26 | 33 | 59 | 4 | 4 | 8 | 13 | 8 | 21 | 1 |  | 1 |
| Waupaca | 23 | 17 | 40 | 6 | 5 | 11 | 3 | 9 | 12 |  | 2 | 2 |
| Waushara | 12 | 7 | 19 | 2 |  | 2 | 4 | 4 | 8 |  | 3 | 3 |
| Winnebago | 58 | 63 | 124 | 3 | 2 | 5 | 14 | 25 | 39 | 7 | 4 | 11 |
| Wood ．．．．．． | 18 | 20 | 38 | 1 |  | 1 | 10 | 5 | 15 | 3 | 2 | 5 |
| Total | 1，573 | 1，668 | 3，241 | 135 | 153 | 288 | 409 | 405 | 814 | 110 | 100 | 210 |

TABLE NO．31．－SHOWING DEATHS FROM EAOH COUNTY ARRANGED ACCORD ING TO THE CAUSES OF DEATH FOR EACH YEAR．－Cont．

| County． | Diseases of the veins（varices， haemorrhoids， phlebitis，etc．） |  |  | Diseases of the lymph－ atic system （lymphan－ gitis，etc．） |  |  | Haemorrh－ age；other diseases of the circula－ tory system |  | Diseases of the nasal fossae． |  |  | Diseases of the larynx． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1909 | 1910 | Total | 1909 | 1910 | T | 1909｜1910 | 骨 | 1909 | 1910 | П゙ | 1909 | 1910 | స్ |
| Adams |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ashland |  |  |  |  |  |  |  |  |  |  |  |  | 1 | 1 |
| Barron |  |  |  |  |  |  |  |  |  |  |  | 1 | 2 | 3 |
| Bayfield |  |  |  |  |  |  | ．．． 1 | 1 |  |  |  | 1 |  | 1 |
| Brown |  |  |  |  | 1 | 1 |  |  | 1 |  | 1 |  | 1 | 1 |
| Buffalo |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Burnett |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |
| Calumet |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


| County. | Diseases of the veins (varices, haemorrhoids, phlebitis. etc.) |  |  | Diseases of the lymphatic system (1ymphangitis, etc.) |  |  | Haemorrhage: other aiseases of the circulatory system |  |  | Diseases of the nasal fossae. |  |  | Diseases of the larynx. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1909 |  | ָ |  | 1910 | - | 1909 | 1910 | $\begin{aligned} & \text { Tin } \\ & \stackrel{0}{5} \end{aligned}$ | 1909 | 1910 | $\begin{aligned} & \text { ज } \\ & \text { Ĥ } \end{aligned}$ | 1909 | 1910 |  |
| Chippewa |  | 1 | 1 |  |  |  |  |  | 1 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Columbia |  | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| Crawford |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Dunn . | i |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Iron |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |
| Jackson |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Kewaunce |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| La Crosse |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pierce $\quad . .$. | ...... |  | ...... | .... | .... | .... | .... | $\cdots$ | .... | .... | .... |  | .... | .... | .... |
| Polk |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Taylor .... |  |  |  | 1 | 1 | 1 | 2 | 2 | 2 |  |  |  | 1 |  | 1 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Walworth |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Winnebago |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 24 | 18 | 42 | 7 | 17 | 24 | 38 | 25 | 63 | 4 | 5 | 9 | 35 | 35 | 70 |


| County. | Diseáses of the thy roid body. |  |  | Acute bronchitis. |  |  | Chronic bronchitis. |  |  | Bronchopneumonia. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1909 | 1910. |  |  | 1910 | Total. | 1909 | 1910 | Total. | 1909 | 1910 | Total. |
| Adams |  |  |  |  |  |  |  | 4 | 4 |  |  |  |
| Ashland |  |  |  | 3 | 3 | 6 |  | 3 | 3 | 3 | 1 | 4 |
| Barron |  |  |  | 6 | 5 | 11 | 2 | 2 | 4 | 9 | 7 | 16 |
| Bay field |  |  |  |  | 1 | 1 |  |  |  | 2 | 1 | 3 |
| Brown |  |  |  | 5 | 2 | 7 | 4 | 1 | 5 | 7 | 16 | 23 |
| Buffalo |  |  |  | 1 | 1 | 2 | 3 | 1 | 4 | 2 |  | 2 |
| Burnett |  |  |  |  | 1 | 1 | 1 | 2 | 3 |  | 2 | 2 |
| Calumet |  |  |  | 3 |  | 3 | 1 | 2 | 3 | 5 | 2 | 7 |
| Chippewa |  |  |  | 1. | 5 | 6 | 5 | 6 | 11 | 10 | 4 | 14 |
| Clark |  |  |  | 4 | 1 | 5 | 1 |  | 1 | 4 | 10 | 14 |
| Columbia |  |  |  |  | 1 | 1 | 6 | 4 | 10 | 7 | 1 | 8 |
| Crawford |  |  |  | 3 |  | 3 | 3 | 5 | 8 | 5 | 5 | 10 |
| Dane |  |  |  | 10 | 9 | 19 | 13 | 9 | 22 | 12 | 8 | 20 |
| Dodge |  |  |  | 8 | 5 | 13 | 7 | 3 | 10 | 2 | , | 6. |
| Door |  |  |  | 4 | 4 | 8 | 2 | 2 | 4 | 4 | 1 | 5 |
| Douglas |  |  |  | 1 | 3 | 4 | 1 | 1 | 2 | 3 | 7 | 10 |
| Dunn . |  |  |  |  | 6 | 10 | 6 | 3 | 9 | 8 | 3 | 11 |
| Eau Claire |  |  |  | 2 | 4 | 6 | 3 | 3 | 6 | 6 | 5 | 11 |
| Florence . |  |  |  |  |  |  |  |  |  |  |  |  |
| Fond du La |  | 1 | 1 | 7 | 1 | 8 | 9 | 4 | 13 | 10 | 5 | 15 |
| Forest |  |  |  |  | 1 | 1 | 1 |  | 1 | 3 | 2 | 5 |
| Grant |  |  |  | 8 | 7 | 15 | 5 | 5 | 10 | 8 | 5 | 13 |
| Green |  |  |  | 2 | 4 | 6 | 1 | 1 | 2 | 7 | 3 | 10 |
| Green Lake |  |  |  |  | 2 | 2 | 1 | 1 | 2 | 3 | 3 | 6 |
| Iowa |  |  |  | 2 | 2 | 4 | 4 | 5 | 9 | 4 | 2 | 6 |
| Iron |  |  |  | 4 | 4 | 8 |  | 1 | 1 | 1 |  | 1 |
| Jackson |  |  |  | 5 | 1 | 6 | 5 | 2 | 7 | 1 | 2 | 3 |
| Jefferson |  |  |  | 2 | 7 | 9 | 7 | 3 | 10 | 3 | 4 | 7 |
| Juneau |  |  |  | 1 | 4 | 5 | 2 | 3 | 5 | 4 |  | 4 |
| Kenosha |  |  |  | 5 | 2 | 7 | 3 |  | 3 | 14 | 13 | 27 |
| Kewaunee |  |  |  |  | 4 | 4 | 2 |  | 2 | 5 | 1. | 6 |
| La Orosse |  |  |  | 1 | 3 | 4 | 4 | 2 | 6 | 5 | 10 | 15 |
| Lafayette |  |  |  | 4 |  | 4 |  | 1 | 1 | 7 | 1 | 8 |
| Langlade |  |  |  |  |  |  | 2 |  | 2 | 3 | 3 | 6 |
| Lincoln . |  |  |  | 2 | 3 | 5 |  |  |  | 2 | 2 | 4 |
| Manitowoc | 1 |  | 1 | 7 | 3 | 10 |  |  |  | 4 | 5 | 9 |
| Marathon | 1 |  | 1 | 8 | 8 | 16 | 7 | 3 | 10 | 12 | 4 | 16 |
| Marinette |  |  |  | 2 | 5 | 7 | 1 | 1 | 2 | 5 | 9 | 14 |
| Marquette |  |  |  | 3 | 1 | 4 | 1 | 1 | 2 | 1 | 2 | 3 |
| Milwaukee | 2 |  |  | 95 | 120 | 215 | 75 | 49 | 124 | 199 |  | 438 |
| Monroe | 1 |  |  | 4 | 2 |  |  | 2 | 3 | 4 | 5 | 9 |
| Oconto |  |  |  | 2 | 1 | 3 | 1 | 3 | 4 | 2 |  | $\stackrel{2}{5}$ |
| Oneida ... |  |  |  |  | 2 | 2 |  |  |  | 3 | $\stackrel{2}{10}$ | ${ }_{16}^{5}$ |
| Outagamie | 1. |  | 1 | 4 | 1 | 5 |  | $\begin{array}{r}3 \\ 2 \\ \hline\end{array}$ | 4 <br> 3 | 6 <br> 3 | 10 1 | 16 |
| Ozaukee |  |  |  | 2 | 2 | $\begin{array}{r}2 \\ 3 \\ \hline\end{array}$ | 1 | 2 | 3 | 3 5 | 1 | $\stackrel{4}{6}$ |
| Pierce |  |  |  | 2 | 3 | 5 | $\cdots$ | 3 | 5 | 4 |  | 4 |
| Polk ... |  |  |  | 3 | 4 | 7 |  | 2 | 2 | 5 | 1 | 6 |
| Portage |  |  |  | 5 | 6 | 11 | - 3 | 2 | 5 | 7 | 7 | 14 |
| Price .. |  |  |  | 1 | 1 | 2 |  |  |  | 1 | 1 | 2 |
| Racine |  |  |  | 4 | 10 | 14 | 3 | 7 | 10 | 12 | 12 | 24 |
| Richland |  | 1 |  | 1 |  | 1 | 3 | 5 | 8 | 11 | 5 | 16 |
| Rock |  |  |  | 4 | 9 | 13 | 4 | 4 | 8 | 3 | 7 | 10 |
| Rusk |  |  |  | 1 |  | 1 |  |  |  | 2 | 2 | 4 |
| St. Croix |  |  |  |  | 3 | 3 | 1 | 5 | 6 | 2 | 1 | 3 |
| Sauk |  |  |  | 4 |  | 4 | 2 | 2 | 4 | 3 | 5 | 8 |
| Sawyer |  |  |  | 3 |  | 3 |  |  |  | 1 | 3 | 4 |
| Shawano |  |  |  | 5 | 2 | 7 | 1 | 4 | 5 | 9 | 5 | 14 |
| Sheboygan |  |  |  | 9 | 8 | 17 | 10 | 9 | 19 | 8 | 11 | 19 |
| Taylor |  |  |  | 1 |  | 1 |  |  |  |  | 1 | 1 |
| Trempealeau | 1 |  |  | 2 | 1 | 3 | 6 | 1 | 7 | 3 | 5 | 8 |
| Vernon .... |  |  |  | 5 | 3 | 8 | 1 |  | 1 | 6 | 6 | 12 |
| Vilas .... |  |  |  | 1 |  | 1 |  | 1 | 1 |  | 1 | 1 |
| Walworth |  |  |  | 7 | 3 | 10 |  | 6 | 8 | 5 | 1 | 6 |
| Washburn |  |  |  | 1 | ..... | 1 | , | 1 | 1 | 1 | 2 | 3 |
| Washington |  | . | 1 | 3 | 4 | 7 | 3 | 3 | 6 | 6 | 11 | 17 |

TABLE NO. 31.-SHOWING DEATHS FROM EACH COUNTY ARRANGED ACCORD ING TO THE CAUSES OF DEATH FOR EACH YEAR.-Cont.

| County. | Diseases of the thyroid body. |  |  | Acute bronchitis. |  |  | Chronic bronchitis. |  |  | Bronchoiapneumon. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1909 | 1910 | Total. | $1 ¢ 03$ | 1910 | To- tal. | 1909 | 1910 | To- | 1909 | 1910 | Total. |
| Waukesha |  |  |  | 6 | 4 | 10 | 3 | 5 | 8 | 7 | 9 | 16 |
| Waupaca |  |  |  | 2 | 1 | 3 | 4 | 2 | 6 | 4 | 3 | 7 |
| Waushara |  |  |  | 6 | 3 | 9 |  | 1 | 1 | 1 | 1 | 2 |
| Winnebago |  |  |  | 4 | 5 | 9 | 12 | 1 | 15 | 8 | 10 | 18 |
| Wood ...... |  |  |  | 4 | 2 | 6 | 5 |  | 5 | 5 | 8 | 13 |
| Total | 8 | 2 | 10 | 310 | 313 | 623 | 262 | 213 | 475 | 527 | 529 | 1,056 |

TABLE NO. 31.-SHOWING DEATHS FROM EACH OOUNTY ARRANGED ACCORDING TO THE CAUSES OF DEATH FOR EACH YEAR.-COnt.

| County. | Pneumonia. |  |  | Pleurisy. |  |  | Pulmonary congestion: pulmonary apoplexy. |  |  | Gangrene of the lung. |  |  | Asthma. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1909 | 1910 | To- <br> tal. | 1903 | $\|1910\|$ | $\left\lvert\, \begin{aligned} & \text { To- } \\ & \text { tal } \end{aligned}\right.$ | 190. | 1910 | To- <br> tal. | 1939 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal. } \end{aligned}$ | 1909 | 1910 | To- |
| Adams | 8 | 3 | 11 |  |  |  |  |  |  |  |  |  |  | 1 | 1 |
| Ashland | 26 | 24 | 50 |  |  |  | 2 | 1 | 3 |  |  |  |  | 2 | 2 |
| Barron | 22 | 22 | 44 |  |  |  |  | 2 | 2 |  |  |  | 2 |  | 2 |
| Bayfield | 12 | 16 | 28 |  |  |  | 1 |  | 1 |  |  |  |  | 1 | 1 |
| Brown | 59 | 62 | 121 |  | 2 | 2 | 3 | 3 | 6 |  |  |  | , | 1 | 2 |
| Buffalo | 8 | 10 | 18 |  |  |  | 1 | 1 | 2 |  |  |  | 2 |  | 2 |
| Burnett | 8 | 4 | 12 |  |  |  |  |  |  |  |  |  |  | 2 | 2 |
| Calumet | 7 | ${ }_{6}$ | 13 |  |  |  | 2 | 8 | 4 |  |  |  | 3 |  | 3 |
| Chippewa | 32 | 40 | 72 | 3 | $\cdots$ | 3 | 5 | 1 | 6 |  |  |  |  |  | 4 |
| Clark ... | 15 | 21 | 36 |  |  |  | 3 | 1 | 4 |  |  |  |  |  |  |
| Columbia | 23 | 23 | 46 | 1 | 1 | 2 | 1 | 1 | 2 |  |  |  | 1 | 2 | 3 |
| Crawford | 10 | 20 | 30 | 1 | $\because$ |  |  |  |  |  |  |  |  |  |  |
| Dane | 49 | 51 | 100 | 3 | 3 | 6 | 3 | 4 | 7 |  |  |  | 5 | 4. | 9 |
| Dodge | 30 | 18 | 48 | 2 | 2 | 4 | 6 | 4 | 10 |  |  |  |  |  |  |
| Door | 10 | 7 | 17 |  |  |  | 1 | 1 | 4 |  |  |  |  | 1 | 1 |
| Douglas | 36 | 26 | 62 | 1 |  | 1 | 1 | 1 | 2 |  |  |  |  | 2 | 2 |
| Dunn | 12 | 15 | 27 | 3 |  | 3 | 2 | 1 | 3 |  |  |  |  | 1 | 1 |
| Eau Claire | 24 | 30 | 54 | 1 |  | 1 |  |  |  |  |  |  |  |  |  |
|  | 1 |  | 1 70 |  |  |  |  |  |  |  |  |  |  |  |  |
| Fond du Lac <br> Forest | 13 5 | 37 5 | 70 10 | 1 |  |  | 3 | 2 | 5 |  |  |  | 4 | 2 | 6 |
| Grant | 27 | 20 | 47 | 2 | i | $\ddot{3}$ | $\ddot{2}$ | 6 | 8 |  |  |  | 4 |  | $\dddot{6}$ |
| Green | 21 | 19 | 40 |  |  |  | 1 | 1 | 2 |  |  |  | 1 | , | 2 |
| Green Lake | 5 | 10 | 15 | 1 | 1 | 2 | 2 |  | 2 |  |  |  | 2 | 1 | 3 |
| Iowa | 22 | 12 | 34 |  |  |  | 1 | 2 | 3 |  |  |  | 1 | 1 | I |
| Iron | 10 | 2 | 12 | 1 |  | 1 |  |  |  |  |  |  | , |  | 1 |
| Jackson | 16 | 7 | 23 |  | 2 | 2 | 1 | 1 | 2 |  |  |  | 1 |  | 1 |
| Jefferson | 15 | 23 | 38 | 2 | 2 |  | 1 | 1 | 2 |  |  |  |  |  | 1 |
| Juneau | 16 | 13 | 29 |  |  |  | 1 | 1 | 2 |  |  |  | 2 | 2 | 4 |
| Kenosha | 20 | 31 | 51 | 2 |  | 2 | 3 |  | 3 |  |  |  | 1 |  | 1 |
| Kewaunee | 12 | 12 | 24 |  |  |  |  | 1 | 1. |  |  |  |  | 1 | 2 |
| La Crosse | 40 | 31 | 71 | 1 | 3 | 4 | 1 | 1 | 2 |  |  |  | 1 | 1 | 2 |
| Lafayette | 15 | 7 | 22 | 1 |  | 1 | 1 | 2 | 3 |  |  |  | 1 |  | 1 |
| Langlade | 10 25 | 19 | 29 |  |  |  |  |  |  |  |  |  |  |  |  |
| Manitowoc | 25 24 | 22 | 51 | 4 | 2 | 6 | 6 | 2 |  |  |  |  | 3 |  | 1 5 |
| Marathon | 42 | 40 | 82 | 2 | 3 | 5 |  | 7 | 7 |  |  |  |  | 5 | 5 |
| Marinette | 19 | 20 | 39 |  | 1 | 2 | 1 |  | 1 |  |  |  | 1 |  | 1 |
| Marquette |  |  | 10 |  |  |  |  |  |  |  |  |  |  |  |  |
| Milwaukee Monroe | 355 | 419 | 774 | 17 | 19 |  |  | 25 | $\dddot{48}$ |  |  |  | 19 | 15 | 34 |
| Monroe .. | 38 | 33 | 71 |  |  |  | $2$ |  | $\begin{gathered} 40 \\ 2 \end{gathered}$ |  |  |  | 3 |  | 3 |

TABLE NO. 31.-SHOWING DEATHS FROM EACH COUNTY ARRANGED ACCORDING TO THE CAUSES OF DEATH FOR EACH YEAR.-Cont.

| County. | Pneumonia. |  |  | Pleurisy. |  |  | Pulmonary congestion; pulmonary apoplexy. |  |  | Gangre of the lung. |  |  | Asthma. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1909 | 1910 | Total. | 1909 | 1910 | To- | 1909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal } \end{aligned}$ | 1909 | 1910 | To- | 1909 | 1910 | Total. |
| Oconto | 21 | 13 | 34 | 1 | $\cdots$ | 1 | 3 |  | 3 |  |  |  |  |  |  |
| Oneida | 2 | 5 | 7 | 1 | $\ldots$ | 8 | 1 |  | 2 |  |  |  | 3 | 1 | 4 |
| Outagamie | 40 | 46 | 86 | 5 | 3 | 8 | 1 | 4 | 5 |  |  |  | 3 | 1 | 4 |
| Ozaukee | 8 | 5 | 13 | 1 |  |  | 1 | 1 | 2 |  |  |  |  | 1 | i |
| Pepin . | 19 19 | 7 12 | 818 | 1 | 2 | 1 | 2 | 2 | 4 |  |  |  | 3 | 2 | 5 |
| Pierce . | 19 | 12 6 | 18 | 1 | $\ldots$ | 1 | 2 | 2 |  |  |  |  | 2 | 1 | 3 |
| Portage | 19 | 16 | 35 |  |  | .... | 2 | 1 | 3 |  |  |  |  | 1 | 1 |
| Price .. | 8 | 4 | 12 |  |  |  |  |  |  |  |  |  |  |  |  |
| Racine | 40 | 50 | 90 | 1 | 3 | 4 | 11 | 2 | 13 5 |  |  |  | 2 | 4 | 6 |
| Richland | 18 | 14 | 32 94 |  |  |  | 5 9 |  | 16 |  | 1 | 1 | 1 | 1 | 2 |
| Rock | 51 | 43 2 | 94 7 | 2 | 1 |  | 9 3 | 1 | ${ }^{16}$ |  | 1 | 1 | 1 |  | 1 |
| Rusk | 5 18 | $\stackrel{2}{15}$ | 33 | 2 | 1 | 3 | ${ }_{2}^{3}$ | 2 | 4 |  |  |  | 2 | 2 | 4 |
| Sauk ... | 22 | 16 | 38 | 1 |  | 1 | 2 | 4 | 7 |  |  |  |  | 2 | 2 |
| Sawyer | 8 | 3 | 11 |  |  |  |  |  |  |  |  |  |  |  |  |
| Shawano | 18 | 14 | 32 | 2 |  | 2 | 2 | $\stackrel{2}{5}$ | 4 |  |  |  |  | 3 | ${ }_{5}^{6}$ |
| Sheboygan | 26 | 33 | 59 |  |  |  | 8 | 1 | 13 |  |  |  | 4 | 1 | 5 |
| Taylor | 12 | 2 | 14 | i | 1 | ${ }_{2}^{1}$ |  | 1 | 1 |  |  |  |  | ${ }_{3}$ | 3 |
| Trempealeau | 11 | 14 | 25 | 1 | 1 | 2 | 1 | 1 | 2 |  |  |  | 2 | 1 | 3 |
| Vernon | 27 | 21 | 48. |  |  |  | 1 | 1 | 2 |  |  |  |  | 1 |  |
| Vilas | 5 | 3 | 8 |  |  |  |  | 4 |  |  |  |  |  |  |  |
| Walworth | 29 | 22 5 | 17 | $\cdots$ | .. |  | 3 | 4 | 3 |  |  |  | 2 |  | $\ddot{2}$ |
| Washburn | 12 | $\begin{array}{r}5 \\ 15 \\ \hline\end{array}$ | 17 38 |  |  |  |  | 1 | 1 |  |  |  |  |  |  |
| Washington | 23 32 | 15 23 | 38 55 | 1 | 1 | 2 <br> 3 | $\cdots$ | ${ }_{3}^{1}$ | 4 |  |  |  |  | 1 | 1 |
| Waukesha | 32 31 | 23 32 10 | ${ }_{6}^{65}$ | 1 | 2 | 3 1 1 | ${ }^{1}$ | 4 | 7 |  |  |  | 1 | 1 | 2 |
| Waushara | 9 | 10 | 19 | 1 |  | . 1 |  |  |  |  |  |  |  |  | 10 |
| Winnebago | ${ }_{6}^{67}$ | 45 | 112 | 3 | 3 | 6 | 7 1 | 1 | 16 2 |  |  |  | 2 | 5 2 2 | 10 |
| Wood - | 30 | 19 | 49 |  | 1 |  |  |  | 2 |  |  |  | 2 |  | 4 |
| Total | 1,794 | 1,724 | 3,518 | 77 | 62 |  |  | 137 | 287 |  | 1 | 1 | 98 | 89 | 187 |

TABLE NO. 31.-SHOWING DEATHS FROM EACH COUNTY ARRANGED ACCORDING TO THE CAUSES OF DEATH FOR EACH YEAR.-Cont.

| County. | $\begin{aligned} & \text { Pulmonary } \\ & \text { emphy-- } \\ & \text { sema. } \end{aligned}$ | Other diseases of the respiratory Diseases of system (tuthe mouth berculosis and annexa. excepted). |  |  |  |  |  | Diseases of the pharynx. |  |  | Diseases of the oesophagus. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1909/1910 ${ }^{\text {Ta }}$ (al. | 1.909 | 1910 | To- | 1909 | 1910 |  |  | 1910 | To- |  | 1910 | $\left\lvert\, \begin{gathered}\text { Tc- } \\ \text { tal. }\end{gathered}\right.$ |



TABLE NO. 31.-SHOWING DEATHS FROM EACH COUNTY ARRIANGED ACCORD-
ING TO THE CAUSES OF DEATH FOR EACH YEAR.-Cont.


## TABLE NO. 31.-SHOWING DEATHS FROM EACH COUNTY ARRANGED ACCORDING TO I'HE CAUSES OF DEATH FOR EACH YEAR.-Cont.

| County. | Ulcer of the stomach. |  |  | Other diseases of the stomach (cancer excepted.) |  |  | Diarrhoea and enteritis (under 2 years). |  |  | Diarrhoea and enteritis (2 years and over). |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal } \end{aligned}$ | 1909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal. } \end{aligned}$ | 1909 | 1910 | Total. | 1909 | 1910 | Total. |
| Adams |  | 1 | 1 | 2 | 1 | 3 |  | 7 | 7 | 1 | 4 | 5 |
| Ashland |  |  |  | 1 | 3 | 4 | 5 | 23 | $\because 8$ | 1 | 1 | 2 |
| Barron |  | 1 | 1 | 2 | 3 | 5 | 14 | 20 | 34 | 6 | 9 | 15 |
| Bayfield |  | 1 | 1 | 1 | 2 | 3 | 9 | 13 | 22 |  | 2 | 2 |
| Brown | 2 | 3 | 5 | 6 | 5 | 11 | 38 | 50 | 88 | 3 | 3 | 6 |
| Buffalo Burnett | 1 |  | 1 | 3 |  | 3 3 3 | 5 | 8 | 13 | 2 | 5 | 7 |
| Calumet |  | 1 |  | 1 | 2 1 | 3 2 | 1 | 2 6 | ${ }_{11}$ |  |  |  |
| Chippewa | 1 | 1 | 2 | 1 | 1 <br> 4 | 2 7 | 5 15 | $\begin{array}{r}6 \\ 12 \\ \hline\end{array}$ | 11 27 | 5 5 | 1 7 | 6 12 |
| Clark |  | 3 |  | 5 | 1 | 6 | 8 | 10 | 18 | 2 | 3 | 5 |
| Columbia | 2 |  | 2 | 6 | 3 | 9 | 11 | 12 | 23 | 3 | 8 | 11 |
| Crawford |  | 1 | 1 | 1 | 4 | 5 | 4 | 9 | 13 | 1 | 5 |  |
| Dane |  | 3 | 3 | 12 | 8 | 20 | 24 | 24 | 48 | 12 | 12 | 24 |
| Dodge |  | 1 | 1 | 3 | 4 | 7 | 9 | 27 | 36 | 3 | 23 | 26 |
| Door | 1 | 1 | 2 | 2 | 2 | 4 | 15 | 8 | 23 | 5 | 5 | 10 |
| Douglas |  | 2 | 2 | 5 | 1 | 6 | 15 | 40 | 55 |  |  |  |
| Dunn | 1 | 1 | 2 | 3 | 2 | 5 | 9 | 8 | 17 | 4 | 6 | $10^{\circ}$ |
| Eau Claire | 1 | , | 4 | 2 | 4 | 6 | 9 | 8 | 17 | 3 | 2 | 5 |
| Florence ..... |  |  |  |  |  |  | 1 | 3 | 4 |  | 1 | , |
| Fond du Lac. Forest | 1 | 1 | 2 | 7 | 2 | 9 | 27 | 22 | 49 | 5 | 7 | 12 |
| Grant .. |  | 3 |  |  |  |  | 6 | 8 | 14 |  | 2 | 2 |
| Green |  | 3 | 3 3 |  | 5 2 | 7 | 11 5 | 21 | 32 | 4 | 4 | 8 |
| Green Lake |  |  |  | 5 | 2 3 | 7 3 | 5 4 4 | 12 | 17 |  | 3 | 3 |
| Iowa |  | i | i | $\ddot{3}$ | 3 1 | 3 <br> 4 | 4 5 | $\stackrel{2}{6}$ | 11 | 1 | 3 4 | 4 |
| Iron |  |  |  | 1 | ...... | 1 | 11 | 12 | 23 | 1 | 4 | 5 |
| Jackson |  |  |  | 4 | $\cdots$ | 5 | 5 | 12 | 17 | 2 | 1 | 3 |
| Jefferson | 3 | 4 | 7 | 4 | 4 | 8 | 9 | 18 | 27 | 2 | 6 | 8 |
| Juneau | 1 |  | 1 | 5 | 4 | 9 | 8 | 14 | 22 | 3 |  | 3 |
| Kenosha |  | 2 | 2 | 4 | 4 | 8 | 29 | 36 | 65 | 7 | 7 | 14 |
| Kewaunee |  | 2 | 2 | 3 | 2 | 5 | 5 | 5 | 10 | 2 | 4 | 6 |
| La Crosse | 1 | 3 | 4 | 4 | 1 | 5 | 10 | 27 | 37 | 5 | 8 | 13 |
| Lafayette |  | 1 | 1 | 2 |  | 2 | 3 | 9 | 12 | 4 | 2 | 6 |
| Langlade |  |  |  | 3 |  | 3 | 3 | 10 | 13 | 2 | 1 | 3 |
| Lincoln | 2 |  | 2 | 1 | 2 | 3 | 11 | 13 | 24 | 2 | 4 | 6 |
| Manitowoc |  | 2 | 2 | 5 | 5 | 10 | 22 | 23 | 45 | 4 | 6 | 10 |
| Marathon | 1 | 2 | 3 | 7 | 5 | 12 | 23 | 47 | 70 | 2 | 13 | 15. |
| Marinette |  | 4 | 4 | 1 | 2 | 3 | 17 | 16 | 33 | 6 | 5 | 11 |
| Marquette | 1 | 2 | 3 |  | 2 | 2 | 2 | 3 | 5 | 1 | 1 | 2 |
| Milwaukee | 19 | 21 | 40 | 83 | 68 | 151 | 485 | 465 | 950 | 56 | 52 | 108 |
| Monroe |  | 2 | 2 | 1 | 1 | 2 | 8 | 18 | 26 | 3 | 6 | 9 |
| Oconto | 1 |  | 1 | 1 | 1 | 2 | 22 | 16 | 38 | 3 | 3 | 6 |
| Oneida. |  |  |  | 3 |  | 3 | 4 | 6 | 10 | 3 | 2 | 5 |
| Outagamie | 4 | 2 | 6 | 3 |  | 7 | 12 | 32 | 44 | 6 | 5 | 11 |
| Ozaukee | 1 |  | 1 | 1 | 3 | 4 | 7 | 11 | 18 | 3 | 1 | 4 |
| Pepin |  |  |  | 1 | 1 | 2 | 2 | 2 | 4 | 1 | 3 |  |
| Pierce | 1 | 1 | 2 |  | 2 | 2 | 7 | 14 | 21 | 1 | 1 | 2 |
| Polk Portage | 2 3 | 1 | 3 <br> 4 | 1 | $\stackrel{2}{2}$ | 3 | 4 | 3 | 7 | , | 2 | 3 |
| Portage <br> Price | 3 | 1 | 4 | 4 | 2 | 6 | 20 | 27 | 47 | 6 | 8 | 14 |
| Racine ${ }^{\text {- }}$ |  |  | 7 |  |  |  |  | 11 | 16 86 | 7 | $\stackrel{2}{8}$ | 3 |
| Richland | 3 | 3 | 6 | $\stackrel{4}{2}$ | - 11 | 15 | 53 6 | 11 6 | 86 12 | 7 3 3 | 8 | 15 |
| Rock | 4 | 1 | 5 | 7 | 5 | 12 | 23 | 24 | 47 | 3 9 | 10 | 19 |
| Rusk |  | 2 | 2 | 1 |  | 1 | 3 | 4 | 7 |  |  |  |
| St. Croix | 1 | 1 | 2 | 1 | 4 | 5 | 10 | 12 | 22 |  |  | 6 |
| Sauk . | 1 |  | 1 | 5 | 7 | 12 | 15 | 7 | 22 | 7 | 3 | 10 |
| Sawyer |  |  |  | 1 |  | 1 | 3 | 3 | 6 |  |  | 10 |
| Shawano |  | 1 | 1 | 4 | 4 | 8 | 13 | 22 | 35 | 3 | 6 | 9 |
| Sheboygan | 1 | 1 | 2 | 3 | 6 | 9 | 23 | 28 | 51 | 6 | 7 | 13 |
| Taylor ...... |  | 1 | 1 | 5 | 5 | 10 | 4 | 4 | 8 | 1 | 1 | 2 |
| Trempealeau |  | 1 | 1 |  | 2 | 2 | 8 | 15 | 23 | 5 | 4 | 9 |
| Vernon <br> Vilas | 1 |  | 1. | $\stackrel{2}{2}$ | 3 | 5 | 5 | 19 | 24 | 5 | 8 | 13 |
| Walworth . | i |  | $\dddot{2}$ | 2 | $\dddot{1}$ | 3 | 7 | 8 | 15 | $\cdots$ | 2 | 5 |

TABLE NO. 31.-SHOWING DEATHS FROM EAOH COUNTY, ARRANGEDI ACCORDING TO THE CAUSES OF DEATH FOR EACH YEAR.--CCont.

| County. | Ulcer of the stomach. |  |  | Other diseases of the stomach (cancer excepted). |  |  | Diarrhoea and enteritis (under 2 years). |  |  | Diarrhoea and enteritis (2 years and over). |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1909 | 1910 | Total. | 1909 | 1910 | Total. | 1909 | 1910 | To- tal. | 1909 | 1910 | To- |
| W ashburn |  | 1 | 1 |  |  |  | 4 | 4 | 8 | 1 |  | 1 |
| Washington |  | 2 | 2 | 3 |  | 3 <br> 8 | 6 | ${ }^{6}$ | 12 | 4 | 4 | 8 |
| Waukesha . | 2 | 5 | 7 | 4 | 4 | 8 | 14 | 15 | $\stackrel{29}{ }$ | 5 | 8 | 13 |
| Waupaca | 1 | 1 | 2 | 3 | 7 | 10 | 12 9 | 8 9 | 20 18 | 7 3 | 12 | 19 7 |
| Waushara |  | 1 | 1 | 1 |  | 14 | 9 27 | $\begin{array}{r}9 \\ 23 \\ \hline 18\end{array}$ | 18 50 | 3 9 | 4 5 | 7 14 |
| Winnebago | 2 | 3 3 | 5 3 | 4 3 | 10 1 | 14 4 | 27 19 | 23 18 | 50 37 | 9 8 | 5 5 | 13 |
| Total | 71 | 111 | 182 | 275 | 251 | 526 | 1,233 | 1,503 | 2,736 | 283 | 354 | 637 |

TABLE NO. 31.-SHOWING DEATHS FROM EAOH OOUNTY, ARRANGED ACCORDING TO THE CAUSES OF DEATH FOR EACH YEAR.-Cont.


TABLE NO. 31.-SHOWING DEATHS FROM EACH COUNTY ARRANGED ACCOKDING TO THE OAUSES OF DEATH FOR EACH YEAR.-C'ont.

| County. | Ankylostomiasis. |  | Intestinal parasites. |  |  | Appendicitis and typhlitis. |  |  | Hernias, intestinal obstructions. |  |  | Diseases of the intestines. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1909 | $1910 \left\lvert\, \begin{gathered} \mathrm{To} \\ \mathrm{tal} \\ \hline \end{gathered}\right.$ | 1909 | 1910 | $\left\lvert\, \begin{aligned} & \text { To- } \\ & \text { tal } \end{aligned}\right.$ | 1909 |  |  | 1909 |  | $\left\|\begin{array}{ll} \mathrm{To} \\ \mathrm{tal} \end{array}\right\|$ | 1909 | 1916 | To |
| Marathon |  |  |  |  |  | 3 | 1 | 4 | 4 | 4 | 8 | 2 | 2 | 4 |
| Marinette |  |  |  |  |  | 7 | 1 | 8 | 6 | 4 | 10 | 2 | 1 | 3 |
| Marquette |  |  |  |  |  | 2 | 4 | 6 |  | 3 | 3 | 1 |  | 1 |
| Milwauke |  |  |  | 1 | 1 | 41 | 57 | 98 | 62 | 60 | 122 | 30 | 20 | 50 |
| Monroe |  |  |  |  |  | 1 | 2 | 3 | 4 | 2 | 6 | 2 | 1 | 3 |
| Oconto . |  |  |  |  |  | 1 | 1 | 2 | 1 | 2 | 3 |  | 3 | 3 |
| Oneida |  |  |  |  |  |  | 1 | 1 | 1 | 2 | 3 |  |  |  |
| Outagamie |  |  |  |  |  | 7 | 7 | 14 | 8 | 13 | 21 | 3 | 1 | 4 |
| Ozauke |  |  |  |  |  |  |  |  | 2 | 1 | 3 |  | 1 | 1 |
| Pepin . |  |  |  |  |  | 1 |  | 1 |  |  |  |  |  |  |
| Pierce |  |  |  |  |  | 1 | 1 | 2 | 1 | 2 |  | ... | 2 | 2 |
| Polk |  |  |  |  |  | 5 | 6 | 6 | ${ }_{4}^{4}$ | 2 | 6 |  |  |  |
| Portage |  |  |  |  |  | 4 | 6 | 10 | 2 | 2 | 4 | 1 |  | 1 |
| Price |  |  |  |  |  |  | 2 | 2 |  | 1 | 1 |  |  |  |
| Racine |  | ... |  |  |  | - | 8 | 17 | 11 | 4 | 15 | 1 | 1 | 5 |
| Richland |  |  |  |  |  |  |  | 3 |  |  |  | 1 | 1 | 2 |
| Rock |  |  |  |  |  | 12 |  | 18 | 8 | 6 | 14 | 1 | 5 | 6 |
| Rusk |  |  |  |  |  | 1 | 1 | 2 | 3 | 5 | 8 |  | 1 | 1 |
| St. Croix |  |  |  |  |  |  | 2 | 2 | 3 | 3 | 6 |  | 1 | 1 |
| Sauk |  |  |  |  |  | 2 | 2 | 4 | 6 | 5 | 11 | 3 | 2 | 5 |
| Sawyer |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Shawano |  |  |  |  |  | 5 | 4 | 9 | 1 | 5 | - | 2 | 2 | 4 |
| Sheboygan |  |  |  |  |  | 6 | 7 | 13 | 5 | 7 | 12 | 1 | 1 | 2 |
| Taylor ..... |  |  |  |  |  |  |  |  | , | 2 | 3 |  |  |  |
| Trempealeau |  |  |  |  |  | 3 | 3 | 6 | 3 | 1 | 4 |  | 1 | 1 |
| Vernon |  |  |  |  |  | 1 | 2 | 3 | 3 | 1 | 2 |  | 1 | 1 |
| Vilas .... |  |  |  |  |  |  |  |  |  | 2 | 2 |  | 1 | 1 |
| Walworth |  |  |  |  |  | 2 | 2 | 1 | 6 | 1 | 7 | 2 | 3 | 5 |
| Washburn |  |  |  |  |  |  | 1 | 1 | 2 | 3 | 5 | 1 | ... | 1 |
| Washington |  |  |  |  |  | 3 |  | 3 | 7 | ${ }_{5}^{6}$ | 13 |  |  |  |
| Waukesha |  |  |  |  |  | 1 | 3 | 4 | 2 | 5. | 7 | 6 |  | 12 |
| Waupaca |  |  |  |  |  | 2 | 3 | 5 | 5 | 1 | 6 |  | 3 | 3 |
| Waushara |  |  |  |  |  | 2 |  | 2 | 6 | 1 | 7 | 1 | 1 | 2 |
| Winnebago |  |  |  |  |  | 10 | 7 | 17 | 11 | 1 | 20 | 5 | 7 | 12 |
| Wood |  |  |  |  |  | 6 | 3 | 3 | 2 | 1 | 3 | 3 | 2 | 5 |
| Total |  |  | 1 | 2 | 3 | 266 | 241 | 507 | 202 | 276 | 568 | 84 | 108 | 192 |

TABLE NO. 31.-SHOWING DEATHS FROM EACH COUNTY ARRANGFD ACCORDING TO THE CAUSES OF DEATH FOR EACH YEAR.-Cont.

| County. | Acute yellow atrophy of the liver. |  |  | Hydatid tumor of the liver. |  | Cirrhosis of the liver. |  |  | Biliary calculi. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { Tal, } \end{aligned}$ | 1909 | 1910 To- ${ }_{\text {tal }}$ | 1909 | 1910 | To- tal. | 1909 | 1910 | Total. |
| Adams | 1 |  | 1 |  |  |  |  |  |  |  |  |
| Ashland | 2 |  | 2 | 1 | 1 | 1 | 1 | 2 |  |  |  |
| Barron | 1 |  | 1 | . | ....... | 1 | 1 | 2 |  | 1 | 1 |
| Bayfield |  |  |  |  |  |  | 1 | 1 |  |  |  |
| Brown |  |  |  |  |  | 2 | 2 | 4 |  | 2 | 2 |
| Buffalo | 3 |  | 3 |  |  |  | 1 | 1 |  |  |  |
| Burnett |  |  |  |  |  |  |  |  |  |  |  |
| Calumet |  |  |  | 1 | . 1 | 1 | 2 | 3 |  |  |  |
| Ohippewa |  |  |  |  | . . .... | 4 | 3 | 7 |  |  |  |
| Clark ... |  |  |  |  |  | 4 | 3 | 7 | 1 |  | 1 |
| Columbia | ... | 1 | 1 |  | . .... | 4 | 2 | 6 |  |  |  |

TABLE NO. 31.-SHOWING DEATHS FROM EACH COUNTY ARRANGED ACCORD. ING TO THE CAUSES OF DEATH FOR EACH YEAR.-Cont.

| Counts. | Acute yellow atropny of the liver. |  |  | Hydatid tumor of the liver. |  |  | Eirrhosis of the liver. |  |  | Biliary calculi. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal. } \end{aligned}$ | 1909 | 1910 | Total. | 1909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal. } \end{aligned}$ | 1909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal } \end{aligned}$ |
| Crawford ... |  |  |  |  |  |  | 2 | 2 | 4 |  |  |  |
| Iane |  | 1 | 1 |  |  |  | 6 | 7 | 13 |  |  |  |
| Dodge |  |  |  |  |  |  | 1 | 4 | 5 |  |  |  |
| Door |  |  |  |  |  |  | 1 | - 1 | 2 |  |  |  |
| Douglas | 2 |  | 2 |  |  |  | 1 | 5 | 6 |  |  |  |
| Dunn ${ }^{\text {Eapar }}$ |  |  |  |  |  |  | 1 |  | 1 |  |  |  |
| Eau Claire <br> Florence |  |  |  |  |  |  | 3 | 1 | 4 |  |  |  |
| Fond du Lac |  |  |  |  |  |  | 1 | 5 | 6 |  |  |  |
| Forest ....... |  |  |  |  |  |  | 1 | 5 | 6 |  |  |  |
| Grant |  |  |  |  |  |  | 1 | 4 | 5 |  |  |  |
| Green |  |  |  |  |  |  |  | 2 | 2 |  |  |  |
| Green Lake |  |  |  |  |  |  | 2 | 3 | 5 |  |  |  |
| Iowa |  |  |  |  |  |  | 1 | 1 | 2 |  |  |  |
| Iron ... |  |  |  |  |  |  | 1 | 2 | 3 |  |  |  |
| Jackson |  |  | 2 |  |  |  | 3 | 2 | 5 |  |  |  |
| Juneau . | 1 | 1 | 2 |  |  |  | 2 3 | 3 2 2 | 5 |  |  |  |
| Kenosha |  |  | 1 |  |  |  | 3 4 | $\begin{array}{r}2 \\ 2 \\ \hline\end{array}$ | 5 |  |  |  |
| Kewaunee |  |  |  |  |  |  | $\stackrel{4}{2}$ | $\stackrel{2}{2}$ | 4 |  |  |  |
| La Crosse |  |  |  |  |  |  | 4 | 4 | 8 |  |  |  |
| Lafayette . |  |  |  |  |  |  | 3 |  | 3 |  |  |  |
| Langlade |  |  |  |  |  |  |  | 1 | 1 |  |  |  |
| Lincoln |  |  |  |  |  |  |  | 3 | 3 |  |  |  |
| Manitowoc |  | 1 | 1 |  |  |  | $\stackrel{\square}{5}$ | 7 | 12 |  |  |  |
| Marathon |  |  |  |  |  |  |  |  | 4 |  | 1 | i |
| Marinette |  |  |  |  |  |  | 3 | 1 | 4 |  |  |  |
| Marquette |  |  |  |  |  |  | 2 |  | ${ }_{2}^{2}$ |  |  |  |
| Milwaukee | $\begin{aligned} & 1 \\ & 1 \end{aligned}$ |  | 1 |  |  | .... | 74 | 77 | 151 |  |  |  |
| Oconto |  |  |  |  |  |  |  | 1 | 1 |  |  |  |
| Oneida |  |  |  |  |  |  |  |  |  |  |  |  |
| Outagamie |  |  |  |  |  |  |  | 5 | 9 |  | 1 | $i$ |
| Ozaukee |  |  |  |  |  |  | 4 | 1 | 5 |  |  |  |
| Pepin |  |  |  |  |  |  | 1 | $\ldots$ | 1 |  |  |  |
| Pierce . |  |  |  |  |  |  | 1 | 1 | 2 |  |  |  |
| Polk Portage |  |  |  |  |  |  | 2 |  |  |  |  |  |
| Price |  |  |  |  |  |  | 2 |  | 2 |  |  |  |
| Racine |  |  |  |  |  | . | 5 | 6 | 11 |  |  |  |
| Richland |  | 1 | 1 |  |  |  | 1 |  | 1 |  |  |  |
| Rock . |  |  |  |  |  |  | 3 | 5 | 8 |  |  |  |
| Rusk Croix |  |  |  |  |  |  | 2 1 | 1 | 3 |  |  |  |
| sauk .... |  |  |  | 1 |  | 1 | 1 | 1 2 | ${ }_{2}^{2}$ |  |  |  |
| Sawyer |  |  |  | 1 |  |  |  |  |  |  |  |  |
| Shawano |  |  |  |  |  |  | 2 | 1 | 3 |  |  |  |
| Sheboygan |  |  |  |  |  |  | 6 | 14 | 20 |  |  |  |
| Taylor |  |  |  |  |  |  | 1 | 1 | 2 |  |  |  |
| Trempealeau |  |  |  |  |  |  |  |  |  |  |  |  |
| Vernon. |  |  |  |  |  |  | 4 | 4 | 8 |  |  |  |
| Walworth |  |  |  |  |  |  |  |  |  |  |  |  |
| Walworth |  |  |  |  | 1 | 1 |  | 5 | 5 |  |  |  |
| Washington |  |  |  |  |  |  |  |  | 4 |  |  |  |
| Waukesha . |  |  |  |  |  |  | 5 | 1 | 4 |  |  |  |
| Waupaca |  |  |  |  |  |  | 2 | 1 | 3 |  |  |  |
| Waushara |  |  |  |  |  |  |  |  |  |  |  |  |
| Winnebago |  |  |  |  |  |  | 4 | 4 | 8 |  |  |  |
| Wood |  |  |  |  |  |  | 6 | 4 | 10 |  |  |  |
| Total | 13 | 5 | 18 | 3 | 1 | 4 | 203 | 221 | 424 | 1 | 5 | 6 |

TABLE NO. 31.-SHOWING DEATHS FROM EACH COOUNTY ARRANGED ACCORD ING TO THE CAUSES OF DEATH FOR EACH YEAR.-Cont.


TABLE NO. 31.-SHOWING DEATHS FROM EACH COUNTY, ARRANGED ACCORD ING TO THE CAUSES OF DEATH FOR EACH YEAR.-CONt.

| County. | Other diseases of the liver. |  |  | Diseases of the spleen. |  |  | Simple peritonitis '́nonpuerperal). |  |  | Other diseases of the digestive system (can. and tub. excepted). |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1909 | 1910 | To- | 1909 | 1910 | To- | 1909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal. } \end{aligned}$ | 1909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal. } \end{aligned}$ |
| Washburn <br> Washington <br> Waukesha <br> Waupaca <br> Waushara <br> Winnebago <br> Wood |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 3 | 5 |  |  |  | 2 | 3 | 5 | 1 |  | 1 |
|  | 2 1 | 4 5 | ${ }_{6}^{6}$ |  | 1 | 1 |  | 1 | 1 | 2 |  | $\ddot{2}$ |
|  | 4 | $\stackrel{5}{3}$ | ${ }_{7}^{6}$ |  | 1 | 1 | $\stackrel{3}{2}$ | 2 | 5 | 4 | 1 | 5 |
|  | 4 | 12 | 16 |  |  |  | 2 5 |  | $\stackrel{2}{8}$ | 1 | 2 | 3 |
|  | 4 | + 5 | 16 9 | 1 |  | 2 | 5 1 | 3 1 | 8 | 1 3 | 1 2 | 2 5 |
| Total | 208 | 234 | 442 |  |  | 20 | 162 | 124 | 286 | 216 | 85 | 301 |

TABLE NO. 31.-SHOWING DEATHSI FROM EACH COUNTY, ARRANGED ACCORD. ING TO THE CAUSES OF DEATH FOR EACH YEARi-CCont.

| County. | Acute nephritis. |  |  | Bright's disease. |  |  | Chyluria. |  |  | Other diseases of the kidneys and annexa. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal. } \end{aligned}$ | 1909 | 19:0 | $\begin{aligned} & \mathrm{To} \\ & \mathrm{t}, \mathrm{l} . \end{aligned}$ | 1909 | 1910 | Total. | 1909 | 1910 | To- tal. |
| Adams | 3 | 1 | 4 | 4 |  |  |  |  |  |  |  |  |
| Ashand | 6 | 8 | 14 | 9 | $\stackrel{4}{8}$ | 17 |  |  |  |  |  |  |
| Barron | 4 | 5 | 9 | 15 | 16 | 31 |  |  |  |  |  |  |
| Bayfield |  | 3 | 3 | 4 | 16 | 4 |  |  |  |  | 1 | 1 |
| Brown | 10 | 11 | 21 | 34 | 41 | 75 |  |  |  | 1 |  | 1 |
| Buffalo |  | 1 | 1 | 7 | 8 | 15 |  |  |  | 1 | 1 | 1 |
| Burnett <br> Calumet |  | 2 | ${ }_{2}^{2}$ | 1 | 4 | 5 |  |  |  | 1 |  | 1 |
| Chippewa | 8 | 1 | ${ }_{12}^{2}$ | 8 | $\begin{array}{r}4 \\ 14 \\ \hline\end{array}$ | 12 |  |  |  |  | 1 | 1 |
| Clark ... | 4 | 1 | 12 5 | 7 8 | 14 | 21 |  |  |  | 2 | 1 | 3 |
| Columbia | 3 | 3 | 6 | 14 | 18 | 19 |  |  |  |  | 2 | 2 |
| Crawford | 5 | 4 | 9 | 14 6 | 185 | 11 |  |  |  | 4 | 1 | 5 |
| Dane | 6 | 5 | 11 | 26 | $4{ }^{5}$ |  |  |  |  |  |  |  |
| Dodge | 4 |  | 4 | 11 | 19 | 73 30 |  |  |  | 4 | 1 | 5 |
| Door | 4 | 1 | 5 | + | 11 | 20 |  |  |  |  | 1 | 1 |
| Douglas | 6 | 4 | 10 | 17 | 8 | 25 |  |  |  |  |  |  |
| Dunn | 3 | 3 | 6 | 13 | 8 | 21 |  |  |  |  | 1 | 1 |
| Eau Claire | 7 | 1 | 8 | 13 | 28 | 41 |  |  |  | 2 |  |  |
| Florence .... |  | 1 | 1 |  |  |  |  |  |  | 2 |  | 2 |
| Fond du Lac | 11 | 4 | 15 | 16 | 32 | 48 |  |  |  | 3 | 3 | 6 |
| Forest |  |  |  |  | 2 | 2 |  |  |  | 3 | 3 | 6 |
| Grant | 6 | 4 | 10 | 15 | 19 | 34 |  |  |  |  | 1 | i |
| Green Green Lake | 1 |  | 1 | 7 | 9 | 16 |  |  |  | 1 |  | 1 |
| Iowa ...... | 3 |  | 2 <br> 3 | 8 9 | -88888 | 16 |  |  |  |  |  |  |
| Iron .. | 3 |  | 3 | 4 | 13 1 | 22 |  |  |  |  | 1 | 1 |
| Jackson | 3 | 2 | 5 | 8 | 5 | 13 |  |  |  | 1 |  |  |
| Jefferson |  | 5 | 5 | 16 | 13 | 29 |  |  |  | 1 |  | 2 |
| Juneau | 4 | 1 | 5 | 6 | 9 | 15 |  |  |  | 2 | 1 | ${ }^{2}$ |
| Kenosha | 3 | 2 | 5 | 17 | 15 | 32 |  |  |  | 2 | 1 | 2 |
| Ka Crosse . | 1 |  | 1 | 6 | 5 | 11 |  |  |  |  |  |  |
| La Crosse | 8 4 | 1 | 15 5 | 17 6 | 26 3 | 4 |  |  |  |  | 2 | 2 |
| Langlade | 4 | 3 | $\stackrel{5}{3}$ | 6 | 3 | 9 |  |  |  |  | 1 | 1 |
| Lincoln ... | 2 | 1 | 3 | 11 | 6 | 17 |  |  |  |  |  |  |
| Manitowoc | 11 | 3 | 14 | 11 | 13 | 24 |  |  |  | $\dddot{i}$ |  | $2$ |

TABLE NO. 31.-SHOWING DEATHS FROM EAGH COUNTY, ARRANGED ACCORDING TO THE CAUSES OF DEATH FOR EAOH YEAR.-CCOnt.

| County. | Acute nephritis. |  |  | Bright's disease. |  |  | Chylaria. |  |  | Other diseases of the kidneys and annexa. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal. } \end{aligned}$ | 1909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal. } \end{aligned}$ | 1909 | 1910 | Total. | 1909 | 1910 | Total. |
| Marathon | 7 | 6 | 13 | 15 | 18 | 33 |  |  |  | 4 | 1 |  |
| Marinette | 3 | 4 | 7 | ${ }_{6}$ | 9 | 15 |  |  |  | 1 |  | 1 |
| Marquette | 1 |  | 1 | - 2 | 219 | 5 |  |  |  | 1 |  | 1 |
| Milwaukee | 118 | 93 | 211 | - 158 | 219 | 377 |  |  |  | 3 | 3 | 6 |
| Monroe | ${ }_{2}^{2}$ | 4 | 6 8 | 12 | 12 3 | 24 |  |  |  |  |  | 1 |
| Oconto | 3 | 5 | 8 | 4 | $\stackrel{3}{2}$ | 7 |  |  |  |  | 1 | 1 |
| Oneida ... | 1 | 2 | 3 7 | 2 16 | r11 | 4 27 |  |  |  | 1 | 5 | $\ddot{6}$ |
| Outagamie | 3 | 4 | 7 2 | 16 3 | 11 3 | 27 6 |  |  |  | 1 | 5 |  |
| Ozaukee .. | 2 | $\ddot{i}$ | 2 1 | 3 1 | 3 1 | ${ }_{2}^{6}$ |  |  |  |  |  |  |
| Pierce | 9 | 5 | 14 | 13 | 9 | 22 | ..... |  |  |  | 1 |  |
| Polk | 1 | 1 | 2 | 11 | 9 | 20 |  |  |  | 1 |  | 1 |
| Portage | 3 |  | 3 | 8 | 16 | 24 | ..... |  |  | 1 | 1 | 1 |
| Price ... |  |  |  | 1 | $\stackrel{3}{6}$ | 4 |  |  |  |  | $\stackrel{1}{3}$ | 3 |
| Racine | 6 | 5 | 11 | 31 | 26 10 | 57 20 |  |  |  | 2 | 3 | 2 |
| Richland | 4 | 2 | 6 | 10 29 | 10 31 | 20 |  |  |  |  | 1 | 2 |
| Rock | 11 | 6 | 17 | 29 4 | 31 3 | 60 7 |  |  |  | ..... | 1 | 1 |
| Rusk St. ${ }^{\text {coix }}$ | 1 | 2 | 3 | 14 | $\begin{array}{r}3 \\ 13 \\ \hline\end{array}$ | 27 |  |  |  | 1 | 1 | 2 |
| Sauk |  | 7 | 11 | 17 | 13 | 30 |  |  |  |  | 3 | 3 |
| Sawyer |  |  |  | 3 | 1 |  |  |  |  |  | 2 | 2 |
| Shawano | 6 | 8 | 14 | 8 | 12 | 20 |  |  |  |  | 2 | 2 |
| Sheboygan | 5 | 6 | 11 | 23 | 20 | 43 |  |  |  |  |  |  |
| Taylor ..... |  |  |  | 3 3 3 | 4 13 | ${ }_{1}^{7}$ |  |  |  |  |  | 2 |
| Trempealeau |  |  | 1 8 | + 12 | 18 | 16 |  |  |  | 1 | 1 | 2 |
| Vernon ... | 6 | 2 | 8 | 12 | 18 | 1 |  |  |  |  |  |  |
| Walworth | 3 | 4 | 7 | 12 | 27 | 39 |  |  |  | 2 |  | 2 |
| Washburn |  | 1 | 1 | 3 | 3 | 6 |  |  |  |  |  |  |
| Washington |  | 2 | 2 | 9 | 13 | 22 |  |  |  | 1 |  | 1 |
| Waukesha | 4 | 2 | 6 | 22 | 23 | 45 |  |  |  |  |  |  |
| Waupaca | 6 | 5 | 11 | $\stackrel{22}{8}$ | 38 9 | 60 | ... |  |  |  |  |  |
| Waushara | 3 | 1 | 4 | 8 | 99 | 17 |  |  |  | 4 | 2 | 6 |
| Winnebago Wood | 5 6 | 12 3 | 17 9 | 20 10 | 17 5 | 37 15 |  |  |  |  | 1 | 1 |
| Total | 357 | 285 | 642 | 884 | 1,052 | 1,936 |  |  |  | 50 | 57 | 107 |

TABLE NO. 31.-SHOWING DEATHS FROM EACH OOUNTY ARRANGED ACCORDING TO THE CAUSES OF DEATH FOR EACH YEAR.-Cont.

| County. | Calcuni of the urinary passages. |  |  | Diseases of the bladder. |  |  | Diseases of the urethra, urinary abscess, etc. |  |  | Diseases of the prostate. |  |  | Nonvenereal diseases of the male genital organs. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1009 | 1910 | Total. |  | 1910 | Total. | 1909 | 1910 | To- tal. |  | 1910 |  |  | 1910 | To- |
| Adams | 1 |  | 1 | 1 | 1 | 2 |  |  |  |  |  |  |  |  |  |
| Ashland |  |  |  | 1 |  | 1 |  |  |  |  |  |  |  |  |  |
| Barron |  |  |  | 1 | 1 | 2 |  |  |  |  | 1 | 1 | $\ldots$ |  |  |
| Bayfield |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Brown | 1 |  | 1 | 2 | 2 | 4 | ... |  |  |  | 1 | 1 | 1 | ... | 1 |
| Buffalo |  |  |  | 1 | 1 | 2 |  |  |  |  |  |  |  |  |  |
| Burnett |  |  |  | 1 | 1 | 1 | ... |  |  | 1 | 1 | 2 |  |  | $\ldots$ |
| Calumet | 1 |  | 1 | 1 | .... | 1 | ... |  |  |  |  |  |  |  |  |
| Chippewa |  |  |  |  |  | 2 |  |  |  | 1. | 2 |  |  |  |  |

TABLE NO. 31.-SHOWING DEATHS FROM EAOH COUNTY ARRANGED ACCORDING TO THE OAUSES OF' DEATH FOR EACH YEAR.-Cont.


TABLE NO. 31. -SHOWING DEATHS FROM EACH COUNTY, ARRANGED ACCORDING TO THE CAUSES OF DEATH FOR EACH YEAR.-Cont.

| Counts. | Uterine haemorrhage (nonpuerperal) |  |  | Uterine tu- Other dismor (non- eases of the cancerous). uterus. |  |  |  |  |  | $\begin{aligned} & \text { Cysts and } \\ & \text { other tu- } \\ & \text { mors of the } \\ & \text { ovary. } \end{aligned}$ |  |  | Salpingitis and other diseases of the female genital organs. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1909 |  |  |  |  | $\begin{aligned} & \text { To- } \\ & \text { tal. } \end{aligned}$ |  | $1910$ | $\left\lvert\, \begin{aligned} & \text { To- } \\ & \text { tal } \end{aligned}\right.$ | . 909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal. } \end{aligned}$ | 1909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal. } \end{aligned}$ |
| Adams |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Barron |  |  |  |  |  |  |  |  |  | 1 |  | 1 |  | 1 | 1 |
| Brown |  |  |  | 2 |  | 2 |  | 1 | 1 |  | 2 | 2 |  | 1 | 1 |
| Buffalo |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Burnett |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 | 1 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Dane |  |  |  |  |  |  | 1 |  | 1 |  | 2 | 2 |  | 2 | $\ddot{2}$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Dunn. |  |  |  |  |  |  |  |  |  |  |  |  | 2 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fond du Lac.............. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Grant $\ldots \ldots \ldots \ldots .$. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Iron |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Jackson |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Jefferson |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Juneau <br> Kenosha |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| OcontoOneidaOn |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | 1 |  | 1 |  |  |  |  |  |  |
| Polk |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Portage |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Price .. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Racine Richland |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| St. Croix |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sawyer |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Shawano ............. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sheboygan $\ldots \ldots \ldots \ldots \ldots$Taylor $\ldots \ldots \ldots \ldots \ldots$.N |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Trempealeau .......... |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

TABLE NO. 31.-SHOWING DEATHS FROM EAOH OOUNTX, ARRANGED ACCORDING TO THE CAUSES OF DEATH FOR EACH YEAR.-COnt.

| County. | Uterine haemorrhage (nonpuerperal). |  |  | Uterine tumor (noncancerous). |  |  | Other diseases of the uterus. |  |  | Cysts and other tumors of the ovary. |  |  | Salpingitis and other diseases of the female genital organs. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1909 | 1910 |  |  |  |  |  | 1910 |  | 1909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal. } \end{aligned}$ | 1909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal } \end{aligned}$ |
| Walworth |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Washburn |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 | 1 |
| Washington |  |  |  | 1 |  |  |  |  |  | 1 | 1 | 2 | 1 |  | 1 |
| Waukesha |  |  |  |  | .... |  |  |  |  |  |  |  |  |  |  |
| Waupaca |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Waushara |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Winnebago |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total |  |  |  | 15 | 6 | 21 |  | 9 |  | 13 | 21 | 34 | 13 | 18 |  |

TABLE NO. 31.-SHOWING DEATHS FROM EACH COUNTY ARRANGED ACCORDING TO THE OAUSES OF DEATH FOR EACH YEAR.-Cont.

| County. | Nonpuerperal diseases of the breast, (cancer excepted). |  |  | Accidents of pregnancy. |  |  | Puerperal haemorrhage. |  |  | Other accidents of labor. |  |  | Puerperal septicaemia. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1909 | 1910 | $\left\lvert\, \begin{aligned} & \mathrm{To}- \\ & \text { tal } \end{aligned}\right.$ |  |  |  | $1909$ | 1910 | To- | 1909 | 1910 | To- tal. | 1909 |  | $\begin{aligned} & \text { To- } \\ & \text { tal. } \end{aligned}$ |
| Adams |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 | 2 |
| Ashland |  |  |  |  |  |  |  | 2 | 2 |  |  |  | 1 | 4 | 5 |
| Barron |  |  |  |  |  |  | 1 | 1 | 2 |  |  |  | 2 | 3 | 5 |
| Bayfield |  |  |  |  |  |  | 1 |  | 1 |  |  |  |  |  |  |
| Brown |  |  |  |  |  |  | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 1 | 2 |
| Buffalo |  |  |  |  |  |  | 1 |  | 1 |  |  |  |  | 1 | 1 |
| Burnett |  |  |  |  |  |  |  | 1 | 1 | 1 |  | 1 |  |  |  |
| Calumet |  |  |  |  |  |  | 1 | 1 | 2 |  |  |  |  |  |  |
| Chippewa |  |  |  |  |  |  |  | 3 | 3 |  |  |  | 2 | 5 | 7 |
| Clark |  |  |  |  |  |  |  |  |  | 1 |  | 1 |  | 3 | 1 |
| Columbia |  |  |  |  |  |  | 2 |  | 2 | 1 |  | 1 | 1 |  | 1 |
| Crawford Dane |  |  |  |  |  |  | 1 | 2 | 3 |  |  |  | 1 | 4 | 5 |
| Dodge |  |  |  |  |  |  |  |  |  |  |  |  | 2 |  | 5 2 |
| Door |  |  |  |  |  |  |  | 1 | 1 |  |  |  | 1 | 2 | 3 |
| Douglas |  |  |  |  |  |  |  | 1 | 1 |  |  |  | 3 | 2 | 5 |
| Dunn |  |  |  |  |  |  | 2 | 1 | 3 |  |  |  | 1 | 3 | 4 |
| Eau Claire |  |  |  |  |  |  |  |  |  |  |  |  | 2 | 1 | 3 |
| Florence .... |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fond du Lac |  |  |  |  | 1 | 1 | 1 $\cdots$ |  | 1 |  |  |  |  | 1 | 1 |
| Forest ... <br> Grant |  |  |  |  |  |  |  | 1 | 1 |  |  |  | 5 |  | 5 |
| Green. |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |
| Green Lake |  |  |  |  |  |  | 1 |  | 1 |  |  |  | 1 |  | , |
| Iowa |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 | , |
| Iron |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 | 4 |
| Jackson |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |
| Jefferson |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Juneau . |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Kenosha |  |  |  |  |  |  | 1 | 1 | 2 |  |  |  | 1 | 1 | 2 |
| Kewaunee |  |  |  |  |  |  | 1 |  | 2 |  |  |  |  | 1 | 1 4 |
| Lafayette. |  |  |  |  |  |  |  |  | 2 |  |  |  |  | ${ }_{2}^{3}$ | 4 2 |
| Langlade |  |  |  |  |  |  | $i$ |  | $\dddot{1}$ |  |  |  |  | $\ldots$ | $\ldots$ |

TABLE NO. 31.-SHOWING DEATHS FROM EACH COUNTY ARRANGED ACCORDING TO THE CAUSES OF DEATH FOR EACHE YEAR.-Cont.

| Counts: | Nonpuerperal díseases of the breast, (cancer excepted). |  |  | Accidents of pregnancy. |  |  | Puerperal haemorrhage. |  |  | Other accidents of labor. |  |  | Puerperal septicaemia. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1909 | 1910 | Total. | 1909 | 1910 | $\left\lvert\, \begin{aligned} & \text { Too } \\ & \text { tal } \end{aligned}\right.$ | 1909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal. } \end{aligned}$ | 1909 | 1910 |  |  | 1910 | $\left\lvert\, \begin{aligned} & \text { To- } \\ & \text { tal } \end{aligned}\right.$ |
| Manitowoc |  |  |  |  |  |  | 1 | 1 | 2 |  |  |  | 1 | 3 | 4 |
| Marathon |  |  |  |  |  |  | 3 | 3 | 6 |  |  |  | 4 | 4 | 8 |
| Marinette |  |  |  |  |  |  | 1 |  | 1 |  |  |  | 1 | 2 |  |
| Marquette |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |
| Milwauke |  |  |  | 1 | 4 | 5 | 9 | 11 | 20 | 3 | 1 | 4 | 22 | 24 | 46 |
| Monroe |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |
| Oconto |  |  |  |  |  | . | 1 | $\ldots$ | 1 |  |  |  | 1 | 1 | 2 |
| Oneida |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 | 1 |
| Outagamie |  |  |  | 1 | 1 | 2 |  | 1 | 1 |  |  |  | 1 | 3 | 4 |
| Ozauke |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pepin |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pierce |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |
| Polk Portage |  | $\cdots$ |  |  |  |  | 2 1 | 1 | 4 |  |  |  | 1 | 2 2 | 4 3 |
| Portage |  |  |  |  | 2 | $\ddot{2}$ |  |  | 1 |  |  |  | 1 | 1 | 2 |
| Racine |  |  |  |  |  | $\ldots$ | 3 |  | 3 | $\cdots$ | 2 | 2 | 1 | 1 | 2 |
| Richland |  |  |  |  |  |  | 1 |  | 1 |  |  |  | 1 | 1 | 2 |
| Rock |  |  |  | 1 |  | 1 |  | 2 | 2 | 1 |  | 1 | 1 |  | 1 |
| Rusk |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 | 1 |
| St. Croix |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Sauk . |  |  |  |  |  |  | 1 |  | 1 | $\ldots$ |  |  |  | 1 | 1 |
| Sawyer |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 | 1 |
| Shawano |  |  |  |  | 1 |  | 1 |  | 1 |  |  |  | 2 | 2 | 4 |
| Sheboygan |  |  |  | 1 | 1 | 2 |  |  |  |  |  |  | 1 | 2 | 3 |
| Taylor |  |  |  |  |  |  | , |  | 1 |  |  |  | 4 | 1 | 5 |
| Trempealeau |  |  |  |  |  |  | 1 |  | 1 |  |  |  |  |  |  |
| Vernon |  |  |  |  | 1 | 1 |  | ... | .... | ... |  |  | 1 | 2 | 3 |
| Vilas |  |  |  |  |  | ... | .. | $\cdots$ |  |  |  |  |  |  |  |
| Walworth |  |  |  |  |  |  |  | 1 |  |  |  |  | 1 | 1 | 2 |
| Washburn .. |  |  |  |  |  |  | 1 | 1 | 2 |  |  |  |  |  |  |
| Washington |  |  |  |  |  |  |  |  |  |  |  |  | , |  | 1 |
| Waukesha |  |  |  |  | 1 | 1 | 3 |  | 3 |  |  | ... | 1 | 1 | 2 |
| Waupaca |  |  |  |  |  |  | 1 | 1 | 2 |  |  |  | 1 | 4 | 5 |
| Waushara |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 | 3 |
| Winnebago |  |  |  |  |  |  |  |  |  |  |  |  | 5 | 1 | 6 |
| Wood |  |  |  |  |  |  | 1 | 1 | 2 |  | 1 | 1 | 4 | 2 | 6 |
| Total |  |  |  | 5 | 12 | 17 | 48 | 44 | 92 | 8 | 7 | 15 | 92 | 110 | 202 |

TABLE NO. 31.-SHOWING DEATHS FROM EACH COUNTY ARRANGED ACCORD ING TO THE CAUSES OF DEATH FOR EACH YEAR -Cont.

|  | County. | Puerperal albuminuria and convulsions. |  |  | Puerperal phlegmasia alba dolens sudden death. |  |  | Following childbirth (not otherwise defined). |  |  | Puerveral diseases of the breast. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1909 | 1910 |  | 1909 | 1910 | To- | 1909 | 1910 | Total. | 1909 | 1910 | $\left\lvert\, \begin{aligned} & \text { To- } \\ & \text { tal. }\end{aligned}\right.$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Barron $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots .$. |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bayfleld |  | 1 |  | 1 |  |  |  | 1 |  | 1 | $\cdots$ |  | $\cdots$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Buffalo .............................. 1 .... 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Burnett Calumet |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


| County. | Puerperal albuminuria and convulsions. |  | Puerperal phlegmasia alba dolens sudden death. |  |  | Following childbirth (not otherwise defined. |  |  | Puerperal diseases of the breast. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $1909 \mid 1910$ | $\left\lvert\, \begin{aligned} & \text { To- } \\ & \text { tal. } \end{aligned}\right.$ | 1909 | 1910 | To- | 1909 | 1910 |  | 1909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal. } \end{aligned}$ |
| Chirpewa |  |  |  |  |  |  |  |  |  |  |  |
| Clark | 1 | 1 |  |  |  |  | 2 | 2 |  |  |  |
| Columbia |  |  |  |  |  | 1 |  | 1 |  |  |  |
| Orawford | 1 | 1 |  |  |  |  | 1 | 1 |  |  |  |
| Dane | $2{ }^{2} 1$ | 3 |  |  |  |  | 4 | 4 |  |  |  |
| Dodge | $1{ }^{1} 1$ | 2 |  |  |  |  |  |  |  |  |  |
| Door | 1 .... | 1 |  |  |  |  | 1 | 1 |  |  |  |
| Douglas | 12 | 3 |  |  |  | 2 |  | 2 |  |  |  |
| Punn ..... | 2 | 2 |  |  |  | 1 |  | 1 |  |  |  |
| Tau Claire | 1 | 1 |  |  |  | 2 | 1 | 3 |  |  |  |
| Fond du La ac. | 1 | 12 |  |  |  | 1 | 1 | 2 |  |  |  |
| Forest |  |  |  |  |  |  |  |  |  |  |  |
| Grant | 11 | 2 |  |  |  |  | 1 | 1 |  |  |  |
| Green . |  |  |  | 1 | 1 |  |  |  |  |  |  |
| Green Lake |  |  |  |  |  |  |  |  |  |  |  |
| Iowa |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Jackson |  |  |  |  |  | 1 | 2 | 3 |  |  |  |
| Jefferson | 1 | 1 |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Lafayette . | $1{ }^{1} 1$ | 2 |  |  |  |  |  |  |  |  |  |
| Langlade |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Marquette |  |  |  |  |  |  | 1 | 1 |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Monroe |  |  |  |  |  | 2 | 2 | 4 |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Ozaukee |  |  |  |  |  |  |  |  |  |  |  |
| ${ }_{\text {Prepin }}$ |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Price $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots .$. |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| St. Croix | 1 | 1 |  |  |  | 1 |  | 1 |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Taylor |  |  |  |  |  |  | 1 | 1 |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Vilas. |  |  |  |  |  |  |  |  |  |  |  |
| Walworth |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Wood ............................. $\cdot .$. |  |  |  |  |  |  |  |  |  |  |  |
| Total | $3 6 \longdiv { 2 7 }$ | 63 | 1 | 2 | 3 | 41 | 53 | 94 |  | , | $\cdots$ |

TABLE NO．31．－SHOWING DEATHS FROM EACH COUNTY ARRANGED ACCORD－ ING TO THE CAUSES OF DEATH FOR EACH YEAR．－Cont．

| County． | Gangrene． |  |  | Furuncle． |  |  | Acute abscess． |  |  | Other diseases of the skin and annexes． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \％ | $\stackrel{\circ}{\circ}$ | ت゙ | 产 | $\stackrel{\ominus}{\square}$ | $\begin{aligned} & \text { تin } \\ & \text { Hi } \\ & \text { H. } \end{aligned}$ | \％ | $\stackrel{0}{\mathbf{O}}$ | － | 令 | － | － |
| Adams |  | 1 | 1 |  |  |  |  |  |  |  |  |  |
| Ashland | 1 | 2 | 3 |  |  |  | 1 | 3 | 4 |  |  |  |
| Barron | 1 |  | 1 |  |  |  |  |  | 1 |  |  |  |
| Bayfeld | 1 |  | 1 |  |  |  |  |  |  |  |  |  |
| Brown | 2 |  | 2 |  |  |  |  | 2 | 2 |  | 2 | 2 |
| Buffalo |  | 1 | 1 |  |  |  |  |  |  |  |  |  |
| Burnett | 1 |  | 1 | 1 |  | 1 |  |  |  |  |  |  |
| Calumet |  |  |  |  |  |  |  | 1 | 1 | 1 |  | 1 |
| Chippewa clark .... | 1 | 2 | 3 |  | 1 | 1 | 1 | 1 1 | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |  | 1 | 1 |
| Columbia | 3 | 3 | 6 |  |  |  | 3 |  | 3 |  |  |  |
| Crawford |  |  |  | 1 |  | 1 |  |  |  |  |  |  |
| Dane ． | 6 | 4 | 10 |  | 1 | ， | 2 |  | 2 | 3 | 1 | 4 |
| Dodge |  | 2 | 2 |  | 1 | 1 |  |  |  |  |  |  |
| Door |  | 2 | 2 |  |  |  |  |  |  |  |  |  |
| Douglas | 1 |  | 1 |  |  |  | 1 | 2 | 3 |  |  |  |
| Dunn |  |  |  |  |  |  |  | 1 | 1 |  | 1 | 1 |
| Florence ．．．．．．． |  |  |  |  |  |  |  | 1 |  |  | 1 |  |
| Fond du Lac．． | 2 | 1 | 3 |  | 1 | 1 |  | 2 | 2 | 2 |  | 2 |
| Forest ． |  |  |  |  |  |  |  |  |  |  |  |  |
| Grant ． | 2 1 | 1 | 1 |  |  |  | 1 | 2 | 3 |  | 1 | 1 |
| Green Lake |  |  |  |  |  |  |  |  |  |  |  |  |
| Iowa |  |  |  |  |  |  |  |  |  | 1 |  | 1 |
| Iron |  |  |  |  |  |  | 1 | 1 | 2 |  |  |  |
| Jackson | 1 |  | 1 |  |  |  |  |  |  |  |  |  |
| Jefferson | 4 | 4 | 8 |  |  |  |  |  |  |  |  |  |
| Juneau ．．． | 2 | 1 | 3 |  |  |  |  |  |  |  |  |  |
| Kenosha | 3 | 2 | 5 |  |  |  |  | 1 | 1 |  | 1 | 1 |
| Kewaunee |  |  |  |  |  |  |  |  |  |  |  |  |
| La Crosse Lafayette | 1 | $\stackrel{1}{1}$ | 1 |  | 1 | 1 | i | 4 | 4 | 1 | 2 | 3 |
| Langlade ．．．．． |  |  |  |  |  |  | 1 | 1 | 1 |  |  |  |
| Lincoln ． |  |  |  |  |  |  |  |  |  |  |  |  |
| Manitowoc | 2 | 1 | 3 |  |  |  |  | 1 | 1 |  |  |  |
| Marathon | 2 | 4 | 6 |  |  |  | 2 |  | 2 |  | 2 | 2 |
| Marinette ． | 1 | 2 | 3 |  |  |  |  | 1 | 1 |  |  |  |
| Marquette ． | 1. |  | 1 |  |  |  | 1 |  | 1 |  |  |  |
| Milwaukee ．．．． | 11 | 19 | 30 | 3 | 2 | 5 | 12 | 20 | 32 | 10 | 6 | 16 |
| Monroe | 1 |  | 1 |  |  |  | 2 | 1 | $\begin{array}{r}3 \\ 3 \\ \hline\end{array}$ |  |  |  |
| Oconto |  |  |  |  |  |  | 1 | 2 | 3 |  |  |  |
| Oneida ．．．．．．．． |  |  |  |  |  |  |  |  |  |  |  |  |
| Outagamie Ozaukee | 3 | 1 | 4 |  |  |  | 5 | 1 |  | 2 | 1 | 3 1 |
| Ozaukee <br> Pepin |  |  |  |  |  |  | 1 |  | 1 | 1 |  | 1 |
| Pierce | 1 | 3 | 4 |  |  |  |  |  |  |  |  |  |
| Polk | 1 | 1 | 2 |  |  |  | $-1$ |  | 1 | 1 |  | 1 |
| Portage | 2 | 1 | 3 |  |  |  | 3 | 1 | 4 |  | 1 | 1 |
| Price ． |  |  |  |  |  |  |  |  |  |  |  |  |
| Racine | 2 | 1 | 3 |  |  | 1 | 3 | 2 | 5 |  |  |  |
| Richland |  |  |  |  |  |  | 1 |  | 1 |  |  |  |
| Rock | 1 | 3 | 1 |  |  |  | 2 | 1 | 1 ... |  |  |  |
| St．Croix | 1 | 1 | 2 | 1 |  | 1 |  |  |  | 1 |  | 1 |
| Sauk |  | 1 | 1 |  | 1 | 1 | 2 | 1 | 3 | 1 |  | 1 |
| Sawyer ． |  |  |  |  |  |  |  | 1 | 1 |  |  |  |
| Shawano |  | 2 | 2 |  |  |  | 2 | 1 | 3 | 1 | 1 | 2 |
| Sheboygan ．．．． | 4 |  | 4 |  |  |  | 3 | 1 | 4 | 1 |  | 1 |
| Taylor ．．．．．．．． |  |  |  |  |  |  | 3 |  | 3 |  |  |  |
| Trempealeau ．． | 1 | 4 | 5 |  |  |  |  |  |  |  |  |  |
| Vernon | 1 |  | 1 |  |  |  |  |  |  |  |  |  |
| Vilas Walworth | 2 | 2 | 4 | 1 |  |  | 1 | 1 | 2 | 1 |  | 1 |
| Washburn |  |  |  |  |  |  |  |  |  |  |  |  |

TABLE NO．31．－SHOWING DEATHS FROM EACH COUNTY，ARRANGED ACOORD． ING TO THE CAUSES OF DEATH FOR EACH YEAR．－Cont．

| County． | Gangrene． |  |  | Furuncle． |  |  | Acute abscess． |  |  | Other diseases of the skin and annexes． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \％${ }_{\text {8 }}$ |  | $\begin{aligned} & \text { ञi } \\ & \stackrel{0}{0} \\ & \text { En } \end{aligned}$ | \％ | $\stackrel{0}{9}$ | $\begin{aligned} & \text { ت゙ } \\ & \stackrel{0}{0} \\ & \text { E } \end{aligned}$ | 会 | $\stackrel{\text { 악 }}{ }$ |  | 骨 | $\stackrel{\text { 알 }}{ }$ | ＋ |
| Washington | 1 |  | 1 |  |  |  | 1 |  | 1 |  |  |  |
| Waukesha | 1 |  | 1 |  |  |  |  |  |  | 1 | i | $\ddot{2}$ |
| Waupaca |  |  |  |  | 1 | 1 |  |  |  | 1 | 1 | 2 |
| Waushara |  |  |  |  |  |  | 1 | 1 | 2 |  |  |  |
| Winnebago | 2 <br> 3 | 1 | 3 | 1 | ． | 1 |  |  |  |  | 2 | 2 |
| Total | 77 | 74 | 151 | 9 | 9 | 18 | 59 | 60 | 119 | 30 | 25 | 55 |

TABLE NO．31．－SHOWING DEATHS FROM EACH COUNTY，ARRANGED ACCORD－ ING TO THE CAUSES OF DEATH FOR EACH YEAR．－Cont．

| County． | Diseases of the bones， tuberculosis excepted． |  |  | Diseases of the joints，tubercu－ losis and rheu－ mati，m ex－ cepted． |  |  | Amputations． |  |  | Other diseases of the organs of locomotion． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 萵 | $\stackrel{\circ}{9}$ |  | 吴 | $\stackrel{\circ}{9}$ |  | 宮 | $\stackrel{\circ}{9}$ | تुं से | 遌 | 윽 | － |
| Adams |  |  |  |  |  |  |  |  |  |  |  |  |
| Ashland |  |  |  |  |  |  | i |  | 1 |  |  |  |
| Barron |  |  |  |  |  |  |  |  |  |  |  |  |
| Bayficld Brown |  |  |  |  |  |  |  |  |  |  |  |  |
| Brown ${ }^{\text {Buffalo }}$ | 2 | 1 | 3 |  |  |  |  | 1 | i |  |  |  |
| Buffalo |  |  |  |  |  |  |  |  |  |  |  |  |
| Burnett Calumet |  | 1 | 1 |  |  |  |  |  |  |  |  |  |
| Chippewa |  |  |  |  |  |  |  |  |  |  |  |  |
| Clark ．．． |  |  |  |  |  |  | 1 |  | 1 |  |  |  |
| Columbia |  |  |  |  |  |  |  |  |  |  |  |  |
| Crawford |  |  |  |  |  |  |  |  |  |  |  |  |
| Dane | 1 |  | 1 |  |  |  |  |  |  |  |  |  |
| Dodge |  |  |  |  |  |  |  |  |  |  |  |  |
| Door ．．． |  | 1 | 1 |  |  |  |  |  |  |  |  |  |
| Douglas |  |  |  |  |  |  |  | 1 | 1 |  |  |  |
| Eaun claire | 1 |  | 1 |  |  |  |  |  |  |  |  |  |
| Florence ． |  |  |  |  |  |  |  |  |  |  |  |  |
| Fond du Lac． |  | 1 | 1 | 1 |  |  | 1 |  | 1 |  |  |  |
| Forest ． |  |  |  |  |  |  |  |  |  |  |  |  |
| Grant Green | 1 |  | 1 |  |  |  |  |  |  |  |  |  |
| Green Lake |  |  |  |  |  |  |  |  |  |  |  |  |
| Iowa ．．．．．．． | 1 |  | i |  |  |  |  |  |  |  |  |  |
| Iron ．．．．． |  |  |  |  |  |  |  |  |  |  |  |  |
| Jackson | 1 |  | 1 |  |  |  |  |  |  |  |  |  |
| Jefferson | 1 |  | 4 | 1 |  | 1 |  |  |  |  |  |  |
| Kenosha |  | 1 | 1 |  |  |  |  |  |  |  |  |  |
| Kewaunee |  |  |  |  |  |  |  |  |  |  |  |  |
| La Cross ${ }^{\text {a }}$ | 2 |  | 2 |  |  |  |  |  |  |  |  |  |
| Lafayette |  |  |  |  |  |  |  |  |  |  |  |  |
| Lincoln ． | 1 |  | 1 |  |  |  | 1 |  |  |  |  |  |
| Manitowoc | 2 |  | 2 |  |  |  | 1 |  | 1 |  |  |  |
| Marathon ． | 1 |  | 1 | 1 |  |  |  |  |  |  |  |  |

TABLE NO．31．－SHOWING DEATHS FROM EAOH COUNTY ARRANGED AOCORD－ ING TO THE CIAUSES OF DEATH FOR EACH YEAR．－Cont．

| County． | Diseases of the bones， tuberculosis excepted． |  |  | Diseases of the joints，tubercu－ losis and rheu－ matism ex－ cepted． |  |  | Amputations． |  |  | Other diseases of the organs of locomotion． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { e8. } \\ & \text {. } \end{aligned}$ | $\stackrel{\circ}{\square}$ | $\begin{aligned} & \text { ت゙ } \\ & \stackrel{0}{\mathrm{~N}} \end{aligned}$ | 㕆 | $\stackrel{0}{0}$ | ञ ¢ －1 | 令 | $\stackrel{\circ}{\underset{\sim}{2}}$ | ¢ | \％ | 윽 |  |
| Marinette | 1 | 1 | 2 |  |  |  |  |  |  |  |  |  |
| Marquette |  |  |  |  |  |  |  |  |  |  |  |  |
| Milwaukee | 9 | 8 | 17 | ．．．．． | ． |  | 1 | ．．． | 1 |  |  |  |
| Monroe |  | 1 |  |  |  |  |  |  |  |  |  |  |
| Oneida ．． |  |  |  |  |  |  | 1 |  | 1 |  |  |  |
| Outagamie | 2 | 1 | 3 |  |  |  |  | 1 | 1 |  |  |  |
| Ozaukee ．． |  |  |  |  |  |  |  |  |  |  |  |  |
| Pepin |  |  |  |  |  |  |  |  |  |  |  |  |
| Pierce |  | 2 | 2 |  |  |  |  |  |  |  |  |  |
| Polk ． |  | 1 | 1 |  |  |  |  |  |  |  |  |  |
| Portage ．．．．．．．． |  |  |  |  |  |  |  |  |  |  |  |  |
| Price ．． |  |  |  |  |  |  |  |  |  |  |  |  |
| Racine |  | 1 | 1 |  |  |  | 1 |  | 1 |  |  |  |
| Richland |  | 1 | 1 | ．．．．．． |  |  |  |  |  |  |  |  |
| Rock |  | 1 | 1 |  |  |  |  |  |  |  |  |  |
| Rusk ．．．． |  |  |  |  |  |  |  |  |  |  |  |  |
| St．Croix |  |  |  |  |  |  |  | 1 | 1 |  |  |  |
| Sauk ． | 1 |  | 1 | ．．．．． |  |  |  |  |  |  |  |  |
| Sawyer ．．．．．．．． |  |  |  |  |  |  |  |  |  |  |  |  |
| Shawano ．． |  |  |  |  |  |  |  |  |  |  |  |  |
| Sheboygan ．．． Taylor |  | 1 | 1 |  |  |  | 1 | ．．．．． | 1 |  |  |  |
| Taylor ．．．．．．．． <br> Trempealeau | 1 | 1 | 2 |  |  |  |  |  |  |  |  |  |
| Vernon ．．．．．．．． | 1 | 1 | 2 |  |  |  |  |  |  |  |  |  |
| Vilas ． |  |  |  |  |  |  |  |  |  |  |  |  |
| Walworth |  |  |  |  |  |  |  |  |  |  |  |  |
| Washburn ． |  |  |  |  |  |  |  |  |  |  |  |  |
| Washington |  | 1 | 1 |  |  | 1 |  |  |  |  |  |  |
| Waukesha ．．．． |  |  |  |  | 2 | ， |  |  |  |  |  |  |
| Waupaca | 2 |  | 2 |  | 1 | 1 | ．．．．． |  |  |  |  |  |
| Waushara |  |  |  |  |  |  |  |  |  |  |  |  |
| Winnebago | 1 | 5 | ${ }_{6}^{6}$ |  |  |  |  |  |  |  |  |  |
| Wood ．．．．． | 1 | 2 | 3 |  |  |  |  |  |  |  |  |  |
| Total $\cdot .$. | 33 | 36 | 69 | 3 | 4 | 7 | 9 | 4 | 13 |  |  |  |

TABLE NO．31．－SHOWING DEATHS FROM EACH OOUNTY ARRAANGED ACCORD－ ING TO THE CAUSES OF DEATH FOR EACH YEAR．－CCont．

| ，County． | Congenital mal－ formations．Still births not in－ cluded． |  |  | Congenital de－ bility，icterus and sclerema． |  |  | Other diseases peculiar to early infancy． |  |  | Lack of care． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \％\％ | 옥 |  | \％ | $\stackrel{\bigcirc}{\circ}$ | ＋ | \％ | $\stackrel{\text { O}}{\sim}$ | त | 会 | 옥 | － |
| Adams |  |  |  |  |  |  | 4 | 4 | 8 |  |  |  |
| Ashland |  |  |  | 8 |  | 8 | 17 | 19 | 36 |  |  |  |
| Barron |  | 2 | 2 | 6 | 8 | 14 | 18 | 25 | 43 | 1 | ． | 1 |
| Bayfield |  |  |  | 5 | 2 | 7 | 9 | 11 | 20 |  |  |  |
| Brown | 4 | 5 | 9 | 12 | 11 | 23 | 35 | 40 | 75 | － 2 | 1 | 3 |
| Buffalo |  | 1 | 1 | 2 | 1 | 3 | 3 | 8 | 11 |  |  |  |
| Burnett | 2 |  | 2 |  |  |  | 6 | 4 | 10 |  |  |  |
| Calumet |  | 2 | 5 | 1 | 6 | 7 | 7 | 3 | 10 |  |  |  |
| Chippewa | 4 | 3 | 7 | 5 | 15 | 20 | 13 | 20 | 33 |  | 1 | 1 |
| Clark | ， | 1 | 2 | 3 | 9 | 12 | 14 | 15 | 29 |  | 1 | 1 |
| ＇Columbia | 2 | 3 | 5 | 3 | 4 | 7 | 12 | 19 | 31 |  | 1 | 1 |

TABLE NO．31．－SHOWING DEATHS FROM EACH COUNTY ARRIANGED ACCORD－ ING TO THE CAUSES OF DEATH FOR EACH YEAR．－Cont．

| County． | Congenital mal－ formations．Still－ births not in－ cluded． |  |  | Congenital de－ bilits，icterus and selerema． |  |  | Other diseases peculiar to early infancy． |  |  | Lack of care． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | O | $\stackrel{\circ}{9}$ |  | 命 | $\stackrel{\circ}{5}$ | $\begin{aligned} & \text { ت゙ } \\ & \stackrel{0}{0} \\ & \text { Ei } \end{aligned}$ | 萬 | $\stackrel{\ominus}{3}$ | $\begin{aligned} & \text { تं } \\ & \text { से } \\ & \text { E. } \end{aligned}$ | \％ | $\stackrel{\circ}{\circ}$ | － |
| Crawford | 1 | 2 | 3 | 3 | 4 | 7 | 9 | 12 | 21 |  |  |  |
| Dane ． | 4 | 7 | 11 | 6 | 12 | 18 | 40 | 41 | 81 | 1 | 1 | 2 |
| Dodge | 7 | 5 | 12 | 3 | 14 | 17. | 13 | 24 | 37 |  |  |  |
| Door | 1 | 1 | 2 | 2 | 4 | 6 | 7 | 12 | 19 |  |  |  |
| Douglas | 3 |  | 3 | 4 | 5 | 9 | 17 | 26 | 43 |  |  |  |
| Dunn ．．．．．．．．． |  |  |  | 3 | 4 | 7 | 19 | 10 | 29 |  |  |  |
| Eau Claire ．．． |  | 2 | 2 | 3 | 6 | 9 | 5 | 15 | 20 | 1 |  | i |
| Florence $\ldots$ ．．．． |  |  |  | 1 |  | 1 |  | 3 | 3 |  |  |  |
| Fond du Lac．． | 1 | 2 | 3 | 4 | 10 | 14 |  | 29 | 57 |  |  |  |
| Forest ．．．．．．．． |  |  |  |  | 3 | 3 | 5 | 7 | 12 |  |  |  |
| Grant ． | 2 | 2 | 4 | 4 | 5 | 9 | 22 | 20 | 42 |  |  |  |
| Green ． | 3 |  | 3 | 1 | 2 | 3 | 7 | 7 | 14 |  |  |  |
| Green Lake | 1 |  | 1 | 2 | 5 | 7 | 7 | 8 | 15 |  |  |  |
| Iowa | 2 | 2 | 4 | 2 | 2 | 4 | 6 | 15 | 21 |  |  |  |
| Iron． |  |  |  | 1 | 3 | 4 | 3 | 3 | 6 |  |  |  |
| Jackson |  |  |  | 1 | 5 | 6 | 7 | 8 | 15 |  |  |  |
| Jefferson | 1 |  | 1 | 1 | 3 | 4 | 12 | 17 | 29 |  |  |  |
| Juneau ．． |  |  |  |  |  | 3 | 13 | 8 | 21 |  |  |  |
| Kenosha | 2 | 1 | 3 | 2 | 16 | 18 | 18 | 26 | 44 |  |  |  |
| Kewaunce | 1 | 1 | 2 | 1 | 10 | 11 | 13 | 5 | 18 |  |  |  |
| La Crosse | 3 | 1 | 4 | 6 | － 13 | 19 | 21 | 14 | 35 |  |  |  |
| Lafayette | 1 | 1 |  | 1 | 3 | 4 | 8 | 10 | 18 |  |  |  |
| Langlade | 1 | 3 | 4 | 1 | 5 | 6 | 11 | 10 | 21 |  |  |  |
| Lincoln ． | 1 | 4 | 5 | 2 | 5 | 7 | 12 | 6 | 18 |  |  |  |
| Manitowoc | 1 |  | 9 | 6 | 9 | 15 | 21 | 20 | 41 |  | 2 | $\ddot{2}$ |
| Marathon | 2 | 3 | 5 | 6 | 9 | 15 | 42 | 30 | 72 | 1 |  | 1 |
| Marinette | 6 | 2 | 8 | 19 | 16 | 35 | 18 | 11 | 29 |  |  |  |
| Marquette |  | 1 | 1 |  |  |  | 7 | 3 | 10 |  |  |  |
| Milwaukee | 25 | 14 | 39 | 131 | 164 | 295 | 239 | 348 | 587 | 5 | 10 | 15 |
| Monroe | 3 | 1 | 4 | 6 | 3 | 9 | 12 | 13 | 25 |  |  |  |
| Oconto | 6 | 3 | 9 | 8 | 7 | 15 | 14 | 15 | 29 |  |  |  |
| Oneida ．．． | 2 |  | 2 | 5 | 2 | 7 | 4 | 6 | 10 |  |  |  |
| Outagamie | 3 | 5 | 8 | 9 | 12 | 21 | 27 | 22 | 49 |  |  |  |
| Ozauke ． | 1 |  | 1 | 5 |  |  |  | 4 | 12 |  |  |  |
| Pepin ．． |  |  |  | 2 | 3 | 5 | 6 | 2 | 8 | 1 |  | i |
| Pierce | 1 | 1 | 2 | 4 | 3 | 7 | 5 | 8 | 13 |  |  |  |
| Polk ．． | 1 | 1 | 2 | 4 | 7 | 11 | 13 | 8 | 21 | 1 |  | 1 |
| Portage | 2 |  | 2 | 8 | 18 | 26 | 17 | 13 | 30 | 1 |  | 1 |
| Price． |  |  |  | 1 | 3 | 4 | 7 | 2 | 9 | 1 |  | 1 |
| Racine |  | 2 | 6 | 2 | 6 | 8 | 19 | 21 | 40 | 1 |  | 1 |
| Richland |  | 1 | 4 | 2 | 3 | 5 | 14 | 11 | 25 |  |  |  |
| Rock | 6 | 1 | 7 | 7 | 9 | 16 | 26 | 23 | 49 |  |  |  |
| Rusk | 2 | 3 | 5 | 2 | 4 | 6 | 3 | 6 | 9 |  |  |  |
| St．Croix | 4 | 1 | 5 | 5 | 5 | 10 | 8 | 11 | 19 |  |  |  |
| Sauk ． | 2 |  | 2 |  | 6 | 6 | 13 | 15 | 28 |  |  |  |
| Sawyer |  |  |  | 2 | 3 | 5 | 1 | 2 | 3 |  |  |  |
| Shawano ．．．．． | 3 | 1 | 4 | 7 | 7 | 14 | 16 | 14 | 30 |  |  |  |
| Sheboygan ．．． | 2 | 2 | 4 | 7 | 10 | 17 | 20 | 26 | 46 | 1 |  | 1 |
| Taylor ．．．．．．．． |  | 1 | 1 |  |  |  | 4 | 5 | 9 9 |  |  | 1 |
| Trempealeau ． | 1 ． | 2 | 3 | 4 | 6 | 10 | 11 | 8 | 19 | 1 |  | 1 |
| Vernon ．．．．．．．． | 2 | 2 | 4 | 4 | 6 | 10 | 12 | 15 | 27 |  |  |  |
| Vilas ．．．． |  |  |  |  | 1 | 1 |  | 2 | 2 |  |  |  |
| Walworth ．．．．． | 2 |  | 2 | 2 | 4 | 6 | 9 | 11 | 20 |  |  |  |
| Washburn ．．．． | 2 |  | 2 |  | 4 | 4 | 7 | 9 | 16 |  |  |  |
| Washington ．． | 1 |  | 1 |  | 1 | 1 | 6 | 11 | 17 |  |  |  |
| Waukesha ． | 5 | 2 | 7 | 4 | 6 | 10 | 19 | 22 | 41 |  |  |  |
| Waupaca ．．．．． | 5 |  | 5 | 8 | 10 | 18 | 16 | 17 | 33 |  | i | 1 |
| Waushara ．．．． | 2 | 2 | 4 |  | 6 | 9 | 11 | 9 | 20 |  |  |  |
| Winnebago ．．． | 6 | 4 | 10 | 6 | 5 | 11 | 25 | 36 | 61 |  |  |  |
| Wood ．． |  | 4 | 4 | 5 | 7 | 12 | 20 | 19 | 35 |  |  |  |
| Total ．．． | 156 | 118 | 274 | 383 | 563 | 946 | 1，141 | 1，302 | 2，443 | 18 | 18 | 36 |

TABLE NO. 31.-SHOWING DEATHS FROM EACH COUNTY, ARRANGED ACCORDING TO THE CAUSES OF DEAT'H FOR EACH YEAR.-Cont.

| Counts. | Senility. |  |  | Suicide by poison. |  |  | Suicide bs asphyxia. |  |  | suicide br <br> hanging or <br> strangulation. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & 8.8 \\ & \hline \end{aligned}$ | $\stackrel{0}{2}$ | $\begin{aligned} & \text { ت} \\ & \stackrel{\rightharpoonup}{5} \\ & \text { E } \end{aligned}$ | 合 |  |  | 会 | $\stackrel{\circ}{\underset{-}{2}}$ | ت $\stackrel{\text { En }}{0}$ - |  | $\stackrel{\ominus}{\underset{\sigma}{2}}$ |  |
| Adams | 8 | 5 | 13 | 1 |  | 1 |  |  |  | 1 |  | 1 |
| Ashland | 14 | 6 | 20 | 1 | i | 2 |  |  |  | 4 |  | $\ddagger$ |
| Barron | 16 | 19 | 35 |  | 3 | 3 |  |  |  | 1 |  | 1 |
| Bayfield | 10 | 9 | 19 |  | 2 | 2 |  |  |  |  |  |  |
| Brown | 64 | 53 | 107 | 4 | 2 | 6 |  |  |  | 2 |  | 2 |
| Buffalo | 10 | 18 | 28 |  |  |  |  |  |  | 2 |  | 2 |
| Bureit | 11 | 8 | 19 |  |  |  |  |  |  |  | 1 | 1 |
| Calumet | 8 | 11 | 19 |  |  |  |  |  |  |  |  |  |
| Chippewa | 39 | 36 | 75 | 1 |  | 1 |  |  |  | 1 | 1 | 2 |
| Clark ... | 21 | 13 | 34 |  | 1 | 1 |  |  |  | 1 |  | 1 |
| Columbia | 41 17 | 47 | 88 |  | 3 | 3 |  | 1 | 1 | 2 |  | 2 |
| Crawford Dane | 17 53 5 | 20 | 37 118 |  |  |  |  |  |  |  | 1 | 1 |
| Dodge | 42 | 43 | 118 80 8 | 5 | 1 | $\begin{aligned} & 6 \\ & 1 \end{aligned}$ |  |  |  | 5 | 5 | 10 |
| Door | 19 | 12 | 31 |  |  |  |  |  |  |  |  |  |
| Douglas | 8 | 14 | 22 | 3 | 1 | 4 |  |  |  | 2 |  |  |
| Tiun $n$. | 15 | 24 | 39 |  |  |  |  |  |  | 1 | 1 | 2 |
| Eau Claire | 13 | 27 | 40 |  |  |  |  |  |  | 1 | 1 | 2 |
| Florence | 6 | 4 | 10 |  |  |  |  |  |  | 1 | 1 |  |
| Fond da Lac. | 51 | 40 | 91 | 1 | 1 | 2 |  |  |  | 1 | 1 | 2 |
| Forest | 3 | 2 | 5 |  |  |  |  |  |  |  |  |  |
| Grant | 32 | 42 | 74 |  |  |  |  |  |  | 1 | 1 | 2 |
| Green | 12 | 18 | 30 |  |  |  |  |  |  | 1 | 1 | 2 |
| Green Lake | 24 | 12 | 36 |  | 1 | 1 |  |  |  |  |  |  |
| Jowa . | 24 | 19 | 4.3 | 1 | 2 | $\stackrel{2}{2}$ |  |  |  |  |  |  |
| fackson | ${ }_{13}^{2}$ | - | 5 |  | 2 | 2 |  |  |  | 2 |  | 2 |
| Jefferson,$\ldots$. | 26 | 32 | 58 | 1 | 1 | 2 ? |  |  |  | 2 | 1 | 3 |
| Juncall | 16 | 30 | 46 |  |  |  |  |  |  |  |  |  |
| Kenosha | 12 | 18 | 30 | 1 |  | 1 |  |  |  | 1 |  | 1 |
| Kewaunee | 31 | 22 | 53 |  |  |  |  |  |  |  |  |  |
| Lafayette | 21 14 14 | 38 | 61 | 1 | 3 | 4 | 1 |  | 1 |  | 1 | 1 |
| Langlade | 12 | 16 | 28 | 1 |  | 1 | ... |  |  |  |  |  |
| Lincoln | 13 | 8 | 21 |  |  |  |  |  |  | 1 |  | 1 |
| Manitowoc | 35 | 46 | 81 |  | $i$ | 1 |  |  |  | 1 | 3 | 4 |
| Marathon | 85 | 48 | 83 |  | 3 | 3 |  |  |  | 1 | , | 4 |
| Marinette | 20 | 21 | 41 | 2 |  | 2 |  |  |  | 1 | 3 |  |
| Marquette | 11 | 22 | 33 |  |  | 2 |  |  |  | 1 | 3 | + |
| Mlwaukee | 187 | 191 | 378 | 34 | 43 | 7 | 6 | 7 | 13 | 13 | 22 | $3 ;$ |
| Monroe | 23 | 29 | 52 |  | 1 | 1 |  |  |  | , | 1 |  |
| Conto <br> Oneida | 18 9 | 22 | 40 9 |  | 1 | 1 |  |  |  | , |  | 1 |
| Outagamic | 5 | 50 | 105 | 1 | 1 | 1 |  |  |  |  | 1 | 1 |
| Ozaukee . | 15 | 12 | 27 |  | 1 | , |  |  |  | 2 | 1 | 1 |
| Pepin | 4 | 5 | 9 |  |  |  |  |  |  | 1 |  | 1 |
| Pierce | 20 | 13 | 33 | 1 | 1 | 2 |  |  |  | 2 | 2 | 4 |
| Polk | 8 | 6 | 14 |  | 1 | 1 |  |  |  | 1 |  | 1 |
| Portage | $\begin{array}{r}18 \\ 3 \\ \hline\end{array}$ | 29 6 | 47 9 |  | 2 | 2 |  |  |  |  | 1 | 1 |
| Racine | r | 6 42 | 9 | 4 | 3 | 7 |  |  |  |  | 1 | 1 |
| Richland | 11. | 7 | 18 |  |  | 7 |  |  |  | 6 | 4 | 10 |
| Rock | 60 | 59 | 119 | 2 | 1 | 3 | 5 |  | 5 | 3 | 1 | 4 |
| Rusk | 5 | 6 | 11 |  |  |  |  |  |  |  |  |  |
| St. Croix | 18 | 24 | 42 | 1 |  | 1 |  |  |  |  |  |  |
| Sauk | 41 | 43 | 84 |  |  |  |  |  |  |  |  |  |
| Sawyer | 3 | 4 | 7 | 1 |  | 1 |  |  |  |  | 1 | 1 |
| Shawano | 11 | 15 | 26 |  |  |  |  |  |  | 1 | 2 | 3 |
| Sheboygan | 55 | 53 | 108 | 3 | 4 | 7 |  |  |  | 2 | 4 | 6 |
| Tremlor ..... | 6 | 9 | 15 | 1 |  | 1 |  |  |  |  | 1 | 1 |
| Trempealeau Vernon | 12 | 24 | 36 | 1 |  | 1 |  |  |  | 1 | 1 | 2 |
| Vernon <br> Vilas | 24 1 | 21 | 45 1 | 1 |  | 1 |  |  |  | 1 | 2 | 3 |
| Walworth | 56 | 40 | 96 | 3 | i | 4 |  |  |  |  |  |  |
| Washburn .... | 4 | 5 |  |  |  |  |  |  |  |  | 1 | 1 |

19-B. H.

TABLE MO．31．－SHOWING DEATHS FROM EAOH COUNTY，ARRANGED ACCORD－ ING TO THE CAUSES OF DEATH FOR EACH YEAR．－Cont．

| County． | Senility． |  |  | suicide by poison． |  |  | Suicide by asphyxia． |  |  | Suicide by hanging or strangulation． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | －8． | 응 | － | 咸 | $\stackrel{\circ}{9}$ | $\begin{aligned} & \text { تं } \\ & \text { से } \\ & \text { H. } \end{aligned}$ | \％ | 을 | ¢ ¢ H | 令 | $\stackrel{\circ}{9}$ | न̈ ＋ H |
| Washington | 23 | 20 | 43 | 2 |  | 2 |  |  |  |  | 1 | 1 |
| Waukesha ． | 34 | 30 | 64 | 1 |  | 1 |  |  |  | 2 | 2 | 4 |
| Waupaca | 40 | 34 | 74 | 1 | 1 | 2 |  | ．．．． |  | 1 |  | 1 |
| Waushara | 22 | 15 | 37 |  |  |  |  |  |  | 1 |  | 1 |
| Winnebago | 51 | 46 | 97 | 1 |  | 1 |  |  |  | 3 | 4 | 7 |
| Wood ．．．． | 8 | 11 | 19 | 1 |  | 1 |  |  |  | 2 |  | 2 |
| Total | 1，712 | ，791 | 3，503 | 85 | 89 | 174 | 12 | 8 | 20 | i8 | 79 | 157 |

TABLE NO．31．－SHOWING DEATHS FROM EACH COUNTY ARRANGED ACCORD－ ING TO THE CAUSES OF DEATH FOR EACH YEAR．－Cont．

| County． | Suicide by drowning． |  |  | Suicide by firearms． |  |  | Suicide by cutting or pierc－ ing－instruments． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 导 | $\stackrel{9}{9}$ |  | O. | $\stackrel{\circ}{9}$ | $$ | 守 | $\stackrel{\text { O}}{\substack{- \\ \hline}}$ | － |
| Adams |  |  |  |  |  |  |  |  |  |
| Ashland |  |  |  | 1 | 3 | 4 | 2 |  | 2 |
| Barron |  |  |  |  |  |  |  |  |  |
| Bayfield |  |  |  |  | 3 | 3 |  | 1 | 1 |
| Brown |  | 1 | 1 |  | 4 | 4 |  |  |  |
| Buffalo ． |  |  |  |  |  |  |  |  | 1 |
| Burnett Calumet |  |  |  |  |  |  |  | 1 | 1 |
| Chippewa | 1 |  | 1 | 1 |  | 1 |  | 1 | 1 |
| Clark ．．． |  |  |  | 3 | 2 | 5 |  |  |  |
| Columbia |  |  |  | 2 |  | 2 |  | 2 | 2 |
| Crawford |  |  |  |  |  |  |  |  |  |
| Dane ．． | 1 |  | 1 | 3 | 3 <br> 3 | ${ }_{3}^{6}$ |  | 1 | 1 |
| Dodge ． |  |  |  |  | 3 | 3 |  | 1 | 1 |
| Douglas | i | 2 | 3 |  | 3 | 3 | 1 | 3 | 4. |
| Dunn ．． |  |  |  |  |  |  | 1 |  | 1 |
| Eau Claire | 1 |  | 1 |  |  | ． |  |  |  |
| Florence |  |  |  |  |  |  |  | 1 | 1 |
| Fond du Lac |  | 1 | 1 | 2 | 1 | 3 |  | 1 | 1 |
| Forest Grant ．．．．．．．．．． |  |  |  | 2 |  | 2 |  | 1 | 1 |
| Grant |  |  |  |  | i | 1 |  |  |  |
| Green Lake |  |  |  |  | 1 | 1 |  |  |  |
| Iowa ．．．．．．． |  |  |  | 2 |  | 2 |  |  |  |
| Iron ．．． |  |  |  |  |  |  |  |  |  |
| Jackson |  |  |  |  | 1 | 1 |  |  |  |
| Jefferson | 1 | 1 | 2 |  | 1 | 1 |  |  |  |
| Juneau | 1 | 1 | 2 | 1 |  | 1 |  | 1 | 1 |
| Kewaunee |  |  |  |  | 1 | 1 |  |  |  |
| La Orosse |  | 4 | 4 | 1 | 1 | 2 |  |  |  |
| Lafayette |  |  |  |  | 1 | 1 |  |  |  |
| Langlade |  |  |  |  | 1 | 1 |  |  | 1 |
| Lincoln ．．． |  |  |  | 3 2 | 1 | 4 | 1 |  | 1 |
| Manitowoc |  |  |  |  |  |  |  |  |  |
| Marathon Marinette |  |  |  |  |  |  | 1 |  | 1 |

TABLE NO. 31.-SHOWING DEATHS FROM EACH COUNTY ARRiANGED ACCORD ING TO THE CAUSES OF DEATH FOR EACHH YEAR.-Cont.

| County. | Suicide by drowning. |  |  | Suicide by firearms. |  |  | Suicide by cutting or piercing instruments |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | O. O. | $\frac{9}{6}$ | ت | \% | $\stackrel{\text { 을 }}{\text { ¢ }}$ | $\stackrel{\text { ci }}{\stackrel{\text { ci}}{0}}$ | \% | $\stackrel{\bigcirc}{9}$ | ¢ - - |
| Marquette |  |  |  |  | 1 | 1 |  |  |  |
| Milwaukee | 7 | 10 | 17 | 19 | 18 | 37 | 3 | 5 | 8 |
| Monroe |  |  |  |  |  |  |  |  |  |
| Oconto . |  |  |  |  |  |  |  |  |  |
| Oneida |  |  |  |  |  |  |  |  |  |
| Outagamie | 1 |  | 1 |  | 1 | 1 |  | 1 | 1 |
| Ozaukee .. |  |  |  |  | 1 | 1 |  | 1 | 1 |
| Pepin . |  |  |  |  |  |  |  |  |  |
| Pierce |  |  |  | 1 |  | 1 |  | 1 | 1 |
| Polk ${ }^{\text {Portage }}$ |  |  |  | 1 | 1 | 1 |  | 1 | 1 |
| Price . |  |  |  | 1 | 1 | 2 |  | 1 | 1 |
| Racine |  |  |  | 1 | 3 | 4 | 1 | 1 | 2 |
| Richland |  |  |  |  |  |  |  |  |  |
| Rock |  | 1 | 1 | 2 | 3 | 5 |  |  |  |
| Rusk |  |  |  |  |  |  |  |  |  |
| St. Croix |  | 2 | 2 | 2 | 1 | 3 |  | . |  |
| Saux |  |  |  |  | 3 | 3 |  |  |  |
| Sawyer .. |  |  |  |  | 1 | 1 |  |  |  |
| Shawano |  |  |  |  | 3 | 3 | 1 |  | 1 |
| Sheboygan | 1 | 3 |  | 1 | 1 | 2 |  |  |  |
| Taylor ${ }_{\text {Trempealeau }}$ | 1 |  |  |  |  |  | 1 |  | 1 |
| Vernon ..... | 1 |  | 1 |  |  |  | 1 |  | 1 |
| Vilas .. |  |  |  |  | 1 | 1 |  |  |  |
| Walworth |  |  |  | 2 |  | 2 |  |  |  |
| Washburn |  |  |  | 2 |  | 2 |  |  |  |
| Washington |  |  |  |  |  |  |  |  |  |
| Waukesha Waupaca |  |  |  | 1 | 4 1 | 4 |  |  | 1 |
| Waushara |  |  |  |  |  |  |  | 1 | 1 |
| Winnebago |  | 1 |  |  | 2 | 2 |  |  |  |
| Wood .... |  |  |  | 1 |  | 1 |  |  |  |
| Total | 17 |  |  | 58 | 77 | 135 | 12 | 25 | 37 |

TABLE NO. 31.-SHOWING DEATHS FROM EACH COUNTY, ARRANGED ACCORD. ING TO THE CAUSES OF DEATH FOR EACH YEAR.-Cont.

| County. | Suicide by jumping from high places. |  |  | Suicide by crushing. |  |  | Other suicides. |  |  | Poisoning by food. |  |  | Other acute poisonings. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1909 | 1910 | Total | 1909 | 1910 | To- tal. | 1909 | 1910 |  | 1909 | 1910 |  | 1909 | 1910 | To- |
| Adams |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ashland |  |  | . | . |  | .... | 1 | 1 | 2 | ... |  | . |  |  |  |
| Barron |  |  |  |  |  |  | 1 |  | 1 | ... |  | . |  |  |  |
| Bayfield |  |  |  |  |  |  | ... |  |  | 1 |  | 1 |  | 2 | 2 |
| Buffalo |  | 1 | 1 |  |  |  |  |  |  | 1 |  |  |  |  |  |
| Burnett |  |  |  |  |  |  |  |  |  | 3 |  | 3 |  |  |  |
| Calumet |  |  |  |  |  |  |  |  |  | 1 |  | 1 |  |  |  |
| Chippewa |  |  |  |  |  |  |  |  |  |  |  | 2 |  |  |  |
| Clark |  |  |  |  |  |  |  |  |  |  | 1 | 1 |  |  |  |
| Columbia |  |  |  |  |  |  |  |  |  |  |  | 1 | 2 |  |  |

TABLE NO. 31.-SHOWING DEATHS FROM EACH COUN'TY, ARRANGED ACCORD ING TO THE CAUSES OF DEATH FOR EACH YEAR.-COnt.

| County. | Suicide by jumping from high places. | suiride by crushing. | Other suicides. |  |  | Poisoning by food. |  |  | Other acute poisonings. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $19091910 \mathrm{~T}_{\mathrm{To}} \mathrm{tal}$ | $190 \%$ ¢910 To- |  |  |  |  |  | $\left\lvert\, \begin{aligned} & \text { To- } \\ & \text { tal } \end{aligned}\right.$ | 1909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal. } \end{aligned}$ |
| Dane |  |  | 2 |  | 2 | 1 | 1 | 2 | 2 | 2 | 4 |
| Dodge |  | 1 |  |  |  |  |  |  |  | 1 | 1 |
| Door |  |  |  |  |  |  | 1 | 1 |  |  |  |
| Douglas |  |  |  |  |  |  |  |  | 2 |  | 2 |
| 1)unn .. |  |  |  |  |  | 1 |  | 1 |  |  |  |
| Eau Claire |  |  |  |  |  |  |  |  |  |  |  |
| Florence ... |  |  |  |  |  |  |  |  |  |  |  |
| Fond du Lac. |  |  |  | 1 | 1 | ... |  |  | 1 | $\cdots$ | 1 |
| Forest |  |  |  |  |  |  |  |  |  |  |  |
| Grant |  |  | 1 |  | 1 |  |  |  |  |  |  |
| Green |  |  |  | 1 | 1 | 1 |  | 1 |  |  |  |
| Grecn Lake |  |  |  |  |  |  |  |  | 1 | 1 | ${ }_{2}^{2}$ |
| lowa |  |  |  |  |  |  |  |  | 1 |  | 1 |
| 1ron ... |  |  |  |  |  |  |  |  |  | 2 | 2 |
| dackeon <br> Jelferson |  |  |  |  |  |  |  |  |  |  |  |
| Jumerson |  |  | 2 |  | 2 | 1 |  | 1 |  | 1 2 | 1 2 |
| kenosha |  |  |  | 1 | 1 | 1 |  | 1 |  |  |  |
| Kewaunce |  |  | 1 |  | 1 |  |  |  |  |  |  |
| La Crosse | 1 |  |  |  |  |  | 1 | 1 | 1 |  | 1 |
| Lafayette |  |  |  |  |  |  |  |  | 1 |  | 1 |
| Langlade |  |  |  |  |  |  | 1 | 1 |  |  |  |
| Manitowe |  |  |  |  |  | 1 |  | 1 |  | 1 | 1 |
| Marathon |  |  |  |  |  |  | 1 | 1 |  |  |  |
| Marinette |  |  | 1 |  | 1 |  |  |  |  |  |  |
| Marquette |  |  |  |  |  |  |  |  |  |  |  |
| Milwauke | 2 ... 2 | $2 \quad 2$ | . |  |  | 3 | 7 | 10 | 3 | 5 |  |
| Monroe . |  |  |  |  |  |  | 2 | 2 | 1 | 2 | 3 |
| Oconto . |  |  |  | 1 | 1 |  |  |  |  | 1 | 1 |
| Oneida |  |  | 1 |  | 1 | 1 | 2 | 1 | 1 | i | 2 |
| Ozaukee . |  |  | 1 |  | 1 |  |  |  |  |  |  |
| Pepin ... |  |  |  |  |  |  |  |  |  |  |  |
| Pierce |  |  |  |  |  |  | 1 | 1 |  |  |  |
| Polk |  |  |  |  |  |  | 1 | 1 |  |  |  |
| Portage |  |  |  |  |  | 2 |  | 2 | 2 |  | 2 |
| Price |  |  | 1 | 1 | 2 |  |  |  |  |  |  |
| Racise ${ }^{\text {Richland }}$ |  |  |  |  |  | 1 |  | 1 | 1 | 1 | 2 |
| Richland |  |  |  |  |  |  |  |  |  |  |  |
| Rock |  |  |  |  |  | 1 | 1 | 2 | 1 | 1 | 2 |
| Rusk .... |  |  |  |  |  |  |  |  | 1 |  | 1 |
| St. Croix |  |  |  |  |  |  | 1 | 1 |  |  | $\ldots$ |
| Sauk . |  |  |  | 1 | 1 | 1 | . | 1 |  |  |  |
| Sawyer ${ }^{\text {Shawano. }}$ | ....... |  |  |  |  |  |  |  |  |  |  |
| Shawano . <br> Sheboygan |  |  |  |  |  | 2 | 1 | 3 |  | 1 | 1 |
| Taylor .... |  |  |  |  |  |  |  |  |  |  |  |
| Trempealeau |  |  |  |  |  |  |  |  |  |  |  |
| Vernon ..... |  |  |  |  |  |  |  |  |  |  |  |
| Vilas |  |  |  | .. |  |  |  |  |  |  |  |
| Walworth |  |  |  |  |  |  |  |  | 1 |  | 1 |
| Washburn |  | ... |  |  |  | 1 | 1 | 2 |  |  |  |
| Washington | ... | ... |  |  |  |  |  | 1 |  |  |  |
| Waukesha . |  | .... |  |  |  |  |  | 1 | 1 |  | 1 |
| Waushara |  |  |  |  |  | 1 | $\ldots$ | 1 |  | 2 | 2 |
| Winnebago |  |  | 1 |  | 1 | 2 |  | 2 |  |  |  |
| Wood |  |  |  |  |  |  |  |  |  |  |  |
| Total | 3 1 | 3 | 13 | 7 | 20 | 32 | 26 | 58 | 23 | 30 | 53 |

TABLE NO. 31.-SHOWING DEATHS FROM EACH COUNTY, ARRANGED ACCORD ING TO THE CAUSES OF DEATH FOR EACH YEAR.-Cont.

| Counts: | Conflagration. |  |  | (Burn conhagration excepted). |  |  | Absorption of deleterious grases |  |  | Accidental drowning. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal. } \end{aligned}$ | 1909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { ial. } \end{aligned}$ | 1909 | 1910 | Total. | 1909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal. } \end{aligned}$ |
| Adams | 2 |  | 2 | 1 |  | 1 |  |  |  |  | 3 | 3 |
| Ashland | 6 | 6 | 12 | 2 |  | 2 |  |  |  | 3 | 4 | 7 |
| Barron | 4 | 1 | 5 |  | 1 | 1 |  |  |  |  | 5 | 5 |
| Bayfleld | 1 |  | 1 |  | 2 | 2 |  |  |  | 3 | 5 | 8 |
| Brown . | 3 |  | 3 | 1 | 2 | 3 |  |  |  | 10 | 3 | 13 |
| Buffalo |  | 1 | 1 |  |  |  |  |  |  |  |  |  |
| Buinett | 2 |  | 2 |  |  |  |  |  |  |  |  |  |
| Calumet |  | 2 | 2 |  |  |  |  |  |  |  | 1 | 1 |
| Chippewa | 2 | 3 | 5 | 3 |  | 3 |  |  |  | 2 |  | 2 |
| Clark ... | 3 | 1 | , | 1 | 1 | 2 |  |  |  | 1 | 1 | 2 |
| Columbia |  |  |  |  |  |  |  |  |  | 4 |  | 4 |
| Crawford |  |  |  |  |  |  |  |  |  | 2 | 1 |  |
| Dane | , | 2 | 3 | 3 |  | 3 |  | 1 | 1 | 7 | 7 | 14 |
| Dodge | 2 | 1 | 3 | . |  | 1. |  |  |  | 4 | 3 | 7 |
| Door |  | 1 | 1 | , | 1 | 2 |  |  |  |  | 3 | 3 |
| Douglas | 1 | 4 | 5 | 2 | 1 | 3 |  |  |  | 10 | 16 | $\bigcirc$ |
| Dunn . | 1 | 3 | 4 |  |  |  |  |  |  | 1 | 1 | 2 |
| Eau Claire | 2 |  | 2 | 1 | 1 | 2 |  |  | ... | 8 | 2 | 10 |
| Florence . |  |  |  |  |  |  |  |  |  |  | 1 | 1 |
| Fond du Lac | 4 | 2 | 6 |  |  |  |  |  |  | 1 | 4 | 5 |
| Forest |  |  |  |  |  |  |  |  |  |  | 1 | 1 |
| Grant . |  | 1 | 1 |  |  |  |  |  |  | 1 | 2 | 3 |
| Green . |  | 1 | 1 | 1 |  | 1 |  | 2 | 2 |  | 3 | 3 |
| Green Lake |  |  |  |  |  |  |  |  |  | 4 | 2 | 6 |
| Iowa |  | 1 | 1 |  | , | 1 |  |  |  |  | 1 | 1 |
| Iron . |  | 3 | 3 |  | 2 | 2 |  |  |  | 1 | 3 | 4 |
| Jackson |  |  |  |  |  | 1 |  |  |  | 2 |  | 2 |
| Jefferson | 1 | 1 | 2 |  |  |  |  |  |  |  | 2 | 2 |
| Juneau . | 1. |  | 1 |  |  |  |  |  |  |  | 1 | 3 |
| Kenosha | 1 | 1 | 2 |  |  |  | 2 | 2 | 4 | 4 | 7 | 11 |
| Kewaunce |  | 1 | 1 | 2 |  | 2 |  |  |  | 2 | 2 | 4 |
| La Crosse | 3 |  | 3 | 1 | 2 | 3 |  |  |  | 4 | 5 | 9 |
| Lafayette . | 2 |  | 2 |  |  |  |  |  |  | 1 | 6 | 7 |
| Langlade |  |  |  |  |  |  |  |  |  |  |  |  |
| Lincoln . | 2 |  | 2 |  |  |  |  |  |  | 1 | 4 | 7 |
| Manitowoe | 1 | 1 | 2 |  | 1 | 1 |  |  |  | 1 | 5 | 6 |
| Marathon . | 3 | 2 | 5 | 2 |  | 2 |  |  |  | 3 | 3 | 6 |
| Marinette | 5 | 1 | 6 |  |  |  |  |  |  | 7 | 6 | 13 |
| Marquette |  | 1 | 1 |  |  |  |  |  |  | 2 | 1 | 3 |
| Milwaukee | 13 | 9 | 22 | 11 | 6 | 17 | 5 | 7 | 12 | 37 | 58 | 75 |
| Monroe . | 2 | 1 | 3 |  |  |  |  |  |  | 1 | 1 | 2 |
| Oconto . | 3 | 3 | ${ }_{6}^{6}$ |  |  |  |  |  |  | 1 | 2 | 3 |
| Oneida. | 2 | 1 | 7 |  |  |  |  |  |  | 1 |  | $1{ }_{1}^{1}$ |
| Outagamie | 5 | 2 | 7 |  |  |  |  |  |  | 5 1 | 2 | 10 3 |
| Ozaukee |  |  |  | 1 |  | 1 |  |  |  | 1 | 3 3 | 3 3 3 |
| Pepin . <br> Pierce |  | 1 | 1 |  | 1 | 1 |  |  |  | 1 | $\stackrel{3}{2}$ | 3 |
| Polk |  |  |  |  |  |  |  |  |  |  | 3 | 3 |
| Portage | 1 | 3 | 4 | 1 | 1 | 2 |  |  |  | 1 | 3 | 4 |
| Price .. |  |  |  |  |  |  |  |  |  | 4 | 1 | 5 |
| Racine | 3 | 2 | 5 |  | 2 | 2 |  |  |  | 4 | 7 | 1,1 |
| Richland |  |  |  |  |  |  |  |  |  | 1 | 1 | 2 |
| Rock | 2 | 6 | 8 |  |  |  | 4 | 1 | 5 | 8 | 1 | 9 3 |
| Rusk |  |  |  |  |  |  |  |  |  |  | 3 | 3 |
| St. Croix | 1 | 1 |  | 1 |  | 1 |  |  |  |  | 1 | 1 |
| Sauk ... | 1 |  | 1 |  |  |  |  |  |  | $\stackrel{2}{2}$ |  | 2 |
| Sawyer . | 1 | 1 | 1 |  |  |  |  |  |  | 2 | 1 | 3 |
| Shawano. |  |  |  |  |  |  |  |  |  | 4 |  | 4 6 |
| Sheboygan Taylor | 2 | 3 | 5 |  |  | 1 | 1 | 2 | 3 | 2 | 4 | 6 2 |
| Trempealeau |  | 1 | 1 |  |  |  |  |  |  | 1 |  | 1 |
| Vernon .... | 1 |  | 1 |  |  |  |  |  |  |  | 1 | 1 |
| Vilas. |  |  |  |  |  |  |  |  |  | 2 | 2 | 4 |
| Walworth |  | 1 | 1 |  |  | 1 |  |  |  | 1 | 2 | 3 |
| Washburn | 3 | $\ldots$ | ${ }^{3}$ | $\ldots$ | 1 | 2 |  |  |  | 1 | 4 | 5 |

TABLE NO. 31.-SHOWING DEATHS FROM EACH COUNTY, ARRANGED AOCORDING TO THE CAUSES OF DEATH FOR EACH YEAR.-Cont.

| Counts. | Conflagration. |  |  | Burns(conflagra- <br> tion excepted) |  |  | Absorption of deleterious gases |  |  | Accidental drowning. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1909 | 1910 | Total. | 1909 | 1910 | Total. | 1909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal. } \end{aligned}$ | 1909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal. } \end{aligned}$ |
| Waukesha | 2 | 1 | 3 | 2 |  | 2 | 1 | 3 | 4 | 5 | 3 | 8 |
| Waupaca | 3 | 1 | 4 | 1 |  | 1 |  |  |  | 1 | 4 | 5 |
| Waushara | 2 |  | 2 |  |  |  |  |  |  |  | 1 | 1 |
| Winnebago | 2 | 1 | 6 | 1 | 1 | 2 |  |  |  | 5 | 4 | 9 |
| Wood ..... |  | 1 | 1 |  | 1 | 1 |  |  |  | 6 | 1 | 7 |
| Total | 101 | 85 | 186 | 44 | 29 | 73 | 13 | 18 | 31 | 190 | 216 | 406 |

TABLE NO. 31.-SHOWING DEATHS FROM EACH COUNTY ARRIANGED ACCORDING TO THE CAUSES OF DEATH FOR EACH YEAR.-Cont.

| County. | Traumatism by firearms. |  |  | Traumatism by rutting or piercing instruments |  |  | Traumatism by fall. |  |  | Traumatism in mines and quarries. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1979 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal. } \end{aligned}$ | 1909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { Tal. } \end{aligned}$ | 1909 | 1910 | Total. | 1909 | 1910 | To- |
| Adams | 2 | 1 | 3 |  |  |  |  |  |  |  |  |  |
| Ashland | 5 | 8 | 13 |  | 1 | 1 | 5 | 2 | 7 |  |  |  |
| Barron | 1 |  | 1 |  | 3 | 3 | 3 |  | 3 |  |  |  |
| Bayfield | 1 | 2 | 3 |  | 2 | 2 | 5 | 2 | 7 |  |  |  |
| Brown | 2 |  | 2 |  |  |  | 2 | 2 | 4 |  |  |  |
| Buffalo | 2 | 1 | 3 |  |  |  | 1 |  | 1 |  |  |  |
| Burnett |  |  |  |  |  |  |  | 1 | 1 |  |  |  |
| Calumet |  |  |  |  |  |  | 2 | 1 | 3 |  |  |  |
| Chippewa | 1 | 7 | 8 |  | 2 | 2 | 2 | 2 | 4 |  |  |  |
| Clark ${ }_{\text {Columbia }}$ |  |  |  |  | 2 | 2 |  | 1 | 1 |  |  |  |
| Columbia |  |  |  |  | 3 | 3 |  | 4 | 4 |  |  |  |
| Crawford <br> Dane | 2 | 1 | 3 3 |  |  |  | 1 <br> 3 |  | 1 |  |  |  |
| Dodge | 1 |  | 3 |  | 2 | 2 | 1 1 | 5 3 | 8 4 |  |  |  |
| Door . |  | 1 | 1 |  |  |  |  |  |  |  |  |  |
| Douglas | 4 | 3 | 7 |  |  |  | 2 | 1 | 3 |  |  |  |
| Dunn |  | 1 | 5 |  |  |  | 2 | 1 | 3 |  |  |  |
| Eau Claire | 2 | 2 | 1 |  | 1 | 1 | , | 1 | 2 |  |  |  |
| Florence.... . | 1 |  | 1 |  |  |  | 1 |  | 1 |  | 3 | 3 |
| Fond du Lac | 2 |  | 2 |  |  |  | 1 | 2 | 3 |  |  |  |
| Forest |  |  |  |  | 3 | 3 | 1 |  | 1 |  |  |  |
| Grant | 1 |  | 1 |  | 1 | 1 | 2 | 1 | 3 | 1 |  | 1 |
| Green . | 1 |  | 2 |  |  |  | 1 | 1 | 2 |  |  |  |
| Green Lake |  | 1 | 1 |  | 1 | 1 | 1 |  | , |  |  |  |
| Iowa | 2 | 1 | 3 |  |  |  | 1 | 2 | 3 | 1 | 2 | 3 |
| Iron | 1 | 1 | 2 |  | 2 | 2 | 1 | 1 | 2 | 9 | 1 | 10 |
| Jackson | , |  | 2 |  |  |  |  | 1 | 1 |  |  |  |
| Jefferson | 1 | 1 | 2 |  |  |  | 1 | 1 | 2 |  |  |  |
| Juneau | 1 | 1 | 2 |  |  |  | 1 | 1 | 2 |  |  |  |
| Kenosha | 3 |  | 3 | 1 |  | 1 |  | 3 | 3 |  |  |  |
| Kewaunee | 2 |  | 2 |  |  |  |  | 3 | 3 |  |  |  |
| La Crosse | 1 | 1 | 2 |  |  |  | 1 |  | 1 |  |  |  |
| Lafayette . | 1 | 1 | 2 |  |  |  | 1 |  | 1 | 7 | 1 | 8 |
| Langlade |  |  |  |  |  |  |  | 1 | 1 |  |  |  |
| Lincoln | 2 | 1 | 3 |  |  |  | 1 |  | 1 |  |  |  |
| Manitowoc |  | 1 | 1 |  |  |  | 2 | 4 | 6 |  |  |  |
| Marathon |  | 1 | 1 | 1 | 1 | 2 |  | 3 | 3 |  |  |  |
| Marinette |  | 2 | 2 |  | 3 | 3 | 2 | 1. | 3 |  |  |  |
| Marquette | 1 |  | 1 |  |  |  |  |  |  |  |  |  |
| Milwaukee | 2 | 3 | 5 | 4 | 5 | 9 | 45 |  | 93 |  |  |  |
| Monroe | 3 | 1 | 4 |  |  |  |  | 1 | 1 |  |  |  |

TABLE NO. 31.-SHOWING DEATHS FROM EACH OOUNTY, ARRANGED ACCORDING TO THE CAUSES OF DEATH FOR EACH YEAR.-Cont.

| County. | Traumatism by firearms. |  |  | Traumatism by cutting or piercing instruments. |  |  | Traumatism by fall. |  |  | Traumatism in mines and quarries. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1909 | 1910 | Total. | 1909 | 1910 | Total. | 1909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal } \end{aligned}$ | 1909 | 1910 | Total. |
| Oconto | 2 |  | 2 | 1 |  | 1 |  | 1 | 1 |  |  |  |
| Oneida | 1 | 1 | 2 | 1 | 1 | 2 |  | 5 | 5 |  | 1 | 1 |
| Outagamie |  |  |  |  |  |  |  | 2 <br> 1 | $\stackrel{2}{2}$ | 1 | 1 |  |
| Ozaukee . | 3 |  | 3 |  | 1 | 1 | 1 | 1 | 2 |  |  |  |
| Pepin |  |  |  |  |  |  | 2 | 2 | 4 |  |  |  |
| Pierce |  |  |  |  |  |  |  | 1 | 1 |  |  |  |
| Polk ... | 1 | , | $\stackrel{2}{3}$ |  |  |  |  | ${ }_{2}^{1}$ | 1 |  |  |  |
| Portage |  | 3 | 3 |  |  |  |  | 2 | 2 |  |  |  |
| Price | 1 |  | 1 |  |  |  |  |  |  |  |  |  |
| Racine |  |  |  |  |  |  | 1 | 4 | 1 |  |  |  |
| Richland | 2 1 | 2 | 4 |  | 1 | 1 | 1 | 4 | 5 |  |  |  |
| Rock Rusk | 2 | 1 | 3 |  |  |  | 1 |  | 1 |  |  |  |
| St. Croix |  |  | , |  |  |  |  | 1 | 1 |  |  |  |
| Sauk | 1 | 1 | 2 |  | 1 | 1 | 2 | 2 | 4 |  |  |  |
| Sawyer |  |  |  |  |  |  |  |  |  | 1 |  | 1 |
| Shawano | 2 | 4 | 6 |  |  |  | 2 | $\stackrel{2}{7}$ | 4 |  |  |  |
| Sheboygan |  |  |  |  |  |  | 6 | 7 | 14 |  | 1 | 1 |
| Taylor ..... | 5 | 1 | 6 |  |  |  |  |  |  |  |  |  |
| Trempealeau | 1 |  | 1 | 1 |  | 1 | 1 1 | 1 | 2 3 |  |  | 1 |
| Vernon . | 4 |  | 4 |  |  |  | 1 | 2 | 3 | 1 |  | 1 |
| Wilas .... | 1 | 1 2 | 4 |  | 1 | 1 | 4 | 1 | 5 | - 1 |  | 1 |
| W ashburn |  |  |  |  |  |  |  |  |  |  |  |  |
| Washington |  |  |  |  |  |  | 3 |  | 3 |  |  |  |
| Waukesha | 2 | 1 | 3 | 1 |  | 1 | 1 | 3 | 4 |  |  |  |
| Waupaca | 1 | 2 | 4 |  |  |  |  | 3 | 3 |  |  |  |
| Waushara | 1 |  | 1 |  |  |  | 2 | 1 | 3 |  |  |  |
| Winnebago | 2 |  | 2 |  |  |  | $\stackrel{2}{2}$ | 4 | 6 |  |  |  |
| Wood .... | 1 | 2 | 3 |  |  |  | 2 | 4 | 6 |  |  |  |
| Total | 93 | 68 | 161 | 10 | 37 | 47 | 126 | 154 | 280 | 22 | 10 | 32 |

TABLE NO. 31.-SHOWING DEATHS FROM EACH COUNTY, ARRANGED ACCORDING TO THE CAUSES OF" DEATH FOR EACH YEAR.-Cont.

| County. | Traumatism by machines. |  |  | Traumatism by other crushing (vehicles, railroads. land slides, etc. |  |  | Injuries by animals. |  |  | Starvation. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1909 | 1910 | Total. | 1909 | 1910 | To- tal. | 1909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal } \end{aligned}$ | 1909 | 1910 | Total. |
| Adams . |  |  |  |  |  |  |  |  |  |  |  |  |
| Ashland | 1 |  | 1 | 6 | 7 | 13 | 1 | 1 |  |  |  |  |
| Barron |  |  |  | 1 | 4 | 5 | 3 | 2 | 5 |  |  |  |
| Bayfield |  | 1 | 1 | 1 |  |  |  |  |  |  |  |  |
| Brown | 1 | 4 | 5 | 5 <br> 2 | 6 1 | 11 3 | 2 | 3 | 3 |  |  |  |
| Buffalo |  |  |  | 2 | 1 |  | 2 | 1 | 3 |  |  |  |
| Burnett Calumet |  |  |  | 1 | 1 | 2 | 1 |  | 1 |  |  |  |
| Chippewa |  | 1 | i | 1 | 2 | 3 | 1 | 1 | 2 | ... |  |  |
| Clark ... |  |  |  | 3 | 4 | 7 | ...... | 1 | 1 |  |  |  |
| Columbia |  |  |  | 1 | 4 | 5 |  | 1 | 1 |  |  |  |
| Crawford |  |  |  | 1 | 1 | 2 |  |  |  |  |  |  |
| Dane |  | 2 | 2 | 18 | 10 9 | 28 |  | $\stackrel{1}{2}$ | 2 |  |  |  |

TABLE NO. 31.- SHOWING DEATHS FROM EACH COUNTY, ARRANGED ACCORDING TO IHE CAUSES OF DEATH FOR EACH YEAR.-Cont.


TABLE NO. 31.-SHOWING DEATHS FROM EACH COUNTY, ARRANGED ACCORDING TO THE CAUSES OF DEATH FOR EACH YEAR.-Cont.

| County. | Excessive cold. |  |  | Effect of heat. |  |  | Lightning. |  |  | Electricit. (lightning: excepted.) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal } \end{aligned}$ | 1909 | 1910 | Total. | 1909 | 1910 | $\begin{aligned} & \text { Ts- } \\ & \text { tal. } \end{aligned}$ | 1909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal. } \end{aligned}$ |
| Adams |  |  |  |  |  |  |  |  |  |  |  |  |
| Ashland |  | 3 | d |  |  |  |  |  |  |  |  |  |
| Barron | 1 |  | 1 | 1 | 1 | 2 |  |  |  |  |  |  |
| Bayfield | 1 |  | 1 |  |  |  |  |  |  |  |  |  |
| Brown |  |  |  |  |  |  | 1 |  | 1 |  |  |  |
| Buffalo <br> Burnett |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Calumet |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Crawford ..................... 1 ...... 1 |  |  |  |  | Columbia $\ldots .$. ....................... 1 1 |  |  |  |  |  |  |  |
| Danc ... |  | 1 | 1 |  | 3 | 3 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Door |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ean Claire |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fond du Lac. |  |  |  |  |  |  |  |  |  |  |  |  |
| Forest ${ }_{\text {Grant }}$....... 1 |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Green Lake | 2 |  | 2 |  |  |  | 1 |  | 1 |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Jackson |  |  |  |  |  |  |  |  |  |  |  |  |
| Jefferson |  |  |  |  | 1 | 1 |  |  |  |  | 1 | 1 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Leinyctte $\cdots \cdots$ 1 $\cdots \cdots$ 1 <br> Langlade $\cdots$. $\ldots$. 1 1 |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Minitowoc |  |  |  |  | 1 | 1 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\checkmark$ neida |  |  |  |  |  |  |  |  |  |  |  | 1 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pepin . |  |  |  |  |  |  |  |  |  |  |  |  |
| Pierce |  |  |  |  |  |  |  |  |  |  |  |  |
| Polk .. |  |  |  |  | 1 | 1. |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Racine |  | 1 | 1 | 1 |  | 1 |  |  |  |  |  |  |
| Richland $\ldots \ldots$. |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| St. Croix |  | 1 | 1 |  | 1 | 1 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sawyer |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Trempealeau . |  |  |  |  |  |  |  |  |  |  |  |  |
| Vernon $\ldots . .$. |  |  |  |  |  |  |  |  |  |  |  |  |
| Vilas ............... |  |  |  |  |  |  |  |  |  |  |  |  |
| Walworth Washburn |  | 1 | 1 |  | 2 |  |  |  |  |  |  |  |

TPABLE NO. 31.-SHOWING DEATHS FROM EACH COUNTY, ARRANGED ACCORD ING TO THE CAUSES OF DEATH FOR EACH YEAR.-CONt.

| County. | Excessive cold. |  |  | Effect of heat. |  |  | Lightning. |  |  | Electricity (lightning excepted.) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1909 | 1910 | To- tal. | 1909 | 1910 | To- tal. | 1909 | 1910 | To- tal. | 1909 | 1910 | To- tal. |
| Washington |  |  |  |  |  |  |  |  |  |  |  |  |
| Waukesha | 1 |  | 1 |  | 1 | 1 | .... |  |  | 2 | 1 | 3 |
| Waushara |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Winnebago Wood ..... | 1 |  |  |  | 1 | 1 |  |  |  |  |  | 1 |
| Total | 14 | 17 | 31 | 23 | 40 | 63 | 11 | 7 | 18 | 11 | 17 | 28 |

TABLE NO. 31.-SHOWING DEATHS FROM EAOH COUNTY, ARRANGED ACCORDING TO THE CAUSES OF DEATH FOR EACH YEAR.-C'ont.

| County. | Homicide by firearms. |  |  | Homicide by cutting or piercing instruments. |  |  | Homicide by other means. |  |  | Fractures (cause not specified.) |  |  | $\begin{aligned} & \text { Other ex- } \\ & \text { ternal } \\ & \text { violence. } \end{aligned}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1909 |  |  |  | 1910 |  |  | 1910 | To tal. | 1909 | 1910 | $\left\|\begin{array}{l} \text { To- } \\ \text { tal } \end{array}\right\|$ | 1909 | 1910 | To- |
| Adams |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |
| Ashland | 1 |  | 1 |  |  |  | 1 | 1 | 2 | 2 | 7 | 9 | 4 | 3 | 7 |
| Barron |  |  |  | 2 |  | 2 |  |  |  | 1 |  | 1 | 1 |  | 1 |
| Bayfleld |  | 1 | 1 |  |  |  |  |  |  |  | 2 | 2 |  | 3 | 3 |
| Brown |  | 1 | 1 |  |  |  |  |  |  | 5 | 2 | 7 | 1 | 3 | 4 |
| Buffalo |  |  |  |  |  |  |  |  |  |  | 3 | 3 | 1 | 3 | 4 |
| Burnett |  |  |  |  |  |  |  |  |  | 1 |  | 1 |  | 1 | 1 |
| Calumet |  |  |  |  |  |  |  |  |  | 1 | 1 | 2 | 1 |  | 1 |
| Chippewa |  | 1 | 1 |  |  |  | . |  |  | 2 | 2 | 4 | 6 |  | 6 |
| Clark ... |  |  |  |  |  |  |  |  |  | 4 |  | 4 | 3 | 1 | 4 |
| Columbia |  | 1 | 1 |  | ... |  | $\cdots$ | 1 | 1 | 5 | 1 | 6 | 1 | 3 | 4 |
| Crawford | 2 | .... | 2 |  |  |  |  |  |  | 1 | 1 | 2 | 1 | 1 | 2 |
| Dane . |  |  |  |  | 1 | 1 | $\cdots$ | 1 | 1 | 10 | 7 | 17 | 3 | 5 | 8 |
| Dodge |  |  |  |  |  | ... |  |  |  | 2 | 4 | 6 | 2 | 2 | 4 |
| Door |  |  |  |  |  |  |  |  |  |  | 1 | 1 | 1 |  | 1. |
| Douglas | 1 | 2 | 3 | 1 | ... | 1 | $\cdots$ |  |  | ${ }_{6}$ | 5 | 11 | 3 | 8 | 11 |
| Dunn . |  |  |  |  |  |  |  | .. |  | 2 | 1 | 3 | 1 | $\stackrel{2}{2}$ | 3 |
| Eau Claire |  |  |  |  |  |  |  |  |  |  | 2 | 2 | 3 | 2 | 5 |
| Florence |  |  |  | 1 | $\cdots$ | 1 |  |  |  |  |  |  |  |  |  |
| Fond du Lac |  |  |  |  |  |  |  | 1 | 1 | 6 | 3 | 9 | 3 | 4 | 7. |
| Forest |  |  |  |  |  |  |  |  |  |  | 2 | 2 | 1 | 2 | , |
| Grant |  |  |  |  | 1 | 1 |  |  |  | 1 | 1 | 2 | 2 | 3 | 5 |
| Green . |  |  |  |  |  |  | 1 |  | 1 | 1 |  | 1 | 1 |  | 1 |
| Green Lake |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 2 |
| Iowa |  |  |  |  |  |  |  |  |  | 1 | 1 | 2 | 1 | 1 | 2 |
| Iron |  | 1 | 1 |  |  |  |  | 1 | 1 |  |  |  |  | 1 | , |
| Jackson |  |  |  |  |  |  |  |  |  |  | 1 | 11 |  |  |  |
| Jefferson <br> Juneau |  |  |  |  |  |  |  |  |  | 1 | 9 2 | 10 4 | 2 |  |  |
| Juneau . <br> Kenosha |  |  |  |  |  |  |  |  |  | 1 | 2 | $\stackrel{4}{2}$ | 1 | 1 | 2 |
| Kewaunee |  |  |  |  |  |  |  |  |  | 1 | 2 | 3 | 1 |  | 1 |
| La Crosse |  | 1 | 1 |  |  |  |  |  |  | 6 |  | 10 | 7 | 1 | 8 |
| Lafayette |  |  |  |  |  | .. |  |  |  | 1 | 1 | 2 | 3 |  | 3 |
| Langlade |  |  |  |  |  |  |  |  |  | 2 |  | 2 |  |  |  |
| Lincoln |  |  |  |  |  |  |  |  |  | 1 | 1 | 2 | 1 | 2 | 3 |
| Manitowoc |  |  |  |  |  |  |  |  | 1 | 6 2 | 3 | 9 | 3 | $\ldots$ | 3 |

TABLE NO. 31.-SHOWING DEATHS FROM EACH COUNTY, ARRANGED ACCORDING TO THE CAAUSES OF DEATH FOR EACH YEAR.-Cont.

| County. | Homicide by firearms. |  |  | Homicide by cutting or pierclng instruments. |  |  | Homicide by other means. |  |  | Fractures (cause not specified.) |  |  | Other external violence. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | 1909 | 1910 |  |  | 1910 | $\left\|\begin{array}{c} \mathrm{To} \\ \text { Tat } \\ \text { Ta } \end{array}\right\|$ | 1909 |  | $\begin{aligned} & \text { To- } \\ & \text { tal. } \end{aligned}$ |
| Marinette |  |  |  |  |  |  |  |  |  | 2 | 2 | 4 | 1 | 1 | 2 |
| Marquette |  |  |  |  |  |  |  |  |  |  |  |  | 1 | 1 | 16 |
| Milwaukee | 3 | 3 | 6 | 1 | 3 | 4 | 2 | 4 | 6 | 5 | 6 | 11 | 7 | 9 | 16 |
| Monroe |  |  |  |  |  |  |  |  |  | 4 |  |  | 3 | 1 | 2 4 |
| Oconto |  |  |  |  |  |  | 1 | 1 | 1 |  |  | 3 | 3 | 1 | 4 |
| Oneida |  | 1 | 1 |  |  |  | 1 |  | 1 | 3 2 | $\cdots$ | 3 | 1 | 2 | 4 |
| Outagamie |  | 2 | 2 | $\ldots$ |  |  |  |  |  | 2 | 1 2 | 3 2 2 | 1 | 2 | 1 |
| Ozaukee <br> Pepin |  |  |  |  |  |  |  |  |  | 1 |  | 1 | 1 |  | 1 |
| Pierce |  |  |  | . |  |  |  |  |  |  |  |  | 1 | 1 | 2 |
| Polk . |  |  |  |  |  |  |  |  |  | 2 |  | 2 |  |  |  |
| Portage | 1 |  | 1 | .. |  |  |  |  |  | 1 | 1 | 2 | 2 |  | 2 |
| Price .. |  |  |  |  |  |  |  | 1 | 1 | 3 | 1 | 4 | 1 | 2 | 3 |
| Racine |  |  |  | 1 |  | 1 | 1 |  | 1 | 5 | 1 | 6 | 1 | 2 | 3 |
| Richland |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 | 1 |
| Rock |  | 2 |  |  |  | . | 1 | 1 | 2 | 3 | 1 | 3 | 3 | 4 | 7 |
| Rusk | 1 | 2 | 3 |  |  |  |  |  |  | 1 | 2 3 3 | 3 4 4 | 1 |  | 1 |
| St. Croix |  |  |  |  |  |  |  |  |  | 1 | 3 2 | 4 | 1 | $\because$ | 1 |
| Sawyer |  |  | ... |  |  |  | 1 |  | 1 | 1 |  | 1 | 2 | 1 | 3 |
| Shawano |  |  |  |  |  |  |  |  |  | 1 | 1 | 2 | 2 | 4 | 6 |
| Sheboygan |  |  |  |  |  |  |  |  |  | 5 | 5 | 10 | 3 |  | 3 |
| Taylor ..... |  |  |  |  |  |  |  |  |  | 3 | 1 | 4 | 1 |  | 1 |
| Trempealeau |  |  |  | 4 |  | 4 |  |  |  | 1 | 1 | 2 |  | 1 | 1 |
| Vernon ..... |  |  |  |  |  |  |  |  |  | 1 | 3 | 4 | 1 |  | 1 |
| Vilas |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |
| Walworth |  |  | ... |  | 1 | 1 |  |  |  | 5 | 5 | 10 | 1 | 1 | 2 |
| Washburn |  |  |  |  |  |  |  |  |  |  |  |  | 1 | $\ldots$ | 1 |
| Washington |  |  |  |  |  |  |  |  |  |  | 3 | 8 | 1 |  | 1 |
| Waukesha | 1 | 2 | 3 | ... |  |  |  |  |  | 4 | 4 2 | 8 <br> 3 | 1 |  | 1 3 |
| Waupaca <br> Waushara |  |  |  |  |  |  |  |  |  | 1 | 2 | 3 <br> 1 | 1 | 1 | 1 |
| Winnebago |  | 1 | 1 | . |  |  |  |  |  | 3 |  | 3 | 1 | 2 | 3 |
| Wood ..... |  |  |  |  |  |  |  |  |  | 5 | 2 | 7 | 2 | 3 | 5 |
| Total | 10 | 22 | 32 | 10 | 6 | 16 | 8 | 13 | 21 | 139 | 124 | 263 | 110 | 93 | 209 |

TABLE NO. 31.-SHOWING DFATHS FROM FACH OOUNTY. ARRANGED ACCORDING TO THE CAUSES OF DEATH FOR EACH YEAR.-Cont.

| County. | Ill defined organic disease. |  |  | Sudden death. |  |  | Cause of death not sperified or illdefined. |  |  | Stillbirths. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1909 | 1910 | To- <br> tal. | 1905 | 1910 | To- tal. | 1909 | 1910 | To- tal. | 1909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal. } \end{aligned}$ |
| Adams |  | 1 | 1 |  | 1 | 1 |  | 1 | 1 | 8 | 1 | 9 |
| Ashland |  |  |  |  | 2 | 2 | 6 | 6 | 12 | 14 | 15 |  |
| Barron |  |  |  |  | 2 | 2 | 1 | 4 | 5 | 24 | 12 | 36 |
| Bayfield |  |  |  |  |  |  | 2 | 5 | 32 | 9 | 13 | $\stackrel{22}{2}$ |
| Brown . | 4 |  | 4 | 5 | 2 | 7 | 22 | 10 | 32 | 37 | 35 | 72 |
| Buffalo | 1 |  | 1 | 2 |  | 2 | 3 | 4 | 7 | 11 | 7 4 | 18 |
| Burnett |  |  |  |  | 1 | 1 | 2 6 | 2 | 8 | 4 | $\stackrel{4}{5}$ | 5 |
| Chippewa |  |  |  | $\ddot{2}$ | $\stackrel{1}{2}$ | 4 | 9 | 3 | 12 | 7 | 6 | 13 |
| Clark | 1 |  | 1 |  | 2 | 2 | 15 | 4 | 19 | 21 | 22 | 43 |

TABLE NO. 31.- SHOWING DEATHS FROM EACH COUNTY, ARRANGED ACING TO THE CAUSES OF DEATH FOR EACH YEAR.-Cont.

| Counts. | Ill defined organic disease. |  |  | sudden death. |  |  | Cause of death not specified or ill defined. |  |  | Stillbirths. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1903 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal. } \end{aligned}$ |  | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tal. } \end{aligned}$ | 1909 | 1910 | $\begin{aligned} & \text { To- } \\ & \text { tai. } \end{aligned}$ | 1:03 | 1910 | To |
| Columbia |  |  |  | 1 |  |  |  | 5 |  | 13 | 7 |  |
| Crawford |  |  |  |  | 3 | 3 | ${ }^{8}$ | 2 | 15 | 16 | () | 20 |
| Dane | 1 |  | 1 |  | 1 | 1 | ${ }_{16}^{3}$ | 8 | 24 | 35 | 2 | 57 |
| Dorge | 2 |  | 2 | 1 | 1 | 2 | 13 | 2 | 15 | 15 | 26 | 41 |
| Door |  |  |  |  | 1 | 1 | 4 | 7 | 11 | 6 | 8 | 14 |
| Douglas |  |  |  |  |  |  | 23 | 9 | 32 | 26 | 28 | 54 |
| Dunn ..... |  |  |  |  | 1 |  | 10 | 4 | 14 | 15 | 13 | 24 |
| Fau Claire | 1 |  | 1 | 2 | 1 | 3 | 18 | 5 | 23 | 20 | 14 | 34 |
| Florence ${ }_{\text {Fond }}$ du .... | 2 | 1 | 3 |  |  |  | 1 | 1 | 2 | 1 |  | , |
| Fond du Lac. | 1 | 9 | 10 | 3 | 4 | 7 | 22 | 7 | 29 | 28 | 21 | 49 |
| Grant |  | 2 |  |  | 1 | 1 | 2 | 1 | 3 | 5 | 5 | 10 |
| Green |  | 2 | 2 | 4 | 2 | 6 | 7 | 4 | 11 | 16 | 17 | 33 |
| Green Lake |  | 1 | 1 | 2 |  | 2 | ${ }_{6}$ | 1 | ${ }_{6}^{6}$ | 8 | 3 | 11 |
| Iowa |  | 1 | 1 | 1 | 2 | 3 | 4 | 5 | 8 | $\stackrel{5}{5}$ | ${ }_{6}^{1}$ | 9 |
| Iron |  |  |  |  |  | 3 | 4 | ${ }_{2}^{2}$ | $\stackrel{9}{9}$ | $\begin{array}{r}14 \\ 2 \\ \hline\end{array}$ | ${ }_{6}^{6}$ | 20 |
| Jackson |  |  |  | 1 |  | 1 |  | 2 | 7 | 2 | 6 |  |
| Jefferson |  | 1 | 1 | 3 | 1 | 4 | 5 | 1 | 10 | 7 | 5 |  |
| Juneau |  | 1 | 1 | 2 | 1 | 3 | 16 | 4 | 10 | 9 | 15 |  |
| Kenosha |  |  |  |  | 1 | 1 | 11 | 4 | 15 | 24 | 2988989 | 13 |
| Kewatunee |  | 1 | 1 |  |  |  | 12 | 3 | 15 |  | 5 | $1: 3$ |
| La Crosse |  |  |  | 1 | 1 | 2 | 17 | 3 | 20 | 29 | 25 | 51 |
| Lafayette |  |  |  |  |  |  | 3 | 1 | 4 | - | 2, | 11 |
| Langlade |  |  |  |  | 1 | 1 | 10 | 1 | 11 | 12 | 11 | 113 |
| Lincoln |  | 1 | 1 |  | 1 | 1 | 6 | 1 | 7 | 13 | 10 |  |
| Manitowoc |  | 2 | 2 | 1 |  | 1 | 16 | 7 | 23 | 30 | 30 | 60 |
| Marathon |  | 3 | 3 |  |  |  | 28 | 17 | 45 | 40 | 4. | 84 |
| Marinette |  |  |  |  | 1 | 1 | 31 | 8 | 39 | 20 | 23 | 43 |
| Marquette |  | 2 | 2 |  |  |  | 4 | 2 | 6 | 3 | 11 | 1 1t |
| Milwankice |  |  |  | 3 |  | 3 | 157 | 85 | 242 | 372 | 306 | 768 |
| Monroe | 1 |  | 1 |  | 2 | - | 2 | 3 | 5 | 16 | 10 | 26 |
| Oconto |  |  |  | 1 | 1 | 2 | 9 | 10 | 19 | 12 | 13 | 25 |
| Oncida. |  |  |  |  |  |  | 4 | 2 | 6 | 2 | 3 | 5 |
| Ontagamie |  |  |  | 1 | 4 | 5 | 15 | 13 | 28 | 27 | 25 | 52 |
| Pepince |  |  |  | 1 | 1 | 2 | 5 | 1 | 6 | 6 | 8 | 11 |
| Pierce |  |  |  |  |  |  | 2 | 1 | 3 | 5 | 5 | 10 |
| Polk |  |  |  |  | 3 | 3 | 6 |  | 6 |  | 5 | 12 |
| Portage |  |  |  |  |  |  | 4 | 2 | 6 | 15 | 12 | 27 |
| Price .. |  |  |  | 1 |  | 1 | 19 3 | 5 | 24 | 16 | 26 | 42 |
| Racine |  |  |  |  | 1 |  | 3 9 | 11 | ${ }^{7}$ | 6 | 10 | 16 |
| Richland |  |  |  | 1 |  | 1 | ${ }_{6}^{9}$ | 11 | 20 8 | 35 | 53. | 88 |
| Rock |  |  |  | 2 |  |  |  |  | 8 | 14 | 14 | 28 |
| Rusk |  |  |  | 2 |  | 2 | 13 | 13 | 26 | 31 | $2)$ | 60 |
| t. Croix |  |  |  |  |  |  | 5 | 1 | 6 |  | 1 | 14 |
| Sauk . |  | 1 | 1 | 3 |  | 3 | 10 | ${ }_{6}$ | 16 | 12 | 11 | 23 |
| Sawyer |  |  |  |  | 1 |  | 6 | 2 | 8 | 24 | 18 | 42 |
| Shawano |  |  |  | 4 |  | 1 | 5 | 6 | 11 | 8 | 5 | 13 |
| Sheboygan |  |  |  | 1 | 4 | 8 | 15 | 6 | 21 | 17 | 17 | 34 |
| Taylor .... |  |  |  |  |  | 1 | 11. | 2 | 13 | 36 | 38 | 74 |
| Trempealeau |  | 1 | 1 | 1 |  |  | $\stackrel{3}{8}$ | 5 | +989 | 8 | 9 | 17 |
| Vernon .. |  |  |  | 1 | 1 | 2 | 6 | 1 | 13 | 13 | 13 | 26 |
| Vilas ... |  |  |  |  |  |  | 1 |  | 2 | 15 | 16 | 31 |
| Walworth |  |  |  | 3 | 1 | 4 | 4 | 2 | $\stackrel{2}{6}$ | 2 | 11 | 4 |
| Washburn |  | 1 | 1 |  |  |  | 4 | ${ }_{3}^{2}$ | 6 | 9 | 11 | 20 |
| Washington |  |  |  |  | 1 |  | ${ }_{3}$ | 3 | 6 | 8. | 6 | 34 |
| Wankesha . |  |  |  |  | 1 | 1 | 1 |  | 6 7 7 | 4 | 13 | 17 |
| Waupaca |  |  |  | 1 | 1 | 2 | 1 | 6 3 | ${ }_{9}$ | 17 | ${ }^{29}$ | 39 |
| Waüshara |  |  |  | 2 | 1 | 2 | 3 |  | ${ }_{3}^{7}$ | $\stackrel{17}{7}$ | 28 | 61 |
| Winnebago |  |  |  | 1 | 3 | 4 | 11 | 9 | 20 | 42 | 11 30 | 18 |
| Wood |  |  |  | 1 | 1 | 2 | 10 | 3 | 13 | 16 | 18 | 34 |
| Total. | 14 | 29 | 43 | 60 | 70 | 130 | 748 | 374 | 1,122 | 1,409 | ,414 | ,823 |

TABLE NO. 32.-SHOWING DEATHS FROM EACH DISEASE, BY COLOR, SEX, CONJUGAL OONDITTON AND NATIVIIY.


TABLE NO．32．－SHOWING DEATHS FROM EACH DISEASE，BY COLOR，SEX， CONJUGAL CONDI＇ION AND NATIVITY．－Continued．

| Name of Disease． | Color． |  |  |  | Sex． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\stackrel{ \pm}{\underset{B}{ \pm}}$ | 它 | $\stackrel{\text { 可 }}{\stackrel{\text { gr }}{\Xi}}$ |  | ＊ | 守 | 易 |
| Exophthalmic goitre | 75 |  |  |  | 8 | ${ }^{67}$ |  |
| Addison＇s disease ．．． | 16 |  |  |  | 6 | 10 | $\ldots$ |
| Leuchaemia | 74 |  |  |  | 42 | 32 |  |
| Anaemia，chlorosis | 289 |  | 1. | 1 | 127 | 164 |  |
| Other general diseases | 25 |  | 1 |  | 16 | 10 |  |
| Alcoholism（acute or chronic）．．．．． | 223 | 1 | 1 |  | 209 | 16 |  |
| Chronic lead poisoning ．．．．．．．．．．．． | 2 |  |  |  | 2 |  |  |
| Other chronic occupation poison－ ings | 1 |  |  |  | 1 |  |  |
| Other chronic poisonings．．．．．．．．．．． | 13 |  |  |  | 6 | 7 |  |
| II．Diseases of the Nervous System and of the Organs of Special Sense： Encephalitis | 46 |  |  |  | 24 | 22 |  |
| Simple meningitis ．．．．．．．．．．．．．．．．．． | 970 |  | 6 | 1 | 515 | 462 |  |
| Locomotor ataxia | 69 |  |  |  | 62 | 7 |  |
| Other diseases of the spinal cord． | 138 |  | 2 |  | 77 | 63 |  |
| Cerebral haemorrhage apoplexy．． | 2，543 | 4 | 5 | 2 | 1，390 | 1，164 |  |
| Softening of the brain ．．．．．．．．．．．．． | 80 |  |  |  | 48 | 32 |  |
| Paralysis ．$\ldots \ldots \ldots \ldots \ldots \ldots \ldots$ | 771 | 1 |  | 1 | 436 | 337 |  |
| General paralysis of the insane．． | 230 |  |  |  | 134 | 96 |  |
| Other forms of mental alienation | 30 |  | 1. |  | 17 | 14 |  |
| Epilepsy ．．．．．．．．．．．．．．．．．． | 237 |  | 3 |  | 136 | 104 |  |
| Convulsions（nonpuerperal） | 36 |  |  |  | 13 | 23 |  |
| Convulsions of infants | 1，174 | 3 |  | 1 | 677 | 501 |  |
| Chorea ．．．． | 14 |  |  |  | 4 | 10 |  |
| Neuralgia and neuritis | 48 |  |  |  | 23 | 25 |  |
| Other diseases of the nervous sys－ tem | 275 |  |  | 1 | 140 | 136 |  |
| Diseases of the eyes and their an nexa | ， |  |  |  |  | 4 |  |
| Diseases of the ears ．．．．．．．．．．．． | 30 | 1 |  |  | 19 | 12 |  |
| III．Diseases of the Circulatory Sys－ tem： <br> Pericarditis | 58 |  |  |  | 30 | 28 |  |
| Acute endocarditis | 465 | 1 | 2 |  | 239 | 229 |  |
| Organic diseases of the heart．．．． | 3，228 | 5 | 5 | 3 | 1，784 | 1，457 |  |
| Angina pectoris ．．．．．．．．．．．．．．．．．． | 286 | 1 |  | 1 | 186 | 101 | 1 |
| Diseases of the arteries，atheroma， aneurysm，etc． | 812 | 2 |  |  | 531 | 283 |  |
| Embolism and thrombosis．．．．．．．．． | 209 | 1 |  |  | 101 | 109 |  |
| Diseases of the veins（varices hae－ morrhoids，phlebitis，etc．） | 42 |  |  |  | 14 | 28 |  |
| Diseases of the lymphatic system （lymphangitis，etc．） | 24 |  |  |  | 7 | 17 |  |
| Hemorrhage；other diseases of the circulatory system ．．．．．．．．．．．．．．．． | 62 |  | 1 |  | 35 | 28 |  |
| IV．Diseases of the Respiratory Sys－ tem： <br> Diseases of the nasal fossae．．．．．．． | 9 |  |  |  | 6 | 3 |  |
| Diseases of the larynx．．．．．．．．．．．．．．． | 69 |  | 1 |  | 35 | 35 |  |
| Diseases of the thyroid body | 10 |  |  |  | 3 | 7 |  |
| Acute bronchitis | 620 | 1 | 2 |  | 338 | 285 |  |
| Chronic bronchitis | 474 |  |  |  | 230 | 245 |  |
| Broncho－pneumonia | 1，051 | 1 | ， | 1 | 566 | 490 |  |
| Pneumonia | 3，484 | 5 | 23 | 6 | 1，969 | 1，549 |  |
| Pleurisy | 138 | 1 |  |  | 85 | 54 |  |
| Pulmonary congestion，pulmonary apoplexy | 286 | 1 |  |  | 144 | 143 |  |
| Gangrene of the lung．．．．．．．．．．．．．．． | 1 |  |  |  |  | 1 |  |
| Asthma ．．．．． | 187 |  |  |  | 105 | 82 |  |
| Pulmonary emphysema ．．．．．．．．．．．． | 55 |  |  |  | 37 | 18 |  |
| Other diseases of the respiratory system（tuberculosis excepted）．．． | 111 |  | 2 |  | 59 | 54 |  |

TABLE NO. 32.-SHOWING DEATHS FROM EACH DISEASE, BY COLOR, SEX, CONJUGAL CONDITION AND NA'TIVITY.-Continued.


TABLE NO. 32.-SHOWING DEATHS FROM EACH DISEASE, BY COLOR, SEX CONJUGAL CONDITION AND NATIVITY.-Continued.

| Name of Disease. | Color. |  |  |  | Sex. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\stackrel{\oplus}{E}$ |  | 官 | E 0 $=$ $=$ $=$ | $\underset{\sim}{\text { ¢ }}$ |  | 盛 |
| VIII. Diseases of the Skin and of the Cellular Tissue: <br> Gangrene <br> 151 |  |  |  |  |  |  |  |
| Furuncle | 18 |  |  |  | 100 | 51 |  |
| Acute abscess | 117 | 1 | 1 |  | 13 | 5 |  |
| Other diseases of the skin and annexa | 54 | 1 | 1 |  | 68 29 | 51 26 |  |
| IX. Disetises of the Bones and of the Organs of Locomotion: <br> Diseases of the bones (tuberculosis |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Diseases of the joints (tuberculosis and rheumatism excepted) ....... Amputations | 7 7 |  |  |  | 39 2 | 30 5 |  |
| Other discases of the organs of locomotion | 12 | 1 |  |  | 9 | 4 |  |
| X. Malformations. |  |  |  |  |  |  |  |
| Congenital malformations (still briths not included)................. | 274 |  |  |  | 162 | 112 |  |
| XI. Diseases of Farly Infancy: |  |  |  |  |  |  |  |
| Congenital debility, icterus and sclerema | 941 | 2 |  | 3 |  |  |  |
| Other diseases peculiar to early infancy | 2,425 | 2 | 5 | 3 6 | 512 1,422 | 401 | 3 11 |
| Lack of care................... | 36 | 7 | 5 | 6 | $1,4 \times 2$ 21 | ${ }^{995}$ | 14 |
| NII. Old Age: |  |  |  |  |  |  |  |
| NIII. Affections produced by External Causes: |  |  |  |  |  |  |  |
| Suicide by poison...... | 172 | 1 |  | 1 | 125 |  |  |
| Suicide by asphyxia................ Suicide by hanging or strangula | 20 |  |  |  | 17 | 3 |  |
| suicide by hanging or strangula tion | 157 |  |  |  | 182 |  |  |
| Suicide by drowning. Suicide by firearms. | 46 |  |  |  | 123 | 13 |  |
| Suicide by firearms................. | 135 |  |  |  | 128 | 15 |  |
| struments $\quad$ c.................... | 37 |  |  |  | 32 | 5 |  |
| Suicide by jumping from high | 4 |  |  |  | 3 2 | 2 |  |
| Suicide by crushing | 3 |  |  |  | ${ }_{3}^{2}$ | 2 |  |
| Other suicides ..... | 20 |  |  |  | 19 |  |  |
| Poisoning by food. <br> Other acute poisonings | 58 |  |  |  | 31 | 27 |  |
| Conflagration ........................ | 182 |  | 1 |  | 31 | 22 |  |
| Burns (conflagration excepted) | 182 73 |  | 4 |  | 73 | 113 |  |
| Absorption of deleterious gases (conflagration excepted) | 31 |  |  |  | 49 20 | 24 |  |
| Accidental drowning | 404 | 1 |  |  | 20 362 | 114 |  |
| Traumatism by firearms............... Traumatism by cutting or piercing | 159 | 1 | 1 | 1 | ${ }_{144}$ | 17 |  |
| Traumatism by cutting or piercing instruments | 47 |  |  |  | 144 46 | 17 |  |
| Traumatism by fall................ | 279 |  | 1 |  | 231 | 19 |  |
| Traumatism in mines and quarries | 32 |  |  |  | 231 31 | 49 |  |
| Traumatism by machines........... | 86 |  |  |  | 83 | 3 |  |
| Traumatism by other crushing (vehicles, railroad, landslides, etc.) | 642 |  | 8 |  | 83 607 | 3 |  |
| Injuries by animals | 72 |  |  |  | $\begin{array}{r} 607 \\ 66 \end{array}$ | 43 6 |  |

TABLE NO．32．－SHOWING DEATHS FROM EACH DISEASE，BY COLOR，SEX， CONJUGAL CONDITION AND NATIVITY．－Continued．

| Name of Disease． | Color． |  |  |  | Sex． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \stackrel{ \pm}{E} \\ & = \end{aligned}$ | 烒 |  | 寿 | 家 | ¢ | E |
| Starvation |  |  |  |  |  |  |  |
| Excessive cold | 29 |  |  |  | $\stackrel{3}{2}$ | 2 |  |
| Fffects of heat． | 61 |  | 1 |  | 26 48 | 5 |  |
| Lghtning | 18 | 1 | 1 |  | 17 | 15 |  |
| Flictricity（lightning excepted）．．．． | 25 |  |  |  | 17 | 1 |  |
| Homicide by firearms．．．．．．．．．．．．．．．． | 31 | 1 |  |  | 21 | 10 |  |
| Homicide by cutting or piercing instruments | 15 |  |  |  |  |  |  |
| Homicide by other means．．．．．．．．．．． | 20 |  | 1 |  | ${ }_{12}^{9}$ | 7 |  |
| Fractures（cause not specified）．．．．． | 261 |  | 1 | 1 | 180 | 83 |  |
| Other external violence．．．．．．．．．．．．．．． | 207 |  | 1 | 1 | 171 | 83 38 |  |
| XIV．Ill Defined Diseases： <br> Ill defined organic disease． <br> sudden death <br> Cause of death not specified or ill <br> defined <br> Stilibirths |  |  |  |  |  |  |  |
|  | 43 |  |  |  | 24 | 19 |  |
|  | 129 | 1 |  |  | 79 | 51 |  |
|  | 1，100 | 3 | 15 | 4 | 628 | 493 | 1 |
|  | 2，804 |  | 8 | 11 | 1，560 | 1，18 ${ }^{-}$ | if |
| Total |  |  |  |  |  |  |  |

TABLE NO．32．－SHOWING DEATHS FROM FACH DISEASE，BY COLOR，SEX， CONJUGAL CONDITION AND NATIVITY．

| Name of Disease． | Conjugal conditions． |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Sin- } \\ & \text { gle. } \end{aligned}$ | $\begin{aligned} & \text { Mar- } \\ & \text { ried. } \end{aligned}$ | Wid－ owed． | $\begin{gathered} \text { Di- } \\ \text { vorced } \end{gathered}$ | $\begin{gathered} \text { Vn- } \\ \text { known } \end{gathered}$ |
| I．General Diseases： |  |  |  |  |  |
| Typhoid fever | 527 | 339 |  |  |  |
| Typhus fever | 1 | 339 1 | 28 | 4 | 12 |
| Relapsing fever |  |  |  |  |  |
| Malaria | 2 | 5 |  |  |  |
| $\begin{aligned} & \text { Smailpox } . . . \\ & \text { Measles } . . . . \end{aligned}$ | 10 269 | 5 |  | 1 |  |
| cearlet fever | 269 | 9 |  |  |  |
| Whooping cough | （in 389 | 20 8 | 1 | 1 |  |
| Diphtheria and croup． | 801 | 85 | 3 |  |  |
| Influenza ．．．． | 102 | 150 15 | 148 | 4 | $\stackrel{1}{2}$ |
| Miliary fever Asiatic cholera | 1 |  | 148 |  |  |
| Cholera nostras | 20 | 4 | 4 |  |  |
| Dysentery ．． | 128 | 56 | 48 |  |  |
| Plague ．．．． | 1 |  | 48 |  | 1 |
| Yellow fever |  |  |  |  |  |
| Leprosy | 1 |  |  |  |  |
| Erysipelas ．．．．．．．．．．．．． | 57 | 53 | 28 |  |  |
| Other epidemic diseases ．．．．．． Purulent infection and septich | 5 |  |  |  |  |
| Purulent infection and septich Glanders | 130 | 153 | 28 | 2 | 3 |
| Anthrax | 1 |  |  |  |  |
| Rabies | 1 |  |  |  |  |
| Tetanus | 50 | 13 | 1 |  |  |
| Mycoses Pellagra | 2 | 5 |  | 1 |  |
| Pellagra ． | 3 |  |  |  |  |
| $20-\mathrm{B} . \mathrm{H}$ ． |  |  |  |  |  |

'TABLE NO. 32.-SHOWING DEATHS FROM EACH DISEASE, BY COLOR, SEX, CONJUGAL CONDITION AND NATIVITY.-Continued.

| Name of Disease. | Conjugal condition. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{aligned} & \text { ס } \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  | d 0 0 E 3 |
| Tuberculosis of the lungs | 1,848 | 1,880 | 311 | 42 | 26 |
| Acute miliary tuberculosis. | 1,56 | - 32 | 4 |  | 1 |
| Tuberculous meningitis ... | 191 | 29 | 4 |  | 1 |
| Abdominal tuberculosis | 65 | 55 | 12 |  | 1 |
| Potts' disease ........... | 21 | 3 | 1 |  |  |
| White swelling |  |  | 15 | 1 |  |
| Tuberculosis of other organs | 92 | 88 | 15 | 1 |  |
| Disseminated tuberculosis | 47 | 37 | 3 |  |  |
| Rickets | 15 58 | 14 | 5 |  | 1 |
| Syphilis <br> Gonococcus infection | 58 3 | 14 | 5 |  |  |
| Cancer and other malignant tumors of the buccal cavity | 27 | 153 | 75 | 2 | 3 |
| Cancer and other malignant tumors of the <br> - stomach, liver | 99 | 980 | 380 | 18 | 10 |
| Cancer and other malignant tumors of the peritonaeum, intestines, rectum............. | 22 | 215 | 91 | 3 | 1 |
| Cancer and other malignant tumors of the female genital organs | 19 | 181 | 76 | 4 | 1 |
| Cancer and other malignant tumors of the breast | 20 | 126 | 64 | 3 | 1 |
| Cancer and other malignant tumors of the skin | 4 | 22 | 7 | 1 |  |
| Cancer and other malignant tumors of other organs and of organs not specified. | 54 | 250 | 107 | 8 | 3 |
| Other tumors (tumors of the female genital organs excepted) | 63 107 | 153 | 39 8 | 2 | 1. |
| Acute articular rheumatism. <br>  | 107 70 | 47 121 | 53 |  | 1 |
| Chronic rheumatism and gout Scurvy | $\begin{array}{r}70 \\ 1 \\ \hline\end{array}$ | 121. | 1 1 0 |  | 9 |
| Diabetes ...... | 147 | 281 | 93 6 | 2 | 2 |
| Exophthalmic goitre | 18 8 | 50 8 | 6 |  |  |
| Add son's disease | 88 | 45 | 8 |  | 1 |
| Leuchaemia .... | 20 84 | - 159 | 42 | 2 | 4 |
| Anaemia, chlorosis | 84 17 | 159 | 4 |  |  |
| Other general diseases.. | 71 | 100 | 24 | 11 | 19 |
| Alcoholism (acute or chronic) | 1 | 1 |  |  |  |
| Chronic lead poisoning........... |  | 1 |  |  |  |
| Other chronic occupation pois Other chronic poisonings ..... | 2 | 6 | 5 |  |  |
| II. Diseases of the Nervous System and of the Organs of Special Sense: |  |  |  |  |  |
| Encephalitis ................................. | 831 | 110 | 32 |  | 4 |
| Simple meningitis | 16 | 44 | 6 | 2 | 1 |
| Locomotor ataxia ..... | . 65 | 59 | 15 | 1 |  |
| Other diseases of the spinal cord | 249 | 1,322 | 938 | 19 | 26 |
| 'Clerebral haemorrhage, apope | 12 | 44 | 23 |  | 1 |
| Paralysis .... | 121 | 348 | 283 | 12 | 9 |
| General paralysis of the insane.............. | 58 | 126 | 40 | 3 | 1 |
| Other forms of mental alienation............. | 16 | 10 57 | 18 | 3 | 1 |
| Epilepsy . . .................. | 161 20 | 16 |  |  |  |
| Convulsions (nonpuerperal) ................... |  |  |  |  |  |
| Convulsions of infants | 1,178 9 | 3 | 1 |  | 1 |
| Chorea ...... | 9 | 30 | 12 |  |  |
| Neuralgia and neuritis... | 137 | 100 | 35 | 1 | 3 |
| Other diseases of the nervous system. | 13 | 10 | 1 |  |  |
| Diseases of the eyes and their annexa................................. | 21. | 8 | 1 | 1 |  |
| Diseases of the ears.............................. |  |  |  |  |  |
| III. Diseases of the Circulatory System: | 16 | 24 | 17 | 1 |  |
| Pericarditis ....................... | 131 | 212 | 109 | 8 | 8 |
| Acute endocarditis | 515 | 1,606 | 1,059 | 32 | 23 |

TABLE NO. 32.-SHOWING DEATHS FROM EACH DISEASE, BY COLOR, SEX, CONJUGAL CONDITION AND NATIIVITY.-Continued.


TABLE NO. 32.-SHOWING DEATHS FROM EACH DISEASE, BY COLOR, SEX CONJUGAL CONDI'TION AND NATIVIT'Y.


TABLE NO．32．－SHOWING DEATHS FROM EACH DISEASE，BY COLOR，SEX， CON．JUGAL CONDITION AND NATIVI＇Y．

| Name of Disrase． | Coniugal rontition． |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\underset{\sim}{\underset{y}{E}}$ |  | $\begin{aligned} & \text { B } \\ & \text { B } \\ & 0 \\ & 0 \\ & =0 \end{aligned}$ | 0 <br> 0 <br> 0 <br> 0 <br>  | linknown |
| Injurics by animals | 32 | 35 | 3 |  | 2 |
| Starvation ．．．．．．．．． | － 1 | 1 | 2. |  | 1 |
| Excessive cold | 13 | 8 | 5 | 1 | $\pm$ |
| Efiects of heat ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 24 | 26 | 6 | 2 | 5 |
| Lightaing ．．．．．．．．．．．．．．．．．．．．．． | 11 | 7 |  |  |  |
| Electricity（lightning excepted）．．．．．．．．．．．．． | 13 | 14 | 1 |  |  |
| Homieide by firearms ．．．．．．．．．．．．．．．．．．． | 11 | 15 | $\because$ | $\because$ | 1 |
| Homicide by cutting or piercing instru－ ments | 8 | 6 |  |  | $\because$ |
| Homicide by other means．．．．．．．．．．．．．．．．．．．．． | 13 | 6 |  |  | $\because$ |
| Fractures（cause not specified） | 74 | 100 | 7.5 | 1 | 13 |
| Other external violence ．．．．．．．．．．．．．．．．．．．．．．．． | 105 | 74 | 21 | 4 | 5 |
| XIV．In cemend Diseases： |  |  |  |  |  |
| In defmed organic disease． | 12 | 20 | 11 | ．． |  |
| Sudoen death ．．．．．．．．．．．．．．．．．．．．．．．．．． | 38 | 65 | 24 | 1 | 2 |
| Cavsas of wath not specised or ill definti．． | 813 | 185 | ，14， | \％ | 15 |
| Stilmirths | 2，823 |  |  |  |  |
| Total |  |  |  |  |  |
|  |  |  |  |  |  |

PABLE NO．32．－SHOWING DEATHS FROM EACH TISFASE，BY（OLOR．SEX， COAJUGAL CONDITION AND NATIVITY．

| Name of Disease． | Nativity of ceceased． |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { 苟 } \\ & \text { 至荡 } \end{aligned}$ |  |  | $\stackrel{:}{\underset{~}{\Xi}}$ | 事 |  |
| I．Gencral Diseases： |  |  |  |  | 9 | 30 |
| Typhoid fever | 507 | 101 | 79 1 | 6 | 9 | \％ |
| Typhus fever |  |  |  |  |  |  |
| Malaria ．．．．．．． | 3 | 1 |  | 1 |  | 1 |
| Smalipox | 12 | 2 |  | 1 |  | 1 |
| Measles | 263 | 10 |  |  |  | 1 |
| Scarlet fever | 574 | 43 | 9 |  | 1 | 2 |
| Whooping cough | 382 | 8 | 2 |  |  |  |
| Diphtheria and croup | 751 | 56 | 6 |  |  | I |
| Influenza ．．．．．．．．．．．．． | 121 | 104 | 87 | 26 | 25 | 11 |
| Miliary fever | 1 |  |  |  |  |  |
| Asiatie cholera |  |  |  |  |  |  |
| Cholera Nostras | 21 | 2 | 2 |  |  | 1 |
| Dysentery | 120 | 37 | 32 | 12 | 4 | 9 |
| Plague ．． | 1 |  |  |  |  |  |
| Yellow fever |  |  |  |  |  |  |
| Leprosy |  |  |  | 1 |  |  |
| Erysipetas ．．．．．．．．．．．．． | 62 | 16 | 26 | 5 | 8 | 5 |
| Other enidemic diseases．．．．．．．．．．．．． | 184 | 38 | 43 | 7 | 6 | 5 |
| Glanders ．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  |  |  |  |  |
| Anthrax | 1 |  |  |  |  |  |
| Rabies | 3 |  | 1 |  |  |  |
| Tetanus | 50 | 4 | 1 |  | 1 | 1 |
| Mycoses | 2 | 1 | 2 |  |  | 1 |

TABLE NO. 32.-SHOWING DEATHS FROM EACH DISEASE, BY COLOR, SEX, CONJUGAL CONDITION AND NATIVITY.


TABLE NO. 32.-SHOWING DEATHS FROM EACH DISEASE, BY COLOR, SEX, CONJUGAL CONDITION AND NATIVI'I'Y.

| Name of Disease. | Nativity of deceased. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 永 |  |  |
| Acute endocarditis | 157 | 65 | 134 | 12 | 12 | 20 |
| Organic diseases of the heart ...... | 621 | 669 | - 972 | 151 | 136 | 215 |
| Angina pectoris ...................... | 54 | 90 | 62 | 9 | 15 | 21 |
| Diseases of the arteries, atheroma, aneurysm, etc. | 63 51 | 216 43 | 277. 64 | 73 7 | 55 9 | 42 10 |
| , Embolism and thrombosis .......... | 51 | 43 | 64 | 7 | 9 | 10 |
| Diseases of the veins (varices, haemorrhoids, phlebitis, etc.) .......... | 17 | 6 | 12 | 2 | 1 |  |
| Diseases of the lymphatic system (lymphangitis, etc.) | 13 | 2 | 3 |  | 1 |  |
| Haemorrhage; other diseases of the circulatory system | 33 | 9 | 10 | 3 | 2 | 3. |
| IV. Diseases of the Respiratory System: |  |  |  |  |  |  |
| Diseases of the nasal fossae........ | 8 | 10 | 1 |  |  |  |
| Diseases of the larynx ............. | 53 | 10 | 3 | ....... |  | 1 |
| Diseases of the thyroid body...... | 8 | $\stackrel{2}{2}$ |  |  |  |  |
| Acute bronchitis ..................... | 440 | 39 | 64 | 25 | 13 | 16 |
| Chronic bronchitis .................... | 41 | 99 | 185 | 42 | 22 | 33 |
| Broncho-pneumonia ............... | 773 | 85 | 93 | 23 | 16 | 27 |
| Pneumonia ............................ | 2,003 | 162 | 587 | 124 | 77 | 137 |
| Pleurisy . . . . ......................... | 47 | 25 | 40 | 5 | 1 | 5 |
| Pulmonary congestion, pulmonary <br> apoplexy <br> Gangrene of the lung | 107 | 50 | 71 | 9 | 7 | 13 1 |
| Aangrene of the lung | 19 | 25 | 83 | 9 | 11 | 9 |
| Pulmonary emphysema ............ | 20 | 4 | 15 |  | 3 | 1 |
| Other diseases of the respiratory system (tuberculosis excepted).... | 61 | 15 | 23 | 2 | 1 | 1 |
| V. Diseases of the Digestive System: <br> Diseases of the mouth and annexa.. | 4 | - 1 |  |  |  |  |
| Diseases of the pharynx............. | 46 | 4 | 7 |  |  | 2 |
| Diseases of the oesophagus ......... | 3 | 4 | 2 | 1 |  |  |
| Ulcer of the stomach .............. | 63 | 41 | 38 | 6 | 5 | 8 |
| Other diseases of the stomach (cancer excepted) | 273 | 77 | 87 | 20 | 9 | 15 |
| Diarrhoea and enteritis (under 2 years) | 2,641 | 71 | 3 |  |  |  |
| Diarrhoea and enteritis (2 years and over). | 342 | 88 | 107 | 23 | 13 | 23 |
| Cirrhosis of the liver .............. | 107 | 56 | 145 | 13 | 8 | 16 |
| Intestinal parasites .......... ...... | 2 |  |  |  |  | 1. |
| Appendicitis and typhlitis ........ | 353 | 60 | 38 123 | $\stackrel{3}{15}$ | 4 | 13 |
| Hernias, intestinal obstructions...... | 234 | 71 | 123 | 15 | 15 | 32 |
| Diseases of the intestines........... | 114 | 24 | 23 | 7 | 10 | 5 |
| Acute yellow atrophy of the liver.. | 10 | 2 | 3 | 1 | 1 | 1 |
| Hydatid tumor of the liver.......... |  | 1 | 1 |  |  | 1 |
| Biliary calculi ......................... | 1 |  | 2 |  |  | 19. |
| Other diseases of the liver........... | 143 | 76 | 103 | 21 | 17 | 19 |
| Diseases of the spleen............... | 7 | 5 | 4 | 4 | 1 | 14 |
| Simple peritonitis (nonpuerperal)... | 155 | 39 | 32 | 4 | 5 | 14 |
| Other diseases of the digestive system (cancer and tuberculosis excepted) $\qquad$ | 224 | 28 | 24 | 5 | 7 | 4 |
| VI. Nonvenereal Diseases of the GenitoUrinary System and Annexa: |  |  |  |  |  |  |
| Acute nephritis ...................... | 256 | ¢6 | 128 | 17 | 17 | 28 |
| Brights' disease ........................ | 508 | 447 | 462 | 80 | 76 | 117 |
| Chyluria ................................ |  |  |  |  |  |  |
| Other diseases of the kidneys and annexa | 25 | 27 | 25 | 3 | 3 | 9 |
| Calculi of the urinary passages..... | 2 | 1 | 4 | 2 | 1 | 1 |
| Diseases of the bladder.............. | 15 | 41 | 65 | 18 | 12 | 15 |
| Diseases of the urethra, urinary abseess, ete. |  | 2 |  |  |  | 1 |

TABLE NO. 32.-SHOWING DEATHS FROM EACH DIS'EASE, BY COLOR, SEX, CONJUGAE CONDITION AND NATIVIT'Y.

| Name of Disease. | Nativity of deceased. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \dot{\text { a }} \\ & \text { n } \\ & 0 \\ & 0 \\ & =0 \end{aligned}$ |  |  | 雨 |  |  |
| Discases of the prostate. Nonvenereal diseases of the male genital organs <br> Uterine hacmorrhage (nonpuerperal) | 4 | 21 2 | 43 | 6 | 9 | 11 |
| Uterine tumor (noncancerous)....... | 13 | 4 | 2 |  |  | 1 |
| Other diseases of the uterus......... | 6 | 2 | 2 |  | 2 | 1 |
| Cysts and other tumors of the ovary | 17 | 8 | 5 |  |  | 1 |
| Sallingitis and other diseasis of the female genital organs. | 14 | 6 | 7 |  |  |  |
| Nonpuerperal diseases of the breast (cancer excepted) |  | 6 | 7 |  |  |  |
| VII. The Puerperal State: |  |  |  |  |  |  |
| Actidents of pregnancy. | 14 |  | 2 |  |  |  |
| Puerperal hamorrhage . | 51 | 12 | 11 |  |  | 4 |
| Other accidents of labor | 11 |  | 3 |  |  |  |
| Piermeral sentichaemia ....... | 117 | 19 | 21 | 1 |  | 8 |
| Puerperal albuminuria and convulsions | 46 | 10 | 2 | 1 |  |  |
| peusperal phlegmasia alba dolens cmbolus, sudden death. | 16 2 | 10 | 3 | 1 |  |  |
| Following childbirth (not otherwise (defined) <br>  | 56 | 9 | 12 |  |  | 2 |
| Whll. Discases of the Skin and of the Celluhar Tissue: |  |  |  |  |  |  |
|  | 18 | 31 | 59 | 5 | 8 | 5 |
| Furuncle ... | 10 | 3 | 2 | 2 |  |  |
| Acnte abscess ....................... | 67 | 9 | 20 | 1 | 3 | 1 |
| Uther diseases of the skin and annexi............................. | 45 | 1 | 3 |  | 1 |  |
| IX. Diseases of the Bones and of the Organs of Locomotion: |  |  |  |  |  |  |
| Diseases of the bones (tuluereulosis exepicd) | 52 | 8 | 4 |  | 1 | 1 |
| Ds:ase of the joints (uuberculosis and rheumatism excepted) | 4 | 1 | 1 |  |  | 1 |
| Amputations $\ldots$..................... | 5 | 2 | 2 |  | 1 | 1 |
| Other discases of the organs of locomotion |  |  |  |  |  |  |
| X. Malformations: |  |  |  |  |  |  |
| Congenital malformations (stillbirths not included). | 269 | 4 |  |  |  |  |
| XI. Diseasis of Early Infancy: |  |  |  |  |  |  |
| Congenital debility, icterus and sclerema ................................. | 926 | 14 |  |  |  |  |
| Other diseases peculiar to early in- fancy |  | 14 |  |  |  |  |
| fancy <br> Lack of care. | 2,426 | 17 |  |  |  |  |
| XII. Old Age: |  |  |  |  |  |  |
| Senility | 27 | 829 | ,199 | 356 | 217 | 293 |
| XIII. Affections produced by External Causes. |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Suicide by hanging or strangulation | 48 | 4 | 4 | 2 | ${ }_{2}^{1}$ | 11 |
| Suicide by drowning................... | 22 | 2 | 10 |  |  | ${ }_{2}$ |
| Suicide by firearms .................. | 46 | 24 | 31 | 1 | 1 | 5 |
| Suicide by cutting or piercing instru ments | 9 | 4 | 8 |  |  | 2 |
| Suicide by jumping from high places | , | 1 | 8 |  |  | 2 |
| Suicide by crushing.................. | 1 | 1 |  |  |  |  |

TABLE NO．32．－SHOWING DEATHS FROM FACH DISFASE，BY COLOR，SEX， CONJUGAL CONDITION AND NATTVITY．

|  | Nativity of deceased． |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Name of Disease． | $\begin{aligned} & \dot{3} \\ & \tilde{n} \\ & \underset{\sim}{0} \\ & \ddot{3} \\ & = \end{aligned}$ |  |  | $\frac{\square}{i}$ | 思 | 家 |
| Other suicidcs | 5 |  | 4 |  |  |  |
| Poisoning by food．．．．．． | 48884 | 4 | 4 |  | 1 | 2 |
| Other acute poisonings．．．．．．．．．．．．．．． | 32 | 7 | 6 |  | 1 | 2 |
| Conflagration ．．．．．．．．．．．．．．． | 122 | 21 | 11 | 2 | 3 | 6 |
| Burns（conflagration excepted）．．．．．．． <br> Absorption of deleterious gases（con－ | 57 | 5 | 3 |  | 1 | 1 |
| flagration excepted） <br> Accidental drown＇ng | 9 | 4 | 7 | 2 | 3 | 1 |
| －Traumatism by firearms．．．．．．．．．．．．．．．．． | 194 | 58 | 43 | 5 | 7 | 8 |
| ，Traumatism by cutting or piercing | 108 | 18 | 10 | 1 | 1 | 1 |
| instruments | 14 | 4 | 9 | 1 |  | 3 |
| Traumatism by fall．．．．．．．．．．．．．．．．．．．．．． | 65 | 48 | 69 | 9 | i1 | 18 |
| Traumatism by machines．．．．．．．．．．．． | 10 41 | $\stackrel{2}{6}$ | ${ }_{13}^{2}$ | 1 | 1 | 3 |
| Traumatism by other crushing（ve－ |  | 6 | 13 | 1 | 1 | 3 |
| Injuries，rairoad，landslides，etc．）．．．． | 239 | 92 | 84 | 9 | 12 | 23 |
| Starration animals．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 30 | 7 | 20 | 1 |  | 5 |
| Excessive cold | 10 | 5 |  |  |  |  |
| Fffects of heat． | 10 | 8 | 4 | 1 | 2 | 2 |
| Lightning | 11 | 8 | 13 | 1 | 2 | 2 |
| Flectricity（lightning excepted） | 15 | 3 | 3 |  |  |  |
| Homicide by firearms．． | 13 | 3 | 3 2 2 | 1 |  | 1 |
| Homicide by cutting or piercing in－ struments |  |  |  |  |  |  |
| Homicide by other means．．．．．．．．．．．． | 10 | 1 |  | 1 |  |  |
| Fractures（canse not specified） | 74 | 38 | 47 | 18 |  |  |
| Other external violence．． | 112 | ${ }_{2 i}^{38}$ | 17 | 18 | 10 | 18 |
| XIV．Ill deinnd Diseases： |  |  | 17 | 4 | 4 | 7 |
| Ill defined organic discase． | 11 | \＆ | 12 | 1 | 4 | 8 |
| Sudden death ．．．．．．．．．．．．．．．．．．．．． | 43 | 21 | 28 | 4 | 5 | 11 |
| Cause of death not specified or ill defined | 80 | \％1 | 101 | 14 |  | 28 |
| Stillbirths | 2，823 |  |  |  | 10 |  |
| 2，823 stillbirthis not included in this total． |  | 7，467 | ¢，792 | 1，661 | 1，288 | 2，287 |
|  |  |  |  |  |  |  |

TABLE NO．32．－SHOWING DEATHS FROM EACH DISEASE，BY COLOR，SEX， CONJUGAL CONDITION AND NATIVITY．

| Name of Disease． | Nativity of deceased． |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \dot{x} \\ & \frac{\pi}{x} \\ & \frac{1}{x} \end{aligned}$ | － | $\frac{\pi}{2}$ $\stackrel{\pi}{0}$ $=$ | 莦 | 馬 | S \＃ ¢ H |
| I．General Diseases： |  |  |  |  |  |  |
| Typhoid fever | 19 | 25 |  | 7 |  |  |
| Trphus fever ．． |  | 25 |  | 7 | 6 |  |
| Relapsing fever |  |  |  |  |  |  |
| Malaria |  |  |  | $\cdots$ |  |  |
| Smallpox |  |  |  |  |  |  |
| Measle； | 1 | 1 |  |  |  |  |
| Scarlet fever | 1 | 9 |  |  | 1 |  |
| Thooping cough ．．． |  | 2 |  |  | 1 |  |
| Diphtheria and croup． |  | 1 |  | 2 | 2 | 1 |
| Influenza．．．．． Mliary fever | 3 | 4 | 1 | 3 |  |  |
| Asiat：c cholera |  |  |  |  |  |  |
| Cholera nostras |  |  |  |  |  |  |

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 Report of the Bureau of Vital Statistics．TABLE NO．32．－SHOWING DEATHS FROM EACH DISEASE，BY COLOR，SEX， IOONJUGAL CONDITION AND NATIVITY．－Cont．

| Name of Disease． | Nativity of deceased． |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \frac{\tilde{1}}{\#} \\ & 0 \\ & 0 \end{aligned}$ | $\begin{aligned} & \frac{\dot{0}}{0} \\ & 0 \end{aligned}$ |  | $\begin{aligned} & \text { ت゙ } \\ & \text { ت゙ } \\ & \text { تِ } \end{aligned}$ | 烒 |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Yellow fever |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Glanders <br> Anthrax |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Beriberi |  |  |  |  |  |  |
| Tuberculosis of the lungs | 72 | 36 |  | 29 | 9 | 1 |
| Acute miliary tuberculosis．．．．．．．．．．．． 1 1 $\quad 1$ ．．．．．．． 1 |  |  |  |  |  |  |
| Abdominal tuberculosis ．．．．．．．．．．．．．．．${ }^{\text {a }}$ ．${ }^{\text {a }}$ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Potts＇disease ．．．．．．．．． |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Disseminated tuberculosis ．．．．．．．．．．．${ }_{\text {Rickets }}$ ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Cancer and other malignant tu－ mors of the buccal cavity． |  |  |  |  |  |  |
| Cancer and other malignant tu－ mors of the stomach，liver ．．．．．． | 37 | 25 |  | 27 | 1 | 3 |
| Cancer and other malignant tu－ mors of the peritonaeum，intes－ tines，rectum ．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  |  |  |  |  |
| Cancer and other malignant tu－ mors of the female genital organs |  |  |  |  |  |  |
| Cancer and other malignant tu－ mors of the breast． |  |  |  |  |  |  |
| Cancer and other malignant tu－ mors of the skin．． |  |  |  |  |  |  |
| Cancer and other malignant tu－ mors of other organs and of or－ gans not specifled． <br> 5 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Acute articular rheumatism．．．．．．．．．． | 2 | 2 |  | 2 |  |  |
| Chronic rheumatism and go |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Diabetes | 5 | 1 |  | 6 |  |  |
| Exophthalmic goitre Addison＇s disease |  |  |  |  |  |  |
| Addison＇s disease ．． |  |  |  |  |  |  |
| Leuchaemia | 2 | 1 |  | 1 |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Alcoholism（acute or chronic）． Chronic lead poisoning． |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Other chronic occupation poisonings Other chronic poisonings．．．．．．．．．．．．． | 1 |  |  |  |  |  |
| II．Diseases of the Nervous System and of the Organs of Special Sense： |  |  |  |  |  |  |
| Simple meningitis ．．．．．．．．．．．．．．．．．．．．．．． | 9 | 9 |  | 1 | 6 |  |
| Locomotor ataxia | 1 |  |  | 2 |  |  |
| Other diseases of the spinal cord．．．． | 1 | 1 |  | 2 |  |  |
| Cerebral haemorrhage，apoplexy．．． | 30 | 21 |  | 35 2 | 2 | 1 |
| Softening of the brain． | 4 | 1 |  | 10 |  |  |

TABLE NO. 32.-SHOWING DEATHS FROM EACH DISEASE, BY COLOR, SEX, OONJUGAL CONDITION AND NATIVITY.-Cont.

| Name of Disease. | Nativity of deceased. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \dot{3} \\ & \stackrel{y}{0} \\ & \stackrel{0}{0} \\ & 3 \\ & 3 \end{aligned}$ | ¢ $\stackrel{3}{0}$ |  | 茪 |  | 完 |
| General paralysis of the insane.. | 3 | 7 |  | 4 | 1 | 1 |
| Other forms of mental alienation.. | 1 |  |  |  |  |  |
| Epilepsy ............... |  | 3 |  | 1 |  |  |
| Convulsions (nonpuerperal) |  |  |  | 1 | 1 |  |
| Convulsions of infants..... |  |  |  |  |  |  |
| Chorea | 1 |  |  |  |  |  |
| Neuralgia and neuritis. |  | 1 |  |  |  |  |
| Other diseases of the nervous system | 3 | 2 |  | 2 |  |  |
| Diseases of the eyes and their annexa |  |  |  |  |  |  |
| Diseases of the ears................. |  |  |  |  |  |  |
| III Diseases of the Circulatory System. Pericarditis |  | 2 |  | 1 | 1 |  |
| Acute endocarditis | 3 | 9 | 1 | 2 | 1 | 1 |
| Organic diseases of the hear | 42 | 49 | 5 | 36 | 6 | 9 |
| Angina pectoris .............. | 3 |  |  | 2 | 1 |  |
| Diseases of the arteries, atheroma, aneurysm, etc. | $\stackrel{2}{2}$ | 6 |  | 10 |  | 1 |
| Embolism and thrombosis........... |  |  |  | 2 |  |  |
| Diseases of the veins (varices, haemorrhoids, phlebitis, etc.) |  |  |  |  |  |  |
| Diseases of the lymphatic system (lymphangitis, etc.) | 1 |  |  |  | 1 |  |
| Haemorrhage, other diseases of the circulatory system ................... |  | 2 |  |  |  |  |
| IV. Diseases of the Respiratory System: Diseases of the nasal fossae........... |  |  |  |  |  |  |
| Diseases of the larynx |  | 1 |  |  |  |  |
| Diseases of the thyroid body. |  |  |  |  |  |  |
| Acute bronchitis .................. | 6 | 2 |  |  |  |  |
| Chronic bronchitis | 6 | 6 | 2 | 9 |  |  |
| Broncho-pneumonia | 40 | 9 |  | 26 |  | 1 |
| Pneumon'a ... | 40 | 59 3 |  | 26 2 | 17 | 1 |
| Pleurisy ............................ | 1 | 3 |  | 2 |  | 1 |
| Pulmonary congestion, pulmonary apoplexy | 1 | 1 |  | 1 |  | 1 |
| Gangrene of the lung................. |  |  |  |  |  |  |
| Asthma ... |  | 9 | 1 | 4 |  |  |
| Pulmonary emphysema |  | 5 | 1 |  |  |  |
| Other diseases of the respiratory system (tuberculosis excepted)......... | 1 |  |  |  |  |  |
| V. Diseases of the Digestive System: Diseases of the mouth and annexa.. | 1 |  |  |  |  |  |
| Diseases of the pharynx.............. |  |  |  |  |  |  |
| Diseases of the oesophagus........... |  |  |  |  |  |  |
| Ulcer of the stomach.................. | 3 | 3 |  | 2 |  |  |
| Other diseases of the stomach (cancer excepted) | 5 | 7 | 1 | 4 |  |  |
|  |  | 2 |  |  |  |  |
| Diarrhea and enteritis (2 years and over) | 0 | 6 |  | 5 |  |  |
| Intestinal parasites ................ |  |  |  |  |  |  |
| Appendicitis and typhlitis........... | 3 | 7 |  | 3 |  |  |
| Hernias, intestinal obstructions.... | 14 | 12 |  | 5 |  | 3 |
| Diseases of the intestines.. |  | 3 |  | 1 |  |  |
| Hydatid tumor of the liver......... | 1 |  |  |  |  |  |
| Acute yellow atrophy of the liver. |  |  |  |  |  |  |
| Cirrhosis of the liver. | 6 | 18 | 1 | 2 |  | 1 |
| Other diseases of the live | 5 | 9 | 1 | 3 |  |  |
| Diseases of the spleen..... | 1 |  |  |  |  |  |
| Simple peritonit's (nonpuerreral).... | 6 | 3 |  | 2 |  |  |

TABLE NO. 32.-SHOWING DEATHS FROM EACH DISEASE, BY COLOR, SEX, CONJUGAL CONDITION AND NATIVITY:-Cont.


TABLE NO．32．－SHOWING DEATHS FROM EACH DISEASE，BI COLOR，SEX， CONJUGAL CONDIIION AND NATIVITY．－Cont．

| Name of Disease． | Nativity of deceased． |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 号 | gin 0 0 | 它 |  | 号 |  |
| Other diseases peculiar to early in－ <br> faney |  |  |  |  |  |  |
| Lack of care．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  |  |  |  |  |
| xy．Ola Age． Senility | 58 | 48 | 5 | 33 | 3 | 12 |
| XIII．Affections produced by External Causes． |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Suicide by hanging or strangulation Suicide by drowning．．．．．．．．．．．．．．．．．．．．．． | 5 | 1 |  | 4 |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Suicide by jumping from high places |  |  |  |  |  |  |
| Suicite by crushing．．．．．．．．．．．．．．．．．． |  |  |  |  |  |  |
| Other suicides ．．．．． <br> Poisoning by food． |  |  |  |  |  |  |
| Other acute poisoning |  |  |  |  |  |  |
| Bonflagration ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 1 |  |  |  |  |  |  |
| Absorption of deleterious gases conflagration excepted） |  |  |  |  |  |  |
| kecidental drowning ．．．．．．．．．．．．．．．．． | 4 | 5 |  |  | 3 | 1 |
| Traumatism by firearms．．．．．．．．．．．．．． 3 2 $\ldots \ldots .$. 2 |  |  |  |  |  |  |
| Traumatism by cutting or piercing instruments |  | 1 |  | 1 | 1 |  |
| Traumatism by fall．．．．．．．．．．．．．．．．．． | 2 | 6 |  | 3 | 3 |  |
| Traumatism in mines and quarries | 2 | 1 |  |  | 4 |  |
|  |  |  |  |  |  |  |
| Traumatism by other crushing（ve－      <br> hicles，railroad，landslides，etc．）．．．． 10 23 $\ldots \ldots$. 5 13 |  |  |  |  |  |  |
| Enjuries by animals．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Excessive cold | 1 | 2 |  |  |  |  |
| Effects of heat．．．．．．．．．．．．．．．．．．．．．．．．．．．．．$\quad 2 \ldots \ldots . .1$ |  |  |  |  |  |  |
| Electricity（lightning excepted）．．．．．．．${ }^{\text {light }}$ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Homicide by other means．．．．．．．．．．．． |  |  |  |  | 2 |  |
| Fractures（cause not specified）． Other erternal violence....... | 5 2 | 9 3 |  | 1 | 3 |  |
| EIV．Ill defined Diseases： |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Sudden death ．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| ．Stillbirths ．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  |  |  |  |  |
| Total | 584 | 620 |  | 428 | 125 | 67 |



|  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |

TABLE NO. 32.-SHOWING DEATHS FROM EACH DISEASE, BY COLOR, SEX, CONJUGAL OONDITION AND NATIVITY.-Cont.

| Name of Disease. | Nativity of deceased. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | d B 0 E d |
| Diseases of the intestines $\ldots$.........Acute ycllow atrophy of the liver ...... |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Hydatid tumor of the liver Biliary calculi |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Other diseases of the liver. Diseases of the spleen ...... | 12 | 3 | 3 | 6 | 15 | 6 |
| Simple peritonitis (nonpuerperal) .. 6 |  |  |  |  |  |  |
| Other diseases of the digestive system (cancer and tuberculosis excepted) |  |  |  |  |  |  |
| VI. Nonvencreal Diesases of the GenitoUrinary System and Amexa: |  |  |  |  |  |  |
|  | 23 | 8 | 3 | 7 | 17 | 12 |
|  |  |  |  |  |  |  |
| Other diseases of the kidneys andannexa ........................... |  |  |  |  |  |  |
| Calculi of the urinary passages..... $\quad \frac{1}{6}$ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Diseases of the urethra, urinary absecss, cte. |  |  |  |  |  |  |
| Diseases of the prostate. Nonvencreal diseases of the male genital organs |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Uterine haemorrhage (nonpuerperal) |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Gysts and other tumors of the ovary |  |  |  |  |  |  |
| Sapingitis and other diseases of the female genital organs................ |  |  |  |  |  |  |
| Nonpucrperal diseases of the breast (cancer excepted) |  |  |  |  |  |  |
| VII. The Puerperal State: |  |  |  |  |  |  |
| Accidents of pregnancy. |  |  |  |  |  |  |
| Puerperal hacmorrhage Other accidents of labor |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Pucrperal albuminuria and convulsions |  |  |  |  |  |  |
| Puerperal phlegmasia alba dolens embolus, sudden death ........... |  |  |  |  |  |  |
| Following childbirth (not otherwise defined) |  |  |  |  |  |  |
| Puerperal diseases of the breast. |  |  |  |  |  |  |
| VIII. Diseases of the Skin and of the Cellular Tissue: |  |  |  |  |  |  |
| Gangrene | 9 | 1 |  |  | 3 | 4 |
| Furuncle ............................ |  |  |  |  |  |  |
| Acute abscess <br> Other diseases of the skin and an <br> nexa$\quad 5 \quad$1 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| IX. Diseases of the Bones and of thr Organs of Locomotion: |  |  |  |  |  |  |
| Diseases of the bones (tuberculos: excepted) |  |  |  |  |  |  |
| Diseases of the joints (tuberculosi and rheumatism excepted). |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| X. Malformations: |  |  |  |  |  |  |
| Congenital malformations (stil births not included) |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Congenital debility, icterus and scler ema |  |  |  |  |  | 6 |

TABLE NO. 32.-SHOWING DEATHS FROM EAOH DISEASE, BY COLOR, SEX, CONJUGAL CONDITION AND NATIVITY.-Cont.

$21-\mathrm{B} . \mathrm{H}$.

TABLE NO. 32.-SHOWING DEATHS FROM EACH DISEASE, BY COLOR, SEX, CONJUGAL CONDITION AND NATIVITY.

| Name of Disease. | Birthplace of father. |  |  |  | Birthplace of mother. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{gathered} \dot{5} \\ .00 \\ 0.0 \\ 0.0 \\ 0 \end{gathered}$ | $\begin{aligned} & \text { 号 } \\ & \text { E } \\ & \text { E } \end{aligned}$ |  |  |  | E E E $\#$ |
| 121 108 601 80 168 96 600 46 |  |  |  |  |  |  |  |  |
| Typhoid fever Typhus fever | 121 | 108 | 601 | 80 | 168 | 96 | - 2 |  |
| Relapsing fever |  |  |  |  |  |  |  |  |
| Malaria ........ | 1 | 1 | 5 |  | 1 | 1 | 5 |  |
| Smallpox | 8 | 3 | 5 |  | 6 | 2 | 1 | ${ }^{2}$ |
| Measles . | 111 | 30 | 130 | 7 | 138 | 28 | 111 | 1 |
| Scarlet fever | 222 | 45 | 377 | 12 | 357 | 54 | 229 | 9 |
| Whooping cough | 177 | 37 | 168 | 15 | 216 | 48 | 124 | 9 |
| Diphtheria and croup | 281 | 89 | 443 | 27 | 337 | 82 | 396 | 25 |
| Influenza ....... | 46 | 92 | 219 | 49 | 52 | 82 | 205 | 67 |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Cholera nostras | 10 | 2 | 16 |  | 11 | 3 | 13 | 1 |
| Dysentery | 57 | 44 | 116 | 16 | 76 | 36 | 100 | 21 |
| Plague |  |  |  |  |  |  |  |  |
| Yellow fever |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Erysipelas | 17 | 17 | 82 | 22 | 28 | 15 | 70 | 25 |
|  |  |  |  |  |  |  |  |  |
|  | 41 | 41 | 200 | 34 | 66 | 32 | 180 | 38 |
| Glanders <br> Anthrax |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Rabies | 2 |  | 3 |  | 1 | 1 | 2 |  |
| Tetanus | 24 | 1 | 34 | 6 | 28 | 3 | 26 | 8 |
| Mycoses | 1 |  | 5 | $\stackrel{2}{1}$ | 1 |  | 5 | 2 |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Acute miliary tuberculosis | 13 | 8 | , 63 | 9 | 17 | 15 | - 56 | 5 |
| T'uberculous meningitis | 103 | 26 | 89 | 7 | 109 | 22 | 87 | 10 |
| Abdominal tuberculosis | 20 | 20 | 85 | 8 | 30 | 16 | 77 | 10 |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Tuberculosis of other orga | 28 | 19 | 137 | 14 | 36 | 23 | 123 | 16 |
| Disseminated tuberculosis | 14 | 14 | 54 | 7 | 20 | 13 | 47 | 9 |
| Rickets | 8 | 1 | 7 |  | 10 | 1 | 32 | 16 |
| Syphilis .......................... | 7 | 8 | 28 | 35 1 | 31 1 | 9 2 |  | 16 |
| Gonococcus infection $\ldots \ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~$ 2 1 1 1  2 1 <br> Cancer and other malignant tumors        |  |  |  |  |  |  |  |  |
| Cancer and other malignant tumors of the buccal cavity .............. | 3 | 45 | 163 | 49 | 5 | 41 | 154 | 60 |
| Cancer and other malignant tumers of the stomach, liver | 7 | 154 | 1,177 | 149 | 10 | 142 | 1,115 | 220 |
| Cancer and other malignant tumors of the peritonaeum, intestines, rectum | 4 | 52 | 243 | 33 | 5 | 56 | 227 | 44 |
| Cancer and other malignant tumors of the female genital organs..... |  | 52 | 196 | 30 | 5 | 54 | 188 | 34 |
| Cancer and other malignant-tumors of the breast |  | 49 | 145 | 19 | 5 | 45 | 138 | 26 |
| Cancer and other malignant tumors of the skin |  | 7 | 23 | 4 |  | 7 | 19 | 8 |
| Cancer and other malignant tumors |  |  |  |  |  |  |  |  |
| not specified (tumors of the fe- | . 16 | 38 | 179 | 25 | 19 | 38 | 175 | 26 |
| Acute articular rheumatism........ | 31 | 15 | 107 | 9 | 45 | 13 | 92 | 12 |
|  | 18 | 33 | 172 | 22 | 26 | 35 | 156 | 28 |
| Scurvy $\begin{aligned} & \text { Sint.......................... } \\ & \text { Diabetes }\end{aligned}$ | 1 |  | ${ }^{1}$ |  | 1 |  | 323 |  |
|  | 48 | 83 | 351 | $\stackrel{43}{7}$ | 55 | 86 | $\begin{array}{r}323 \\ 42 \\ \hline\end{array}$ | 61 |
| Diabetes ............. | 8 | 13 | 47 | 7 | 13 | 14 | 42 | \% |
| Exophthalmic goitre | ${ }_{10}^{2}$ | ${ }_{11}^{4}$ | 48 | 1 | ${ }_{11}^{3}$ | + 12 | $\begin{array}{r}7 \\ 45 \\ \hline\end{array}$ | ${ }_{6}$ |
| Addison's disease | 10 | 11 | 48 | 5 | 11 | 12 59 | 171 | ${ }^{6}$ |
| Other general diseases ............. | 35 | 59 | 180 | 17 | 36 | 59 | 171 9 | 1 |
|  | 12 | 3 | 9 | 2 | 12 | 4 |  | 1 |

'TABLE NO. 32.-SHOWING DEATHS FROM EACH DISEASE, BY COLOR, SEX, CONJUGAL CONDITION AND NATIVITY.-CCont.


TABLE NO. 32.-SHOWING DEATHS FROM EACH DISEASE, BY COLOR, SEX, CONJUGAL CONDITION AND NATIVITY.--Cont.


TABLE NO. 32.-SHOWING DEATHS FROM EACH DISEASE, BY COLOR, SEX, CONJUGAL CONDITION AND NATIVITY.-Cont.

|  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

TABLE NO. 33-SHOWLNG DEATHS IN CITIES DURING THE CALENDAR YEAR OF 1909 ARRANGED ACCORDING TO AGE GROUPS

| Cities. |  |  |  | Important Ages. |  |  | Important Causes or Death. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | Other tuberculosis. | $\begin{aligned} & \dot{0} \\ & \text { O } \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  |  | Whooping cough. |  |  |  |  |  | $\begin{aligned} & \dot{\ddot{0}} \\ & \ddot{\ddot{U}} \\ & \text { ت} \end{aligned}$ | $\begin{aligned} & \stackrel{8}{0} \\ & \text { d } \\ & 0 \\ & 0 \end{aligned}$ |  |
| Cities over 50,000 . Milwaukee | 335,056 | 4,896 | 14.6 | 1,302 | 503 | 927 | 344 | 57 | 80. | 111 | 192 | 38 | 20 | 499 | 418 | 77 | 25 | 13 | 229 | 279 | 368 |
| Cities from .25,000 to 50,000. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Superior $\qquad$ <br> Bacine | 40,919 | 413 | 10.1 | 82 | 41 | 47 | 36 | 11 | 13 | 8 | 19 |  | 8 | 42 | 15 | 14 |  | 3 | 14 |  |  |
| Racine Oshkosh $\ldots \ldots . . . . . . . . . . . . . ~$ | 34,842 32,407 | 438 399 | 12.5 12.3 | 82 | 33 16 | 111 | 41 | 16 | $\begin{array}{r}13 \\ 7 \\ \hline\end{array}$ | ${ }_{6}$ | 2 | 2 | . | 45 | 21 | 16 | 9 | 3 | 16 | 45 23 | 25 28 |
| Oshosh La Crosse | 32,407 29,226 | 399 363 | 12.3 12.4 | 72 51 51 | 16 9 | 138 | 33 36 | 10 4 | 7 | 4 |  | .... | 1 | 40 | 15 | 4 |  |  | 26 | 14 | 24 |
| Madison | 28,409 | 286 | 10.1 | ${ }_{38} 8$ | 18 | $\begin{array}{r}113 \\ 93 \\ \hline\end{array}$ | ${ }_{20}^{36}$ | $\stackrel{4}{2}$ | 5 | 1 | 2 | 1 |  | 32 27 | 4 | 3 |  | 1 | 24 | 32 | 19 |
| Green Bay | 27,504 | 476 | 17.3 | $\stackrel{38}{ } 136$ | 28 | 102 | 43 | 11 | 7 | 15 | 3 |  |  | 50 | 20 | ${ }_{23}^{4}$ |  | 1 2 | 10 23 | 30 21 | 10 18 |
| $\begin{gathered} \text { Cities } \\ 25,000 . \end{gathered} \text { from } 10,000 \text { to }$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Eau Claire .......... | 19,713 | 263 | 13.3 | 23 | 15 | 69 | 37 | 8 | 8 | 2 | 2 | 1 |  | 26 |  |  |  |  |  |  |  |
| Kenosha ..... | 19,939 | 230 | 11.5 | 80 | 18 | 38 | 14. | 1 | 4 | 1 | $\ldots$ | 1 |  | 30 | 21 | 6 | 1 | 2 | 17 3 | 18 5 | 11 6 |
| Fond du Lac. | 19,024 | 271 | 14.2 | 51 | 14 | 82 | 21. | 1 | 2 | 5 | 2 |  | 3 | 22 | 14 | 4 |  |  |  |  |  |
| Appleton ${ }^{\text {Sheboygan }}$ | 18,532 24,878 | 212 | 11.4 | 36 | 5 5 18 | 73 86 | 21 | 3 | 1 | ${ }_{2}$ |  |  | 3 | 15 | $\begin{array}{r}14 \\ 4 \\ \hline 1\end{array}$ | 2 | 1 |  | 19 9 | 10 9 | 14 18 |
| Whausau . . | 24,878 | 316 211 | 12.7 13.1 | 51 47 | 18 | 86 54 | 23 16 | 12 | 6 5 | $\begin{array}{r}11 \\ 1 \\ \hline\end{array}$ | 2 |  | 2 | ${ }_{24}^{12}$ | 12 | 9 |  |  | 19 | 16 | 20 |
| Marinette | 15,354 | 174 | 11.3 | 55 | 10 | $\stackrel{54}{29}$ | 12 | 4 | 5 | 1 | 2 |  |  | 13 | 4 | ${ }_{3}^{2}$ |  | 1 | 15 9 | 5 | 11 |
| Ashland | 15,675 | 258 | 16.4 | 42 | 7 | 31 | 22 | 2 | 13 | 3 | 1 |  | 1 | 20 | 2 | 11 | 1 | 1 | 11. | 34 | 13 |
| Janesville | 14,238 | 218 | 15.3 | 30 | 5 | 87 | 10 | 4 | $\begin{array}{r}3 \\ 3 \\ \hline\end{array}$ |  |  |  |  | 12 | 5 | 5 | 3 |  | 15 | $\stackrel{34}{22}$ | 15 5 |
| Beloit | 14,791 13,489 | 176 169 | 11.8 | 19 34 | 9 | 65 | 11 | ${ }_{3}^{2}$ | 2 | 1 |  |  | 1 | 19 | 4 | 5 | 4 |  | 14 | - 6 | 14 |
| Manitowoc • ${ }_{\text {M, }}$ | 13,489 | 169 | 12,5 | 34 | 19 | 65 |  | 3 | 1 | 2 |  |  | 2 | 8 | 5 | $\stackrel{4}{4}$ | 1 |  | 8 | 5 | 17 |


| Cities from 5，000 to 10，000． |  |
| :---: | :---: |
|  | Antigo |
| Baraboo |  |
| Beaver Dam |  |
|  | Chippewa Falls． |
| Grand Rapids |  |
| Marshfield |  |
| Menasha |  |
| Menomonie |  |
| Merrill |  |
| Neen ${ }^{\text {a }}$ |  |
| Oconto |  |
| Platteville |  |
| Portage ． |  |
| Rhine］ander |  |
| So．Milwaukee |  |
| Stevens Point |  |
| Sturgeon Bay |  |
| Two Rivers ． |  |
| Watertown |  |
|  | Waukesha |

Cities from 3,000 to 5,000 Berlin
Cudahy
Cudahy
De Pere ．．．．．．
Hudson
Hudson
Kaukauna
Lake Geneva
Mineral Point
Monrne
New London
Oconomowo
Plymouth
Port Washington
Prairie du Chien
Rice Lake
Ripon
Sparta
Stoughton
Tomah
Washburn
Waupun
Whitewater


8
स
अ 3,508
4,911
3,504
4,911
3.504
3,220 3.520
4,091 4,991
4,141 4,141
3,460 3,460
4,541 4，541 3，210 3,121
3,168 3,168
4,856 \＆
＊
が
 かめ 4，007 4,896
3,114 3,114
4,924 4,924
3,111 3，160



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TABLE ŇO．33－SHOWING DEATHS IN ClTIES DURING THE CALENDAR YEAR OF 1909 ARRANGED ACCORDING TO AGE GROUPS
AND IMPORTANT CAUSES OF DEATH，FROMI MONTHLY REPORAS

| Cities． |  |  | $\begin{aligned} & \text { Annual death rate per } \\ & 1000 \text { estimated nopula- } \\ & \text { tion. } \end{aligned}$ | Important Ages． |  |  | Important Causes of Death． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  | $$ |  |  |  |  |  |  |  | $\begin{aligned} & \text { 上゙ } \\ & \text { E. } \\ & \text { E } \\ & \text { E } \end{aligned}$ |  | む． Ü تु | $\begin{aligned} & \text { © } \\ & \text { E } \\ & \vdots \\ & \hline \end{aligned}$ |  |
| Cities under 3，000． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Algoma <br> Alma | 2,224 1,172 |  |  | 7 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Alma ．．．． | 1,172 1,717 | 8 | 6.8 2.7 |  |  | ${ }_{3}^{3}$ | 2 |  |  |  |  |  |  | 1 |  | 1 |  |  |  | 2 | 2 |
| Augusta | 1，162 | 13 | 2.7 8.3 | 1 |  | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  | 1 | 1 |  |
| Barron ．．．． | 1，818 | 15 | 8.3 8.2 | 1 |  | 5 4 4 | 1 |  |  |  |  |  |  | 2 |  |  |  |  |  |  | 1 |
| Black River | 1，954 | 28 | 14.3 | 3 |  | ${ }_{13}^{4}$ |  |  |  |  | 1 |  |  | 2 |  |  |  | 1 |  | 1 |  |
| Boscobel Brodhead | 1，634 | 23 | 14.1 | 3 3 3 | ${ }_{3}^{3}$ | 11 |  | 1 | 1 |  | 2 |  | 1 | 3 | 1 |  | 1 |  | 3 | 2 | 1 |
| Bufialo． | 1,735 235 | ${ }^{22}$ | 12.6 | 2 |  | 12 | 3 | 1 | 1 |  | 2 |  |  | 4 |  | 2 | 1 |  | 1 |  |  |
| Burlington | 2，705 | 5 | ${ }_{21.4}$ | ${ }_{5}^{1}$ |  |  | 1 |  |  | 1 |  |  |  | 4 |  |  |  |  |  |  |  |
| Cedarburg | 1，724 | 31 31 | 17.9 17.9 | 5 2 | $\stackrel{2}{1}$ | 24 14 | 4 | 1 |  |  |  |  |  | 2 | 2 |  |  |  |  |  | ${ }_{3}^{1}$ |
| Chetek <br> Chilton | － 890 | 11 | 12.3 | 3 | 1 | $\begin{array}{r}14 \\ 2 \\ \hline\end{array}$ | 1 |  | 1 |  | 1 |  |  |  | 1 |  | 1 |  | 1 | 4 | 3 |
| Clintonville | 1，384 | $\stackrel{1}{21}$ | 6.2 10.6 | 1 |  | 4 |  |  |  |  |  |  |  | 2 |  |  | 1 |  |  |  | 1 |
| Colby | 1，074 | 5 | 10.6 4.6 | 2 |  | 8 | 1 |  | 2 | 1 |  |  |  | 1 |  |  |  |  | 1 |  |  |
| Columbus | 2，420 | 31 | 12.8 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 | 5 |
| Cumberland | 1，625 | 12 | 7.8 | ${ }_{3}^{1}$ | 1 | 16 2 | 1 |  |  |  |  |  |  | 1 | 1 | 1 | 1 |  | 4 | 1 |  |
| Darlington <br> Ielavan | 1,871 2,381 | 29 | 15.5 |  |  | 14 | 1 |  | 1 |  |  |  |  |  | 2 |  |  |  | 1 | 1 |  |
| Delavan． | 2,381 2,380 | 23 20 | 7.8 8.6 8.4 | 2 | 1 | 10 | 3 | $\cdots$ | 1 |  |  |  |  | 1 | －1 |  | 2 |  | 5 | 1 | 2 |
| Durand．．． | 1，380 | 17 | 8．4 |  |  | 9 | 1 | 1 |  |  |  |  |  | 1 | 1 |  | 1 |  | 1 | 1 |  |
| Edgerton | 2，596 | 24 | 12.5 9.2 | 5 | 1 | ${ }_{9}^{6}$ | 1 | 1 |  |  |  |  |  | 2 |  |  | 2 |  | 1 | 1 | 2 |
| Elkhorn | 1，886 | 21 | 11.1 |  |  | 15 |  |  |  |  |  |  |  | 1 |  |  |  |  | 1 |  | 4 |
| Elroy | 2，271 | 22 | 9.7 | 4 |  | 6 | 3 |  |  |  |  |  |  | 1 |  |  | 1 |  | ， |  |  |


| Evansville | 2,043 | 25 | 12.2 | 5 |  | 15 | 2 |  |  |  |  |  | ... | 1 | 1 | . | . ..... | . | 1 |  | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fountain City | 1,008 | 12 | 11.9 |  |  | 6 | 1 |  |  |  |  |  |  | 2 |  |  |  |  | 2 |  |  |
| Glenwood ..... | 905 | 9 | 9.9 | 3 |  | 2 | 1 |  |  |  |  |  |  |  |  | 1 |  |  |  |  | 1 |
| Greenwood | 687 | 2 | 2.9 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hartford | 2,388 | 23 | 9.6 | 4 | 2 | 10 | 1 |  |  |  |  |  |  | 4 | 1 |  |  |  | 3 |  | 1 |
| Horicon | 1,701 | 2 | 11.7 |  |  | 2 |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |
| Jefferson | 2,572 | 41 | 15.9 | 5 |  | 15 | 3 | 1 |  |  |  |  |  | 1 |  | 2 |  |  | 5 | 4 | 1 |
| Juneau | 988 | 12 | 12.1 |  |  | 7 | 1 | 1 |  |  |  |  |  |  |  | 1 | 1 |  |  |  |  |
| Kewaunee | 1,719 | 30 | 17.4 | 11 | 1 | 9 | 2 | 1 |  |  |  |  | 1 | 5 |  |  |  |  | 1 | 2 | 1 |
| Ladysmith | 1,720 | 24 | 13.9 | 4 | 4 | 2 |  |  | 2 |  |  |  |  |  |  | 2 |  |  | 1 | 3 | 2 |
| Lake Mills | 1,774 | 15 | 8.4 | 4 |  | 8 |  |  |  |  |  |  |  |  | 3 |  | 1 |  | 1 |  | 1 |
| Lancaster | 2,675 | 39 | 14.5 |  | 4 | 28 |  |  |  |  |  |  |  | 7 |  | 2 | 1 |  | 5 |  | ...... |
| Mauston | 1,969 | 31 | 15.6 | 6 | 2 | 15 |  |  | 1 |  |  |  |  | 4 | 1 |  |  |  |  | 4 | 1 |
| Mayville | 1,793 | 32 | 17.8 | 6 | 7 | 11 | 1 |  |  |  | 2 | 1 | 1 |  | 1 | 2 |  | 1 | 3 | 2 |  |
| Medford | 2;055 | 18 | 8.8 | 1 | 4 | 5 |  |  |  |  |  | 1 |  | 1 |  |  |  |  | 2 | 2 |  |
| Mondovi | 1,642 | 16 | 9.7 | 1 | 2 | 7 | 1 |  |  |  |  |  |  | 3 |  |  |  |  |  | 1 | 1 |
| Neillsville | 2,129 | 37 | 17.3 | 3 |  | 13 | 2 | 1 |  |  |  |  |  | 4 |  |  | 2 |  | 2 | 4 | 2 |
| New Lisbon | 1,159 | 13 | 11.2 | 5 |  | 5 | 1 |  |  |  |  |  |  | 3 |  |  | 1 |  |  |  |  |
| New Richmond | 1,980 | 17 | 8.6 | 5 |  | 7 |  |  |  |  |  |  |  |  |  | 1 |  |  | 2 |  | 2 |
| Onalaska | 1,106 | 8 | 7.2 | 1 |  | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Peshtigo | 2,539 | 27 | 10.5 | 5 | 1 | 10 | 3 |  | 1 |  |  |  |  | 2 |  | 1 |  |  | 2 | 1 | 5 |
| Phillips . | 2,163 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pittsville | 546 | 3 | 5.5 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  | 2 |  |
| Prescott | 889 | 15 | 16.8 | 3 | 3 | 6 | 1 |  |  |  |  |  |  | 2 | 1 | 1 |  |  |  | i | 2 |
| Reedsburg ... | 2,747 | 34 | 12.3 | 3 | 2 | 13 | 2 |  | 2 |  |  |  |  | 2 | 3 |  |  |  |  | 1 | 3 |
| Richland Center | 2,887 | 30 | 10.3 | 2 | 5 | 13 |  | 1 |  |  |  |  |  | 6 |  |  | 1 |  | 1 | i | 1 |
| River Falls | 2,532 | 32 | 12.6 | 4 | 1 | 13 | 1 | 1 | 1 |  |  |  |  | 1 | 1 |  |  |  | 3 | 1 |  |
| Seymour | 1,190 | 10 | 8.4 | 1 |  | 6 |  | 1 |  |  |  |  |  |  |  |  |  |  | 1 | 1 |  |
| Shawano | 2,914 | 42 | 14.4 | 8 | 3 | 12 | 1 | 1 | 1 |  | 4 |  |  | 6 | 1 | 1 |  |  | 4 |  | 2 |
| Shullsburg | 1,153 | . 20 | 17.3 | 3 |  | 10 | 3 |  |  |  |  |  |  | 3 |  |  |  |  | 2 | 1 | 1 |
| Stanley ... | 2,980 | 26 | 8.1 | 7 | 7 | 6 |  | 1 |  |  |  | 1 |  | 5 | 1 |  |  |  | 2 | 1 |  |
| Tomahawk | 2,894 | 47 | 16.2 | 13 | 1 | 6 | 3 |  |  |  |  |  |  | 6 | 2 |  |  |  | 2 | 5 | 1 |
| Viroqua. | 2,096 | 25 | 11.9 | 1 | 1 | 13 | 3 |  |  |  |  |  | ...... ! | 6 |  |  |  |  | 2 |  | 1 |
| Waupaca | 2,873 | 39 | 13.5 | 6 | 1 | 16 | 1 |  | 1 |  |  |  |  | 4 |  | 1 | 1 |  |  | 1 | 3 |
| Wauwatosa | 2,913 | 35 | 12.1 | 3 |  | 17 | 1 |  |  |  |  |  |  | 3 | 2 | 1 |  |  | 1 | 2 | 4 |
| West Allis | 2,306 | 55 | 23.8 | 23 | 4 | 8 | 4 |  |  |  |  | 1 |  | 6 | 10 | - |  |  | 1 | 6 | 3 |
| West Bend | 2,558 | 31 | 12.1 | 4 | 2 | 15 |  | 1 |  |  |  |  |  | 7 | 1 | 1 | 2 |  | 1 | 1 |  |
| Total | 055,677 | 13,817 | 13.1 | 2,949 | 987 | 3,614 | 1,022 | 212 | 243 | 207 | 259 | 56 |  | 1,277 | 686 | 284 | 88 | 37 | 712 | 774 | 813 |

TABLE NO. 34-SHOWING DEATHS IN CLTIES DURLNG THE CALENDAR YEAR OF 1910 ARRANGED AOCORDING TO AGE GROUPS AN IMPORTANT CACSES OF DEATH FROM MONTHLY REPORTS.


Cities from 3,000 to 5,000 ． Berlin
Burlington
Cudahy
Fet．Atkinso
Kaukaun
Lake Geneva
Monroe
New London
Oconomowo
Platteville
Plymouth
Port Washington．
Prairie du Chien．
Rice Lake
Ripon
Sparta ．．
Sturgeon Bay
Tomah
Two Rivers
Washburn
Waupun
Wauwatosa
Whitewater

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TABLE NO．34．SHOWING DEATHS IN CITIES DURING THE CALENDAR YEAR OF 1910 ARRANGED ACCORDING TO AGE GROUPS AND IMPORTANT CAUSES OF DEATH FROM MONTHLY REPORTS－Continued．

|  | ت゙ |  |  | Important ages． |  |  | Important causes of death． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cities． |  |  |  | $\stackrel{\oplus}{3}$ <br>  |  |  |  |  | $\begin{aligned} & \dot{0} \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 2 \\ & E \end{aligned}$ |  |  |  |  |  |  |  | $\begin{aligned} & \text { ๗゙ } \\ & \text { gi } \\ & \stackrel{\Xi}{\Xi} \\ & \end{aligned}$ |  | 䔍 |  | 管 |
| Cities under 3,000 ． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Algoma ．．．．．．． | 2，082 | 20 | 9.6 | 6 | 1 | 6 | 2 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |
| ${ }_{\text {Alma }}^{\text {Altoona }}$ | 1，011 | 10 4 | 9.8 4.8 | 2 |  | 2 |  | 1 |  |  | 1 |  |  | 2 | 1 | 1 |  |  | 2 | 1 | 1 |
| Augusta | 1，405 | 15 | 4.8 10.6 | 2 | 1 | $\stackrel{2}{5}$ | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Barron ．．．．．．．．．．．．．． | 1，449 | 23 | 15.8 | 2 | 2 | 8 | 1 |  | 1 | 1 |  |  |  | 1 |  |  |  |  | 1 |  |  |
| Black River F＇alls．． | 1，917 | 24 | 12.5 | 4 | 1 | 10 | 3 | 1 | 2 |  |  |  |  | 3 |  |  |  |  | 3 | 1 |  |
| Boscobel ．．．．．．．．． | 1，525 | 30 | 19.6 | 4 |  | 14 | 3 | 1 |  |  |  |  |  |  |  |  |  |  | 1 | 1 |  |
| Brodhead | 1，517 | 22 | 14.5 | 3 |  | 14 | ${ }^{3}$ |  |  |  |  |  |  |  | 1 |  |  |  | 1 | 2 | 1 |
| Buffalo ．．． | ${ }_{1}^{255}$ | 5 | 19.6 | ， | i |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  | 2 |  |
| Chetek | 1，777 | 18 | 10.1 |  |  | 9 |  |  | 1 |  |  |  |  | 2 |  | 1 |  |  | 2 | 2 |  |
| Orandon ${ }^{\text {－}}$ | 1829 1,833 | 11 | 13.2 8.1 | 1 | 1 | 4 |  |  |  |  |  |  |  | 1 |  |  |  | 1 | 2 | 2 | 1 |
| Chilton | 1，530 | 18 | 11.7 | 6 | 1 | 3 |  |  |  |  |  |  |  | 1 | 2 | 1 |  |  |  | 2 | 2 |
| Clintonville | 1，747 | 19 | 10.8 | 5 |  | 8 | 2 |  |  |  |  |  |  | 1 | 2 |  |  |  | 2 |  | 1 |
| Colby ．．． | 869 | 13 | 14.9 | 2 | 2 | 3 |  |  |  |  |  |  | 2 | 5 |  |  |  |  |  | 2 | 3 |
| Oolumbus | 2，523 | 47 | 18.6 | 4 | 2 | 25 |  |  |  |  |  |  |  | $\stackrel{2}{3}$ |  |  |  |  | 1 | 1 | 1 |
| Cumberland | 1，445 | 18 | 12.4 | 2 | 4 | $\begin{array}{r}45 \\ 4 \\ \hline\end{array}$ | 1 |  | 1 |  |  |  |  | $\stackrel{3}{3}$ |  |  |  |  | 5 | 1 |  |
| Darlington | 1，808 | 33 | 18.2 | 3 | 1 | 19 | 1 |  | 1 |  |  |  | 1 | $\stackrel{3}{2}$ | 1 |  |  |  | 1 | 1 |  |
| Delavan Dodgevil | 2，450 | 31 | 12.6 | 4 | 2 | 14 |  |  | 1 |  |  |  |  | 2 | 1 |  |  |  | $\stackrel{2}{2}$ | 3 |  |
| Dodgeville ．．．．．．．．． | 1，791 | 21 | 11.7 |  |  | 6 | 4 |  |  |  |  |  |  |  |  |  |  |  | 2 | 1 | 1 |
| Edgerton | 1，513 | ${ }_{38}$ | 8.6 15.1 | 1 | 1 | 5 | 3 | 1 | 1 |  |  |  |  | 1 |  |  | 2 |  |  | 1 |  |
| Elkhorn | 1，707 | 19 | 11.1 |  | 1 | 11 |  |  |  | 1 |  |  |  |  | 2 |  |  |  | 2 | 2 | 1 |
| Elroy | 1，729 | 16 | 9.2 | 1 |  | 9 |  |  |  | 1 |  |  |  |  | 1 |  |  |  |  | 1 |  |
| Evansville ．．．．．．．．． | 2，061 | 30 | 14.5 | 2 | 1 | 16 |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |  |
| Fountain City ．．．．． | 1,031 <br> 954 | 14 9 | 13.5 9.4 |  |  | 13 | 4 |  |  |  |  |  |  | 3 |  |  |  |  | 1 | 1 |  |
| Glenwood | 954 |  | 9.4 | 2 |  | 4 |  |  |  |  |  |  |  | 2 |  |  |  |  | 3 | 1 | 2 |


| Greenwood | 665 | 10 | 15. | 5 | I | 2 |  |  |  |  |  |  |  |  |  |  | 2 1 |  |  |  | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hartford | 2,982 | 24 | 8. | 5 | 1 | 10 | 3 | 1 |  |  |  |  |  | 6 | 2 |  | 1 |  | 1 | $\cdots$ | 2 2 |
| Horicon | 1,881 | 31 | 11.1 | 5 | 2 | 11 | 3 |  | 1 |  |  | 1 |  | 4 |  |  |  |  | 1 3 3 | 3 |  |
| Hudson | 2,810 | 35 | 12.4 | 7 | 1 | 16 | 2 |  |  |  |  |  | 1 | 3 | 3 1 | 1 |  |  | 3 3 |  | 3 2 |
| Jefferson | 2,582 | 39 | 15.1 | 4 |  | 20 | 6 | 1 |  |  | 1 |  |  | 2 | 1 |  |  |  | 3 1 | 2 | 2 1 |
| Juneau | 1,003 | 15 | 14.9 | 2 |  | 7 |  |  |  |  |  |  |  |  |  |  |  |  | 1 | 3 | 1 |
| Kewaunee | 1,839 | 27 | 14.6 | 4 | 2 | 10 | 1 |  |  |  | 4 |  |  |  |  | 1 |  |  | 2 | 5 | 1 |
| Ladysmith | 2,352 | 29 | 12.3 | 7 | 2 | 5 | 2 |  | 1 | 1 |  |  |  | 8 | 2 1 | 1 |  |  | 2 | 1 |  |
| Lake Mills | 1,672 | 39 | 23.3 | 6 |  | 21 | 3 |  |  |  |  |  |  | 8 |  |  |  |  | 3 | 1 | 1 |
| Lancaster | 2,329 | 38 | 16.3 | 3 | 1 | 23 | 4 |  |  |  |  | 1 |  | 2 |  |  |  |  | 3 | 1 | 1 |
| Mauston | 1,701 | 32 | 18.8 | 7 |  | 13 | 1 | 1 |  |  |  |  |  | 2 | 4 |  |  |  | ...... | 1 | $\ddot{2}$ |
| Mayville | 2,282 | 20 | 8.7 | 5 | 2 | 7 | 1 |  |  |  |  |  |  | 1 | 1 |  | 1 | 1 | [ 1 | 2 | 1 |
| Medford | 1,846 | 20 | 10.7 | 5 |  | 2 | 2 |  |  | 1 |  |  |  |  | 3 |  | 1 | 1 |  | 6 |  |
| Mellen | 1,833 | 28 | 15.2 | 7 |  | 1 |  | 11 |  |  |  |  |  |  | 3 |  |  | 1 | 2 | 4 | 1 |
| Mineral Point | 2,925 | 42 | 14.3 | 9 | 1 | 15 | 4 |  |  | 1 |  |  |  | 4 |  |  |  |  | I | 1 | 1 |
| Mondovi | 1,325 | 14 | 10.5 | 3 |  | 6 | 1. |  |  |  |  |  |  |  |  |  |  | 1 | 1 | 1 | 1 |
| Neillsville | 1,957 | 34 | 17.3 | 4 | 2 | 13 | 5 |  |  |  | . |  |  | 5 |  |  |  | 1 | 2 | 2 | 3 |
| New Lisbon | 1,074 | 12 | 11.1 |  |  | 9 |  | 1 |  |  |  |  |  |  |  |  |  |  | 2 | 1 |  |
| New Richmond | 1,988 | 26 | 13. | 3 | 3 | 13 | 1 |  |  |  | 2 |  |  | 1 |  |  |  |  | 2 |  |  |
| Onalaska | 1,146 | 11 | 9.5 | 3 |  | 5 |  |  |  |  |  |  |  |  | 1 | 1 | 1 |  | 2 | 2 | 2 |
| Peshtigo | 1,975 | 28 | 14.1 | 4 | 1 | 7 | 6 | 1 | 1 |  |  |  |  |  | 1 | 1 |  |  |  |  |  |
| Phillips . | 1,948 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pittsville | 450 | 5 | 11.1 | 2 |  | 2 |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  |  |
| Prescott | 936 | 16 | 17. | 1 | 1 | 6 |  |  |  |  |  |  |  | 3 |  | 1 |  |  | 6 |  | 3 |
| Reedsburg | 2,615 | 48 | 18.3 | 6 | 1 | 26 | 1 | 1 |  |  |  |  |  | 1 |  |  | 1 |  | 5 | $\cdots$ | 3 |
| Richland Center | 2,652 | 36 | 13.5 | 2 |  | 20 | 3 | 2 |  |  |  |  |  |  |  | 1 |  |  | 1 |  | 1 |
| River Falls | 1,991 | 30 | 1.5 | 2 | 1 | 16 | 2 | 1 |  |  |  |  |  | 2 |  | 1 |  |  | 1 |  | 1 |
| Seymour | 1,109 | 4 | 3.6 |  | 1 | 2 |  |  |  |  |  |  |  |  | - $\quad 1$ |  | 1 |  | 3 | 4 | 3 |
| Shawano | 2,923 | 37 | 12.6 | 8 | 1 | 10 | 5 |  | 1 |  |  |  |  | 2 | 2 |  | 1 |  | 2 |  | 3 |
| Shullsburg | 1,063 | 14 | 13.1 |  |  | 11 | 2 |  |  |  |  |  |  |  |  | 1 | 1 |  |  |  |  |
| Spooner | 1,453 | 24 | 16.5 | 7 | 3 | 4 | 2 |  |  |  |  |  |  | 3 7 | 2 | 1 | 1 |  |  | 1 | 1 |
| Stanley | 2,675 | 34 | 12.7 | 10 | 3 | 5 |  |  |  |  |  |  |  | 7 4 | 3 2 | 1 |  |  | 2 2 | 2 | 1 |
| Tomahawk | 2,907 | 34 | 11.6 | 9 | 4 | 8 | 1 |  | 1 |  | 3 | 1 |  | 4 | 2 | 1 |  |  | 2 | 1 | 2 |
| Viroqua | 2,059 | 24 | 11.1 | 1 | 2 | 15 | 2 |  |  |  | 1 |  |  | 5 |  |  |  |  |  | 1 | 2 |
| Waupaca | 2,789 | 34 | 12.1 | 2 | 7 | 14 | 2 |  |  |  |  |  |  | 1 |  | 2 |  |  | 6 | 1 | 3 |
| West Bend | 2,462 | 35 | 14.2 | 5 | 1 | 12 | 1 |  | 2 |  | 2 |  |  | 4 | 1 | 2 |  |  | 6 | 1 |  |
| Total | ,083,708 | 14,795 | 13.6 | 3,131 | 976 | 3,826 | 1,068 | 193 | 386 | 231 | 175 | 58 | 72 | 1,402 | 789 | 295 | 70 | 53 | 800 | 875 | 792 |

TABLE NO. 35-SHOWING DEATHS UNDER ONE YEAR OF AGE BY COUNTIES AND DEATH RATE PER 1,000 BIRTHS.

| County. | Total birth. 1908 | Deaths under 1 year 1908 | Death rate per 1,000 births. | Total births 1909 | Deaths under 1 yeas 1909 | Death rate per 1,000 births. | Total births 1910 | Deaths under 1 year 1910 | Death rate per 1,000 births. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Adams | 197 |  |  |  |  |  |  |  |  |
| Ashland | 553 | 16 61 | 81.2 110.3 | 201 | 12 | 55.2 | 173 | 15 | 86.7 |
| Barron ${ }^{\text {Bayfield }}$. | 656 | 61 | 110.3 92.9 | 499 673 | 71 | 142. | 488 | 66 | 80.7 122.4 |
| Bayfield | +254 | 26 | 102.3 | 673 298 | 72 39 | 106.9 | 725 | 77 | 106.2 |
| Buffalo | 1,508 319 | 227 | 145.6 | 1,367 | 227 | 133.3 | 325 | 46 | 141.3 |
| Burnett | 207 | 40 24 | 125. | -289 | 21 | 166.2 | 1492 324 | 222 28 | 148.7 |
| Calumet | 402 | 24 24 | 111.1 59.7 | 173 | 25 | 145.1 | 187 | 18 | 95.9 100. |
| Chippewa | 583 | 62 | 59.7 106.3 | 396 | - 59 | 120. | 382 | 21 | 104.9 |
| Clark ... | 850 | 62 | 106.3 72.9 | 555 725 | 75 | 135.1 | 585 | 77 | 131.6 |
| Columbia | 598 | 39 | 72.9 66.6 | 725 573 | 71 | 97.9 | 653 | 63 | 196.4 |
| Crawford | 399 | 30 | 66.6 88.2 | 573 370 | 51 | 89. | 610 | 47 | 77. |
| Dane | 1,384 | 119 | 88.2 86.7 | 370 1,436 | 40 139 | 108. | 312 | 36 | 112.1 |
| Dodge | 1,384 974 | 19 69 | 86.7 71.8 | 1,436 950 | 139 84 | 97.2 | 1,550 | 133 | 85.8 |
| Door .. | 519 | 41 | 76.9 | 9559 | 84 51 | 88.4 110.8 | 1,003 | 105 | 104.6 |
| Douglas | 1,018 | 109 | 107.8 | 459 922 | 51 102 | 110.8 110.6 | 517 816 | 44 | 85.1 |
| Dunn Claire | 500 582 | 50 | 100.0 | 498 | 102 | 110.6 | 816 | 104 | 127.4 |
| Florence .. | 582 57 | 26 | 44.2 | 541 | 50 | 112.4 | 490 590 | 41 | 83.6 |
| Fond du Lac. | 1,216 | 4 100 | 70.1 81.9 | 57 | 5 | 87.7 | 590 64 | 39 5 | 67.6 |
| Forest . . | 1,216 | 100 | 81.9 86.9 | 1,063 | 123 | 114.6 | 1,126 | 98 | 78.1 89.8 |
| Grant | 906 | 78 | 86.9 87.9 | 188 | 23 | 121. | 162 | 19 | 123.4 |
| Green ...... | 409 | 34 | 87.9 82.9 | 835 | 77 | 92.2 | 846 | 73 | 123.4 86.2 |
| Green Lake | 310 | 44 | 82.9 141.9 | 451 311 | 37 37 | 82. | 407 | 30 | 73.7 |
| Iowa .. | 451 | 46 | 101.9 | 311 387 | 37 33 | 128.6 | 324 | 23 | 70.9 |
| Iron ... | 208 | 31 | 142.8 | 181 | 33 33 | 85.2 182.3 | 444 | 47 | 105.8 |
| Jefferson | 330 687 | 39 | 121.2 | 326 | 33 27 | 182.3 90.9 | 188 | 29 | 157.8 |
| Juneau . | 687 342 | 46 | 66.9 | 568 | 52 | 91.2 | 298 576 | 33 | 113. |
| Kenosha | 867 | 32 97 | 122.2 | 342 | 56 | 163.7 | 329 | 34 | 105.9 |
| Kewaunee | 449 | 97 52 | 114.9 115.5 | 903 | 110 | 121.7 | 959 | 34 113 | 103.3 117.7 |
| La Crosse | 880 | 57 | 115.5 64.7 | 462 889 | 49 | 108.2 | 413 | 43 | 141.1 |
| Lafayette ....... | 464 | 27 | 64.7 58.1 | 889 432 | 76 28 | 89.8 69.4 | 944 | 75 | 149.4 |
| Langlade ........ | 455 | 46 | 101. | 432 432 | 28 39 | 69.4 92.5 | 408 | 34 | 83. |
|  |  |  |  | 43 | 39 | 92.5 | 451 | 46 | 101.9 |



# FOURTH BIENNIAL REPORT 

OF THE

## State Hygienic Laboratory <br> From Jan. 1, 1909, to Dec. 31, 1910.

M. P. RAVENEL, M. D., Director.

KARL SMITH, Bacteriologist.
E. J. TULLY, Chemist.

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22-\mathrm{V}, \mathrm{~S},
$$

## REPORT OF THE STATE HYGIENIC LABORATORY.

The tabulation by Counties shows that the work of the Hygienic Laboratory is very evenly distributed throughout the state. This is true at least as regards population. Naturally, more specimens are received from more densely populated counties than from those in the far north where the population is not so great, and there are fewer towns. In some cities, as for example Milwaukee, La Crosse, and Superior, Municipal Laboratories are supported. Consequently, many of the specimens which would otherwise come to the State Laboratory are done locally. This accounts for the comparatively small number of cases coming from these large centers.

The total number of cases for the Biennium of 1906-1908 were 2757; for this Biennium the number is 5943 . (These calculations are from July 1 to July 1, but are approximately the same as though made from October to October). This increase in the number of cases sent to the Laboratory is very gratifying, and shows that the efforts which are being made to accomodate the physicians, health officers, and veterinarians of the state are meeting with response on their part.

In November 1909, the administration of the Pasteur treatment was begun. The vaccine is given by the Laboratory of Hygiene, Public Health Service, Washington, D. C. It is prepared for injection at the Laboratory, and the injections are made by a physician employed by the State Board of Health. During this period of time 122 have been treated. All have been successful with the exception of one, a little Indian girl who died on the tenth day of treatment. In this case, the period of incubation was very short, one of the shortest on record. Her bites were very severe, lascerating the side of the face, and under the jaw, and going down to the bone. Another patient bitten by this same dog received the treatment, and was not affected with the disease.

## DIPHTHERIA.

Examination of the figures by months shows very clearly the influence of warm weather on diphtheria. During the months of May,

June, July, and August, the examinations for diphtheria fall off a. great deal. Another inference may be drawn from these figures; namely, the influence of schools in spreading the disease. Beginning In September, in both years there was a marked increase in the number of examinations made. The maximum was reached during the winier months. These are the months when children come in closer contact with each other, and when they are less apt to be out playing in the fresh air.

## Tuberculosis.

Shows no seasonal distribution whatever. While the number of cases from month to mōnth varies, this is purely accidental, and has nothing whatever to ao with the weather. Unfortunately, the disease is with us all the year round. Containers, which are accepted by the United States Post Office authorities as being suitable, and allowed to pass through the mail as first-class matter, are now sent to physicians throughout the State without cost, and all physicians are urged to keep a supply of these packages on hand.

## Typhoid Fever.

Typhoid fever is entirely too prevalent during the entire year. As the disease is transmitted mainly through the water supply, the amount of typhoid fever in the State of Wisconsin demonstrates that the public water supplies of the State are not properly safeguarded. With the proper protection of the water supplies from contamination by sewage, typhoid fever would disappear from the state. It is true that a considerable number of cases are spread by milk, some by contact, and some by insects. Nevertheless, water remains to-day the chief source of infection in typhoid fever. Milk epidemics may generally be classed with the water borne cases, because in the great majority of such instances the contamination is due to the dilution of milk with contaminated water, or else washing the cans with water which is contaminated. The influence of typhoid carriers in spreading the disease has not been overlooked. The Laboratory has made a number of examinations for this purpose, but has so far failed to detect any carrier. There have been no outbreaks during the past two years of such character as to lead to the suspicion that they were spread by a carrier.

## Water.

Water examinations are made only at the request of health officers, except in such cases as seem to call for special investigation. The number of routine examinations is usually greater in the summer
months than during the rest of the year, although analyses are made throughout the entire twelve months. Special investigations are made in any month of the year, and may run up the figures for that particular time.

Miscellaneous.
Under the heading Miscellaneous, we class those examinations which, in the majority of cases, do not concern public health at all; such for example as the diagnosis of tumors, the analysis of urine, etc. The Laboratory makes these examinations for physicians throughout the state whenever possible. There is no significance to be attached to the monthly distribution of these cases.

## SPECIMENS EXAMINED DURING THE TWELVE MONTHS ENDING DEC. 31, 1909

 BY COUNTIES.\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{County.} \& \multicolumn{2}{|l|}{Diphtheria.} \& \multicolumn{2}{|l|}{Tuberculous sputum.} \& \multicolumn{2}{|l|}{Typhoid.} \& \multicolumn{2}{|l|}{Water.} \& \multicolumn{2}{|l|}{Rabies.} \& \multicolumn{2}{|l|}{\begin{tabular}{l}
Miscrl- \\
laneous.
\end{tabular}} \& \multirow[t]{2}{*}{} \\
\hline \& + \& - \& \(+\) \& \& + \& - \& + \& -- \& \& \& \(+\) \& -- \& \\
\hline Adams \& \& \& \& \& \& \& \& \& \& \& \& 2 \& 2 \\
\hline Ashland \& \& 6 \& 3 \& 7 \& \& 1 \& 3 \& 6 \& \& \& \& 1 \& 27 \\
\hline Barron \& 2 \& 2 \& \& \& \& 10 \& 1 \& 5 \& \& \& \& \& 20 \\
\hline Bayfield \& 3 \& 1 \& \& 1 \& \& \& \& 5 \& \& \& \& \& 10 \\
\hline Brown \& \& \& \begin{tabular}{l}
3 \\
1 \\
\hline
\end{tabular} \& 4 \& \& \& 3 \& 12 \& 7 \& \& \& \& 30 \\
\hline Buffalo \& 3 \& \& 1 \& \& \& 1 \& \& \& \& \& \& 2 \& 7 \\
\hline Calumet \& \& 1 \& \& 1 \& 1 \& \& \& \& 1 \& \& 1 \& 1 \& \(\stackrel{2}{5}\) \\
\hline Chippewa \& \& \& \& 1 \& \& \& \& \& 1 \& \& 1 \& 1 \& 5 \\
\hline Clark. \& \& \& \& 2 \& \& 1 \& \& 9 \& \& \& \& \& 12 \\
\hline Columbia \& \& \& 8 \& 18 \& 2 \& 1 \& 1 \& 9 \& \& \& \& 1 \& 40 \\
\hline Orawford \& \& 3 \& 4 \& 3 \& \& 1 \& \& 1 \& 1 \& \& 1 \& \& 14 \\
\hline Dane \& 91 \& 244 \& 62 \& 158 \& 15 \& 71 \& 1 \& 15 \& 6 \& \& 23 \& 50 \& 73 \\
\hline Dodge \& \& 2 \& 3 \& 22 \& 2 \& \& 2 \& 5 \& \& \& \& \& 53 \\
\hline Door .. \& 1 \& \& 1 \& 2 \& 1 \& 1 \& 2 \& 7 \& 1 \& \& \& \& 16 \\
\hline Douglas \& 4
6 \& 5
9 \& \& \& \& 1 \& \& \& \& \& \& \& 10 \\
\hline Eau ciaire \& 6 \& 9 \& 1 \& 16
1 \& 7 \& 18 \& \& 2 \& \& \& \& 2 \& 61 \\
\hline Florence \& \& \& \& \& \& \& \& 4 \& \& \& 1 \& \& 3
4 \\
\hline Fond du Lac \& \& \& 5 \& 25 \& i \& 2 \& 1 \& 8 \& 1 \& \& \& 2 \& \\
\hline Forest \& 5 \& 5 \& \& \& 2 \& 2 \& \& 2 \& \& \& \& \& 16 \\
\hline Grant \& 7 \& 13 \& 5 \& 10 \& 10 \& 12 \& \& 3 \& 5 \& \& 1 \& \& 66 \\
\hline Green .. \& \& 3 \& \& 3 \& 1 \& 4 \& 1 \& 5 \& 2 \& \& \& \& 19 \\
\hline Green Lake \& 2 \& 3 \& 3 \& 14 \& 1 \& 5 \& 1 \& 5 \& \& 1 \& \& \& 35 \\
\hline Iowa \& 2 \& 8 \& 1 \& 3 \& 1 \& 1 \& 3 \& 5 \& 1 \& 2 \& \& \& 25 \\
\hline Jackson \& \& \& \& \& \& \& \& \& \& \& \& \& \\
\hline Jefferson \& 26 \& 15 \& 26 \& 70 \& 4 \& 18 \& \& 6 \& 1 \& \& 1 \& 3 \& 170 \\
\hline Juneau \& 2 \& 1 \& 5 \& 7 \& 1 \& 3 \& \& 1 \& \& 1 \& \& 1 \& 22 \\
\hline \begin{tabular}{l}
Kenosha \\
Kewaunee
\end{tabular} \& 1 \& \& \& \& \& 1 \& \& 1 \& \& \& \& 1 \& \\
\hline La Crosse \& \& \& \& ...... \& 5 \& \& \(\cdots\)

2 \& 5 \& 3 \& 2 \& \& \& 10 <br>
\hline Lafayette \& \& \& \& \& 1 \& 1 \& 2 \& 5 \& \& 1 \& \& \& 15
8 <br>
\hline Langlade \& \& \& \& \& \& \& \& 6 \& 4 \& 1 \& \& \& 11 <br>
\hline Lincoln \& \& \& \& 1 \& \& $\ddot{3}$ \& \& 2 \& 4 \& 1 \& \& \& <br>
\hline Manitowoc \& 1 \& 3 \& \& 10 \& 6 \& 6 \& \& 4 \& \& \& \& 3 \& 33 <br>
\hline Marathon \& \& \& i \& 2 \& 3 \& 4 \& 3 \& 4 \& \& \& \& \& 17 <br>
\hline Marinette \& 8 \& 9 \& \& \& 1 \& 1 \& 5 \& 55 \& 5 \& 2 \& \& \& 86 <br>
\hline Marquette \& \& 1 \& \& $\stackrel{4}{4}$ \& \& \& \& \& \& \& \& \& 5 <br>
\hline Milwaukee \& \& .... \& 1 \& 2 \& 2 \& 9 \& 4 \& 4 \& 2 \& 2 \& \& 3 \& $\stackrel{29}{ }$ <br>
\hline Monroe \& \& \& 3 \& 3 \& 4 \& 13 \& \& 2 \& \& \& \& \& 25 <br>
\hline Oconto \& 19 \& 14 \& 5 \& 20 \& 1 \& \& \& 6 \& 9 \& 2 \& \& 3 \& 79 <br>
\hline Oneida ${ }^{\text {Outagamie }}$ \& \& \& \& 3 \& \& \& \& 3 \& \& \& \& 3 \& 9 <br>
\hline Outagamie \& 4 \& 3 \& 5 \& 9 \& 3 \& 8. \& \& \& 1 \& 2 \& \& 2 \& 37 <br>
\hline Ozaukee \& \& \& \& \& \& \& 1 \& \& \& \& \& \& 1 <br>
\hline Pepin \& \& \& 2 \& 7 \& \& \& \& \& \& \& \& \& <br>
\hline Pierce . \& 2 \& 1 \& 3 \& 6 \& 1 \& 2 \& 2 \& 4 \& 1 \& \& \& \& 22 <br>
\hline Polk . . \& 1 \& 4 \& \& 3 \& 7 \& 13 \& 1 \& 1 \& \& \& \& \& 30 <br>
\hline Portage \& 1 \& \& \& 6 \& \& \& \& 4 \& \& \& \& \& 11 <br>
\hline Price . \& 5 \& 4 \& \& \& \& \& \& 1 \& \& \& \& \& 10 <br>
\hline Racine \& 2 \& 4 \& 18 \& 23 \& 1 \& 3 \& 2 \& 2 \& \& \& 2 \& \& 57 <br>
\hline Richland \& 2 \& 2 \& 5 \& 10 \& \& 2 \& \& \& \& 1 \& \& \& 22 <br>
\hline Rock \& 3 \& 10 \& 6 \& 21 \& 9 \& 19 \& \& 12 \& 2 \& 1 \& \& 3 \& 86 <br>
\hline Rusk Stroix \& \& \& \& 2 \& \& \& \& 3 \& \& \& \& 4 \& 10 <br>
\hline St. Croix \& 3
22 \& $\stackrel{2}{73}$ \& 5

5 \& | 12 |
| :--- |
| 28 | \& \& \& \& 1 \& \& \& \& \& 25

146 <br>
\hline Sawyer \& \& '73 \& 5 \& 28 \& 3 \& 4 \& \& 7 \& 1 \& \& \& 3 \& 146 <br>
\hline Shawano \& \& \& 3 \& 7 \& 1 \& 3 \& \& 6 \& 6 \& 4 \& \& 1 \& 31 <br>
\hline Sheboygan \& \& 1 \& 2 \& 6 \& 15 \& 13 \& 2 \& - 14 \& \& \& \& 1 \& 54 <br>
\hline Taylor \& \& \& \& \& \& \& \& 2 \& \& \& \& \& 2 <br>
\hline Trempealeau \& 6 \& 6 \& 3 \& 9 \& \& \& \& 5 \& \& \& \& 1 \& 31 <br>
\hline Vernon .....: \& \& \& \& \& \& 4 \& \& 5 \& \& \& \& 1 \& 10 <br>
\hline Vilas \& \& \& \& \& \& \& \& 3 \& .... \& \& \& - \& 3 <br>
\hline
\end{tabular}

SPEOIMENS EXAMINED DURING THE TWELVE MONTHS ENDING DEC. 31, 1909, BY COUNTIES.-Continued.

| County'. | Diphtheria. |  | Tuberculous sputum. |  | Typhoid. |  | Water. |  | Rabies. |  | Miscellaneous |  | Total examin-ations. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | + | - | + | - | + | - | + | - | + | - | $+$ | - |  |
| Walworth . | 2. | 5 | 3 | 8 |  |  | 1 | 5 | 2 | 1 |  |  | 27 |
| Washburn . |  |  |  | 2 |  |  |  |  |  |  |  |  |  |
| Washington | 2 | 1 | 5 | 16 | 1 | 2 | 1 | 1 |  |  |  | 1 | 30 |
| Waukesha |  | 3 | 6 | 12 | 1 | 3 | 2 | 18 | 1 |  |  |  | 46. |
| Waupaca . | 1 |  | 6 | 9 | 1 | 1 | ..... | 2 | 2 | 1 | 1 | 2 | ${ }^{26}$ |
| Waushara |  | 3 |  | 1 |  |  |  | 2 |  |  |  |  | 18 |
| Winnebago | 3 |  |  | ${ }_{2}^{2}$ | 1 | 2 | 3 | 4 6 | 1 | 1 | $\ldots$ | 1 2 | ${ }^{18}$ |
| Wood | 4 | 2 | 1 | 3 |  |  | 1 | 6 |  |  |  | 2 |  |
| Total | 248 | 473 | 220 | 618 | 118 | 288 | 49 | 325 | 66 | 28 | 32 |  | 2565 |

SPEOMENS EXAMINED DURING THE I'WELVE MONTHS ENDING DEC. 31, 1909.

| :Months. | - Diph:3 theria. |  | Tuberculous sputum. |  | Typhoid. |  | Water. |  | Rabies. |  | ; Miscellaneous. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $+$ | - | $+$ | - | + | - | + | --- | + | - | + | - |  |
| January | 57 | 112 | 11 | 30 | 4 | 26 | 3 | 31 | 4 |  | 1 | 1 | 250 |
| February | 13 | 73 | 18 | 62 | 12 | 15 | 9 | 30 | 4 | 3 | 1 | 9 | 249 |
| March .. | 13 | 42 | 12 | 43 | 10 | 17 | 4 | 30 | 5 | 2 | 2 | 8 | 188 |
| April | 6 | 14 | 20 | 50 | 3 | 14 | - | 30 | 10 | 2 | 2 | 3 | 154 |
| May | 7 | 14 | 22 | 61 | 4 | 20 | 5 | 27 | 1 | 4 | 2 | 6 | 173 |
| June | 9 | 10 | 12 | 50 | 3 | 20 | 4 | 9 | 5 | 1 | 1 | 5 | 129 |
| July | 14 | 10 | 16 | 60 | 8 | 20 | 6 | 20 | 5 | 2 | 4 | 10 | 175 |
| August | 13 | 13 | 20 | 54 | 7 | 40 | 5 | 29 | 8 | 4 |  | 15 | ${ }_{21} 213$ |
| September | 22 | 17 | 30 | 35 | 22 | 33 | 6 | 30 | 9 | 3 | 2 | 10 | 219 |
| October .. | 32 | 42 | 22 | 65 | 20 | 34 | 4 | 40 | 3 | 2 | 9 | 15 | 288 |
| November | 25 | 22 | 22 | 53 | 12 | $\stackrel{27}{27}$ | 2 | 31 | 8 | 2 |  | 9 | ${ }_{2}^{213}$ |
| December | 37 | 104 | 15 | 55 | 13 | 22 | 1 | 18 | 4 | 3 | 3 | 9 | 284 |
| Total | 248 | 473 | 220 | 618 | 118 | 288 | 49 | 325 | 66 | 28 | 32 | 100 | 2,565 |



SPECIMENS EXAMINED DURING THE TWWELVE MONTHS ENDING DEC. 31, 1910, BY COUNTIES.—Oontinued.

| County. | Diphtheria. |  | Tuberculous sputum. |  | Typhoid. |  | Water. |  | Rabies. |  | Miscellaneous. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | + | - | + | - | + | - | + |  | $+$ | - | + |  |  |
| Vilas |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Walworth | . | 7 | 6 | 16 | 5 | 2 | 2 | 3 |  |  |  |  | 41 |
| Washburn |  | 4 | 1 | 2 |  |  |  |  |  |  |  |  | 7 |
| Washington |  | 1 | 5 | 14 | 8 | 15 | 6 | 11 | 2 | 2 | 1 | 3 | 68 |
| Waukesha | 5 | 6 | 11 | 33 | 6 | 9 | 3 | 35 |  | 2 | 3 | 3 | 116 |
| Waupaca | 1 | 1 | 10 | 26 | 4 | 4 | 2 | 9 | 1 | 3 |  |  |  |
| Wiaushara |  | 1 |  |  |  |  |  |  | 4 |  | 1 |  | 6 |
| Winnebago | 60 | 142 | 8 | 1 | 2 | 11 | 1 | 2 | 7 | 2 |  | 1 | 223 |
| Wood | 1 | 3 | 2 | 7 | 2 | 2 | 1 | 1 |  |  |  | 2 | 21 |
| Total | 233 | 572 | 294 | 806 | 190 | 423 | 118 | 433 | 88 | 50 | 26 | 93 | 3,326 |

SPEGIMENS EXAMINED DURING THE TWELVE MON'IHS ENDING DEC. 31, 1910.

| County. | Diphtheria, |  | Tuberculous sputum. |  | Typhoid, |  | Water. |  | Rabies. |  | Miscellaneous. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $+$ | - | + | - | $+$ | - | + | - | + | - | + | - |  |
| January | 28 | 50 | 17 | 46 | 4 | 18 |  | 14 | 12 | 5 | 2 | 8 | 204 |
| February | 24 | 51 | 19 | 70 | 7 | 16 | 1 | 22 | 12 | 6 | 1 | 8 | $23 i$ |
| March | 29 | 77 | 34 | 103 | 10 | 23 |  | 15 | 16 | 4 | 6 | 5 | 322 |
| April | 25 | 105 | 28 | 68 | 10 | 28 | 2 | 34 | 8 | 5 | 2 | 5 | 320 |
| May | 3 | 24 | 24 | 68 | 15 | 35 | 5 | 26 | 5 | 6 | 3 | 10 | 224 |
| June | 6 | 25 | 24 | 68 | 14 | 29 | 5 | 30 | 7 | 2 |  | 9 | $2!9$ |
| July . | 10 | 25 | 25 | 78 | 8 | 47 | 18 | 28 | 4 | 4 |  | 9 | $2: 6$ |
| August | 5 | 8 | 20 | 66 | 36 | 47 | 20 | 48 | 3 | 6 | 2 | 11 | $2^{-3}$ |
| September | 19 | 20 | 23 | 39 | 38 | 45 | 12 | . 46 | 8 | 7 | 3 | 5 | 265 |
| October | 31 | 69 | 32 | 63 | 15 | 48 | 21 | 47 | 5 | 1 | 2 |  | 342 |
| November | 20 | 45 | 25 | 54 | 18 | 43 | 16 | 59 | 5 | 1 | 5 | 10 | 301 |
| December | 33 | 72 | 23 | 83 | 15 | 44 | 18 | 64 | 3 | 3 |  | 5 | 363 |
| Total | 233 | 572 | 294 | 800 | 190 | 423 | 118 | 433 | 88 | 50 | 26 | 93 | 3,323 |

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## TWENTY-FOURTH REPORT

OF THE

# State Board of Health 

## WISCONSIN

FOR THE

TERM ENDING JUNE 30TH, 1912

WITH

REPORT OF THE STATE BUREAU OF VITAL STATISTICS FOR THE CALENDAR YEAR OF 1911
C. A. HARPER, M. D.

Secretary and Executive Officer

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M. P. RAVENEL, Director, Madison.
K. W. SMITH, Bacteriologist, ..... Madison.
E. J. TULLY, Chemist, ..... Madison.
C. D. GEIDEL, Àss't. Chemist, ..... Madison.

The licensing of embalmers, registration of nurses, the distribution of antitoxin for use on indigents suffering from diphtheria and the administration of the Pasteur treatment for the prevention of rabies is done under the direction of the State Board of Health.

## LETTER OF TRANSMITTAL.

State of Wisconsin,
Office of the Secretary of the State Board of Health.
Madison, Wis., June 30th, 1912.
To His Excellency, Francis E. MeGovern,
Governor of the State of Wisconsin.
Sir: In compliance with the law, the twenty-fourth report of the State Board of Health is herewith submitted, the same being for the biennial period ending June 30th, 1912.

Respectfully submitted,
C. A. Harper, M. D., Secretary and Executive Officor.

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## SECRETARY'S REPORT.

## To the State Board of Health.

Gentlemen: I have the honor to submit to you the following report for the biennial period ending June 30th, 1912.

JANUARY MEETING, 1911.

By the order of the President, the State Board of Health met in regular annual session as prescribed by law, January 27th, 1911, at 11:00 A. M., in the offices of the State Board of Health, Washington Building, Madison, Wisconsin.

The following members were present: Dr. Wm. F. Whyte, President, Watertown, Dr. C. H. Sutherland, Janesville, Dr. L. E. Spencer, Wausau, Dr. E. S. Hayes, Eau Claire, and Dr. C. A. Harper, Secretary, Madison.

The meeting was called to order by the President, Dr. Wm. F. Whyte.

The Secretary read the minutes of the last meeting of the Board held at the Plankinton Hotel, Milwaukee, June 24th, 1910. The minutes were approved as read.

The reports of committees were called for.
The Committee on Finance reported that all vouchers presented since the last meeing of the board had been carefully audited and were approved. Report adopted.

The Special committee appointed to consider the advisability of publishing a pamphlet, for general distribution throughout the state, on the subject of "Sexual Hygiene", reported that considerable material has been collected for this report. It was stated by the committee that the information which will be published on this subject will probably be printed in the quarterly bulletin of the State Board of Health and later a reprint will be made for general distribution.

The Committee on Legislation made its report and presented a draft of several bills for introduction at the 1911 session of the legislature, all of which were carefully considered by the Board.

The following suggestions for legislation were discussed.

1. An amendment to the law requiring cases of tuberculosis to be reported, such amendment to prohibit the health officer of various localities from making public the names of the patients who have been reported as having the disease.
2. A bill relating to the licensing of embalmers so as to make it necessary for all applicants for a license to practice two years under a licensed man.
3. A bill giving the State Board of Health more control over the establishment and maintenance of the Water Supply Systems and Sewerage Disposal Plants.
4. A bill providing for the Medical Inspection of Schools.
5. A bill prohibiting the sale of undrawn fowls under certain conditions.
6. A bill providing the State Board of Health with a Sanitary Inspector.
7. A bill providing for partial control of the State Laboratory of Hygiene, or the establishment of a separate laboratory.
8. Two bills amending the present laws in regard to the election of health officers and health commissioners.
9. A bill increasing the appropriation of the State Board of Health so as to provide for more clerical assistance.
10. A bill amending the vital statistics law in regard to the appointment of Sub-Registrars.

The Board agreed to the advisability of introducing such bills when formulated.

The Board also considered the advisability of amending the rule prohibiting the use of the common drinking cup on railroad trains, in railroad stations, and in the public, parochial or private schools.

The Board was unanimous in their recommendation that the rule should be amended so as to include public buildings, public parks and streets.

The subject of providing a minimum quarantine for scarlet fever was then carefully considered.

After thoroughly discussing the situation the following rule was adopted by the board for the quarantine of this disease :
"Quarantine of the patient for at least twenty-one days from the beginning of the discase and as much longer as the severity of the case may demand, that is,-until complete desquamation or scaling of the skin of the patient and disinfection of the patient and premises.

Quarantine of all adults living in the family with or in any way exposed to the patient while the house remains quarantined, unless said adults submit to thorough disinfection of their person and clothing and take up their residence in some other building during the time that said quarantine is maintained.

Children in a family associated with a case of scarlet fever may be removed to a separate building and after disinfection of their person and clothing must be kept in isolation for a period of ten days or until the symptoms of scarlet fever develop.

When a patient suffering from scarlet fever is removed to an isolation hospital, the premises from which such patient is talien must be thoroughly disinfected and all children in the same household must be liept in isolation for a period of ten days from the date on which the afflicted patient was removed from the home.

Isolation of patient and children associated with the patient for ten days after removal of quarantine and disinfection of premises.

Children convalescing from scarlet fover must not atlend school for at least six weeks from the beginning of the discase. children who have been associated with the patient sufforing from scarlet fever shall not attend school for ten days after disinfection of premises and removal of quarantine in quarantined home."

The question of appointing a representative from Wisconsin to serve on the Lake Michigan Water Commission was considered but no further action was taken.

Dr. M. P. Ravenel, the Director of the State Hygienic Laboratory, was present by invitation and reported briefly regarding the work done in the Laboratory during the period from July 1 st, 1910 to December 31st, 1910. The report showed that during this period of time 2,132 specimens for
examination were received. The report by months is as follows: July 266, August 300, September 302, October 372, November 492, and December 400.

The work of the Pasteur Institute was briefly discussed while Dr. Ravenel was present.

Dr. Ravenel presented a chart showing the distribution of cases received for treatment since the institute was established. From this chart it is shown that rabies is especially prevalent in the Wisconsin and Fox River Valleys.

After general discussion as to the work of the board the final order of business was taken up, the election of officers for the ensuing year.

Dr. Wm. F. Whyte of Watertown, and Dr. L. E. Spencer were nominated for President. The ballot showed four votes for Dr. Whyte and one vote for Dr. Spencer. Dr. Whyte, therefore, was elected president of the board for the ensuing year.

The President then announced the appointment of the following committees.

The Committee on Legislation,-Drs. C. A. Harper, L. P. Mayer, and C. H. Sutherland.

The Committee on Finance,-Drs. L. E. Spencer, E: S. Hayes, and C. H. Sutherland.

There being no further business to come before the board, a motion was made to adjourn. Motion carried. The board then adjourned.

> C. A. Harper, M. D., Sccretary.

June Meeting 1911.
Upon the order of the President and the written notice of the secretary, the State Board of Health met in regular semiannual session as prescribed by law on June 16th, 1911, at 11:00 A. M. in the offices of the State Board of Health, Washington Building, Madison, Wisconsin.

The meeting was called to order by the President, Dr. Wm. F. Whyte. The following members answered to the roll call:

Dr. Wm. F. Whyte, President, Watertown, Dr. E. S. Hayés, Eau Claire, Dr. L. E. Spencer, Wausau, Dr. H. A. Meilike,

Clintonville, and Dr. C. A. Harper, Secretary, Madison, Wisconsin.

The Secretary read the minutes of the last meeting of the Board held at the Office of the State Board of Health on January 27th, 1911. The minutes were approved as read.

The president then called for the report of standing committees. The Committee on Finance, through its chairman, Dr. Spencer, reported that all vouchers presented since the last meeting had been carefully examined and were approved. The report was adopted.

Dr. C. A. Harper presented the following report for the committee on Legislation:

At the 1911 session of the Wisconsin Iegislature, an unusually large number of meritorious bills relating to the public health were introduced.

The office assisted many members in the preparation of bills; we also took an active part in the public hearings and encouraged wherever possible the adoption of laws which would protect and improve the public health.

Two bills providing for a system of medical inspection in schools were so violently opposed by members of the Medical Freedom League that it was impossible to secure the passage of either of them even after they had been favorably reported by the committee on public health. It is reasonable to expect that this opposition will be increased from time to time and therefore it is important that all individuals and organizations interested in sound progressive public health legislation appear at the committee hearings and voice their approval of the measures.

The following is a brief summary of the important laws enacted which are more or less directly related to the question of public health:

[^21]Chapter 248, provides for the placarding of all diseases which are contagious or dangerous to the public health.

Chapter 250, requires railroad companies to provide at the depots proper toilet facilities.

Chapter 252, relates to the reporting by physicians of occupational diseases.

Chapter 330, requires that public buildings be equipped with cuspidors and otherwise kept in a clean, sanitary condition.

Chapter 346, provides for the registration of nurses and the appointment by the Board of a committee of examiners.

Chapter 379, prohibits a display of fruit products unless properly protected.

Chapter 407, prohibits spitting in public places under penalty of a fine.

Chapter 412, gives the State Board of Health additional authority to prevent the pollution of streams and public water supplies.

Chapter 457, authorizes county boards to erect and maintain county sanatoria for the treatment of advanced cases of tuberculosis.

Chapter 465, authorizes the Board to provide for a Biennial Conferєnce of Health Officers.

Chapter 440, prohibits the use of other than individual towels in hotels, the permit exemption feature is a weak point in this law and should have been omitted.

Chapter 519, creates a State Laboratory of Hygiene.
Chapter 636, relates to the appointment by the Board of a State Sanitary Inspector, also increases slightly the annual appropriation for the Board and makes some minor changes in the sub-registrar law.

The committee appointed by the board to investigate the advisability of publishing a pamphlet on the subject of "Social Disease" had no report to make.

The committee appointed by the president to recommend textbooks on Physiology \& Hygiene for use in public schools in Wisconsin, reported and recommended for adoption by the buard the following textbooks in addition to the books which have been heretofore recommended by this board: "Riche's Primer of Hygiene" "Riche's Primer of Sanitation" and "Riche's Ituman Physiology".

These books are published by the World Book Company of New York. Report adopted.

The Board then discussed a Joint Resolution, No. 49A, passed by the last legislature, requesting the State Board of Health to prohibit the use of the Common Drinking Cup in all state buildings. After a thorough discussion, the Boart voted unanimously to adopt and publish the following rule which is in the form of an amendment to the rule adopted by the Board on January 28th, 1910, and published in the official state paper on March 22nd, 1910.
"Rule 14. Whereas, it has been repeatedly demonstrated that the use of what is usually known as the common drinking cup is dangerous and is an undoubted source of communication of in-
fectious diseases. Now, therefore, in the interest of the Public Health, be it ruled by the Wisconsin State Board of Health,that the use of the common drinking cup on railroad trains, in railroad stations, in all state buildings, other public buildings, and on the streets and in public parks, in the public, parochial and private schools and in other educational institutions of the state of Wisconsin, is hereby prohibited.

No Person or Corporation in charge of any railroad train or station, superintendent, manager or other official in charge of state buildings, or other public buildings, streets or parks; no school board, board of education, town board or school directors, or board of trustees of any public, parochial or private school, or educational institution shall furnish any drinkling cup for public use, and no person, corporation, superintendent, manager or other official shall permit upon said railroad train or station, in any state or public building, or at any public, parochial or private school or other educational institution the common use of the drinking cup."

The Secretary then explained the necessity for amending Rule 8 of the transportation rules so as to provide for the lawful removal of dead bodies from one cemetery to another, or from one part of a cemetery to another part of the same cemetery by private conveyance.

After discussion, a motion was made, seconded and carried, that the following amendment to Rule 8 , be adopted and published:
> "Amend Rule 8, of the rules for the transportation of the dead by inserting after the word "Box" in the last live of the printed rule the following:
> "When disinterred bodies are removed from one cemetery to another or from one part of a cemetery to another part of the same cemetery, or otherwise transported by private conveyance, the written consent of the health officer of the district where the body is buried, and the health officer of the town, village or city where the body will be reinterred shall be sufficient authority for the removal.'"

> Upon the motion of Dr. Spencer, it was duly seconded and carried that Dr. C. H. Sutherland be chosen as the member from Wisconsin on the Lake Michigan Water Commission.

> The Secretary read a communication from the President of
the American Public Health Association in regard to the ap propriation by the board of money to insure the successful publication of the Journal of the American Public Health Association, the official organ of the American Public Health Association, which is a continuation of the American Journal of Pubic Hygiene.

The Board instructed the Secretary to place an order for seven annual subscriptions to the Journal of the American Public Health association, one for each member of the Board.

The Secretary then read a communication from Dr. J. M. Myers of Odanah, in regard to the control of contagious diseases on Indian Reservations. It was pointed out that the Reservation is Federal territory and therefore not under the jurisdiction of the state authorities and the people on the Reservation are not bound to obey the state laws for the prevention and control of communicable diseases. The Board agreed that this is a matter which should be considered by Congress.

The Secretary was instructed to write to the Commissioner of Indian Affairs, each member of Congress and the two United States Senators in regard to this matter.

The question of adopting and publishing a rule relating to the prevention of Ophthalmia Neonatorum or blindness in new born children was next considered. No action was taken to adopt and publish rules for the prevention of this disease.

Dr. M. P. Ravenel, Director of the State Laboratory of Hygiene, was present by invitation and rendered the following report:

Number of Specimens Received at the State Laboratory of Hygiene

From July 1st, 1910, to June 1st, 1911.

| Number of specimens received to be examined for diphtheria bacilli | 760 |
| :---: | :---: |
| Number of specimens of sputum to be examined for tuberculosis | 1,229 |
| Number of specimens to be examined for typhoid | 634 |
| Number of water analyses made | 699 |
| Number of examinations for rabies | 1.11 |
| Number of miscellaneous examinations | 209 |
| Specimens received, but unfit for examina | 133 |
| Chemical analyses of water in state survey | 180 |
| Total number of specimens received at laborator | 3,955 |

There being no further business to come before the board, a motion was made to adjourn. Motion carried. The board then adjourned.

C. A. Harper, M. D.,<br>Secretary.

## January Meeting 1912.

Upon the order of the president and written notice of the secretary, the State Board of Health met in regular annual session as prescribed by law, January 31st, 1912, at 11:00 A. M., in the Offices of the State Board of Health and Bureau of Vital Statistics.

The meeting was called to order by the president, Dr. Wm. F. Whyte.

The following members answered to roll call: Dr. Wm. F. Whyte, Watertown, Dr. E. S. Hayes, Eau Claire, Dr. C. H. Sutherland, Janesville, Dr. L. E. Spencer, Wausau, and Dr. C. A. Harper, Madison, Secretary.

The Secretary read the minutes of the last meeting of the Board, held in the offices of the State Board of Health June 16th, 1911. The minutes were approved as read.

The President then called for the report of standing committees.

The Committee on Finance, through its chairman, Dr. L. E. Spencer, reported that all vouchers presented since the last meeting had been carefully examined and were approved. The report was adopted.

In compliance with Chapter 346, laws of 1911, the Secretary on January 17th, 1912, appointed the following nurses as members of the committee of Examiners of Registered Nurses, subject to the confirmation of the State Board of Health at its meeting January 31st, 1912 :

Miss Anna Dastych, La Crosse, Wisconsin, graduate of St. Francis Hospital, appointed for one year.

Miss Mary A. Hardaker, Superintendent Mount Sinai Hospital, Milwaukee, Wisconsin, graduate from the Trinity Training School for Nurses, Milwaukee 1902, appointed for two years.

Miss Anna J. Haswell, Madison, Wisconsin, graduate of the Illinois Training School for Nurses, Chicago, in 1899, appointed for two years.

Miss Gertrude I. McKee, graduate of the Akron City Hospital, Akron, Ohio, class 1904, appointed for three years.

Miss Mary E. Stoeber, Madison, Wisconsin, graduate of the Jefferson Medical College, Training School for Nurses, Philadelphia, in 1896, appointed for three years.

It was moved and seconded that the appointments of the above named nurses be confirmed by the board. Carried.

Chapter 465, laws of 1911, providing for a local and State Conference of Health Officers for cities and villages was taken up and the secretary was instructed to call a Conference of the Health Officers of cities and villages of Wisconsin to meet at Madison at such time as in the judgment of the secretary it was deemed most advisable.

The secretary was also instructed to provide a program for the conference.

It was moved and seconded that such a Conference be called. Carried.

The following letter from A. W. Gray, Chairman, Program Committee of the State Medical Society of Wisconsin, was read.

- "Dr. C. A. Harper, Secretary, State Board of Health, Madison, Wisconsin.
Dear Doctor:-The following resolution was adopted at the Waukesha meeting of the State Medical Society of Wisconsin last June: "Resolved, that it is the sense of the House of Delegates of the State Medical Society of Wisconsin that a necessity exists for the reorganization of the administration of public health, medical education and the iicensing of candidates to practice medicine, therefore, we respectively request the State Board of Health, the Wisconsin State Board of Medical Examiners, and the several State Medical Societies, to appoint committees of three members from each organization to meet with the committee on Public Policy and legislation of this society, for the purpose of discussing the best means by which this reorganization may be brought about, and for the further purpose of advancing such legislation as may be deemed desirable and expedient."

Before issuing the request in my capacity as Chairman of the Committee on Public Policy and Legislation of the State Medical Society of Wisconsin. it seemed proper first to communicate this resolution to the State Board of Health and to the Wisconsin State Board of Medical Examiners, which boards would of course be most vitally interested in any changes, which might be proposed, and ask for some expression of opinion as to the necessity and the expediency of such a meeting.

If in the opinion of these two boards a necessity exists for the reorganization for the better control of all health agencies in the state,
it would seem that the coöperation of the Medical profession of the state would be likely to accomplish much in laying out a plan and advancing legislation.

Will you kindly lay this communication before your board with a request for a reply at its earliest convenience?

Very truly yours,
Milwaukee Wis., Dec. 23, 1911.
(Signed) A. W. Gray.
After general discussion the following Resolution was adopted:
"The State Board of Health, as organized at present, has in charge the health of the state; supervision of the registration of nurses of the itate; supervision of the licensing of embalmers; the Hygienic Laboratory; Pasteur Institute; the installation of water supplies and sewerage systems; Bureau of Vital Statistics, etc., and that there is not only in this state, but all over the United Sates, a growing amount of work, or growing action on the part of the State Boards of Health. In view of the accumulating labor on the part of the State Board of Health. it is of doubtful expediency whether the State Board of Health should take over the added work of examining candidates for the practice of medicine without materially affecting the efficiency of the public health work. However, the Board will be willing to coöperate with anything that might be suggested."

Moved, seconded and carried that a committee be appointed consisting of the president and secretary to confer with the committee on Public Policy and Legislation of the State Medical Society.

The following letter from Dr. M. P. Ravenel, together with a notice regarding "Diphtheria Carriers" which was published in the University Press Bulletin, was also read:
"Dr. C. A. Harper, Madison, Wisconsin.
My Dear Dr. Harper:-We have had such good results over at the asylum with our cultures of staphylococcus aureus that I have thought it best to offer to the physicians of the state cultures prepared for "Overriding." I enclose herewith a copy of the notice that I have given to the University Press Bulletin, and wish you would put this in your board of health bulletin also.

Very sincerely,
(Signed) M. P. Ravenel."

## Copy of Notice:

## DIPHTHERIA CARRIERS

In many cases of diphtheria the germs persist in the throat for long periods of time. A physician who has such a patient should report the same to the Laboratory and if advisable the laboratory will supply free of charge cultures of staphylococcus for "Overriding" with full directions for use."

Moved and seconded that the article regarding "Diphtheria Carriers" be published in the State Board of Health Bulletin. Carried.
The situation at Black River Falls was then taken up and the following letter signed by the city officials was read:

"Black River Falls, Wis., January 15th, 1912. Dr. C. A. Harper, Secretary, State Board of Health, Madison, Wisconsin.

Dear Doctor:-A situation confronts us here which we as a local board of health are unable to cope with, and in our distress we are referring the matter to you.

The flood of October 6th not only left our city in a bankrupt condition, but left a large part of our city in an unsanitary condition. Thus far we have been able to handle the situation and we have had no contagious or infectious diseases in the inundated district.

The flood destroyed about 600 feet of our sewerage system and at the present time the outlet of the main sewer is at the foot of Main Street and in the heart of the present business district. The new channel formed by the river has thus far helped us out in so far that the sewage has been carried away as fast as deposited at this point. Sometime during this week the water of the river will be turned into the old channel of the river and whatever sewage which goes through the sewer system will be deposited at the foot of Main Street and will remain there. This will necessarily result in a very unsanitary condition which will become further exaggerated with the approach of spring.

The city has no funds with which to build the 600 feet of sewer necessary to reach the old channel of the river. The lots abutting the sewer are gone, land having been washed away and the owners are not paying taxes on the same..

The writers have in mind the smallpox situation some ten or twelve years ago, among the Winnebago Indians, at which time a certain State Fund for the prevention of the spread of infectious and contagious diseases was drawn on. It occurs to us that it might be possible for the State Board of Health to help us out through this fund. We estimated that the cost of building the 600 feet of sewer referred to above should not exceed $\$ 1000$.

Will you kindly take this matter up with the proper officials and advise us at your early convenience what can be done in the premises.

Very truly yours,
> (Sigined) J. J. McGilvray, President, Eugene Krohn, Secretary. H. H. Parsons, Clerk,

The question of raising sufficient funds for the reconstruction of the sewerage system destroyed by the recent flood was then taken up. The advisability of calling for aid from the State Plumbers' Association was carefully considered. The possibility of raising the necessary funds by taking the matter up with certain organizations in the state to donate enough money to reconstruct sewer was also considered. It was also suggested that the State Board of Health recommend to the
committee in charge of affairs that they appeal to the Plumbers' Association. No definite action was taken.

The city of Phillips having failed to report Vital Statistics to the Bureau of Vital Statistics, Dr. Spencer, upon request of the Secretary, made an investigation there January 23-26, 1912, to ascertain cause of failure to report and to secure all available reports. As result of his investigation, he found that Dr. Fenelon the health officer, had been negligent in attending to the duties in this regard. He was willing, however, to assist Dr. Spencer in securing all available reports as well as reimburse him for necessary expenses incurred; and agreed to furnish reports promptly in the future. Upon motion of the Secretary, duly seconded and carried, it was agreed that the expense of Dr. Spencer's investigation be charged to the local health officer, and have a bill for same sent to Dr. Fenelon for payment, under the law.

The following letter from Dr. Green was then read:

## Dr. C. A. Harper, <br> Madison, Wisconsin.

My Dear Dr. Harper:-The Council of Health and Public Instruction has completed its plans for a Speakers' Bureau, to furnish speakers for public meetings throughout the country. Your name has been considered by the council for this work, and I am writing you to place our plans before you.

For the present we are only in a position to pay the expenses of the speakers. In order to reduce the traveling expenses to a minimum, it is planned to arrange dates for each speaker in states adjoining the state in which he lives. This would mean in your case that appointments would be made for you in the following states: Minnesota, Michigan, Illinois and Iowa. Two or more speakers from each state have been selected and it is hoped that the funds at the disposal of the council will enable us to hold from six to eight meetings in each state. This would mean that you would prabably be called on to address from three to six meetings in adjoining states, for which your expenses will be paid. This will include railroad and Pullman fare, hotel bills, meals, etc.

Are you willing to make from three to six public addresses during the first five months of this year, on these terms? In order that further arrangements may be made, I shall appreciate it if you will kindly let me hear from you on this subject, also indicating the subjects on which you prefer to speak. If you have any newspaper notices of public meetings which you have adressed in the past, I shall be glad to have them for use in preparing material for advertising these meetings to the public. I shall greatly appreciate an early reply.

Hoping to have your active coöperation in the important work of educating the people on public health questions, I am,

Very truly yours,

Upon motion of Dr. Hayes, duly seconded and carried, the Board was in accord with the plan suggested by Dr. Green in having the Secretary coöperate with Dr. Green and make from three to six public addresses during the first five months of this year, providing, however, the Secretary so desires and can conveniently find time to attend to such additional duties.

Dr. Ravenel presented the following report of the work done at the State Laboratory of Hygiene.

## Number of Specimens Received at the State Laboratory of Hygiene.

From July 1st, 1911 to January 1st, 1912.Number of specimens received to be examined for diph-theria baccilli669
Number of specimens of sputum to be examined for tuberculosis ..... 614
Number of specimens to be examined for typhoid ..... 402
Number of water analyses made ..... 673
Number of examinations for rabies ..... 81
Number of miscellaneous examinations ..... 152
Specimens received but unfit for examination ..... 50
Total number of specimens received in the last six months ..... 2641
Number treated at Pasteur Institute since Nov. 1909 ..... 210
Number taking treatment last six months ..... 36
Typhoid Vaccine Supplied ..... 300

Dr. Ravenel stated that they did not have sufficient funds to carry on the work as it should be carried on at the Laboratory. Under the present limited appropriation of $\$ 8,000$, the laboratory has not sufficient funds to take things up on their own responsibility without calling for aid from the various cities. In view of this fact, the Director of the Laboratory asked the Board to recommend to the Regents of the State University an increase in the appropriation totalling from $\$ 15,000$ to $\$ 20,000$ per year. No action taken.

It was moved, seconded and carried that a budget be recommended for the State Hygienic Laboratory.

Chapter 440, laws of 1911, provides that all towels for the use of guests in any hotel, and that all towels in public buildings must be individual towels. It also provides that roller towels shall not be used in certain places unless an exemption is given by thẹ State Board of Health or Local Board of Health.

No exemptions have been given excepting in one case, which was given to the Knickerbocker Ice Company.

It was reported by Dr. M. P. Ravenel that the University was not complying with the provisions of Chapter 440, laws of 1911. The Board deemed it advisable, if the University continued disregarding the provisions of Chapter 440, laws of 1911, that the secretary write a letter to President Van Hise, and ask that the law be enforced, also asking him to issue orders that no roller towels should be purchased and all those now in use should be done away with as rapidly as possible.

The Secretary stated that reports of some 100 hotels were on file and they were all falling in line very satisfactorily. Individual towels were always supplied and in some cases roller and individual towels were found, permitting such hotels to use up the roller towels now on hand.

There being no new business, the Board took up the final business of the day, the election of officers by ballot.

Dr. Whyte, receiving the majority of all votes cast, was elected president of the board for the ensuing year.

The President reappointed the same committees to act for the ensuing year, namely:

Committee on Finance:-Dr. E. S. Hayes, Dr. L. E. Spencer, and Dr. C. H. Sutherland.

Committee on Legislation,-Dr. Wm. F. Whyte, Dr. C. H. Sutherland and Dr. C. A. Harper.

A motion was then made to adjourn. Motion carried. The Board then adjourned.

C. A. Harper, M. D., Secretary.

## June Meeting, 1912.

Upon the order of the President and written notice of the Secretary, the State Board of Health met in regular semiannual session as prescribed by law, June 27th, 1912 in the offices of the State Board of Health.

The meeting was called for $11: 00 \mathrm{~A}$. M. There being no quorum present at this time, the members took up informally for discussion the methods of prevention of Ophthalmia Neon-
atorum with the representatives from the Wisconsin Association for the Blind, Mr. Simon Kander, President, and Dr. G. I. Hogue, Chairman of the committee.

After general discussion, a recess was taken for lunch and the regular meeting called for $2: 00 \mathrm{P} . \mathrm{M}$.

The meeting was called to order by the president, Dr. Wm. F. Whyte, at $2: 00$ P. M.

The following members were present: Dr. Wm. F. Whyte, President, Watertown, Dr. E. S. Hayes, Eau Claire, Dr. C. H. Sutherland, Janesville, Dr. Joseph Barber, Marathon, and the Secretary, Dr. C. A. Harper, Madison. Dr. Joseph Barber was appointed by Governor McGovern to fill out the unexpired term made vacant by the resignation of Dr. L. E. Spencer, and was present for the first time.

The Secretary received a notice from Dr. L. P. Niayer of Hudson regretting his inability to attend the meeting.

The Secretary read the minutes of the last meeting of the Board held in the offices of the State Board of Health January 31st, 1912. The minutes were approved as read.

The president then called for a report of the standing com mittees.

The committee on Finance, through its chairman, Dr. E. S. Hayes, reported that all vouchers presented to the Finance committee since the last meeting had been carefully examined and approved. The report was adopted.

The report of a Special Committee consisting of Dr. Whyte, President, and Dr. C. A. Harper, Secretary, appointed at the January meeting 1912 to confer with a committee of the State Medical Society to consider the advisability of a consolidation of the State Board of Medical Examiners and the State Board of Health, as result of a meeting of these two committees at Waukesha April 3rd, 1912, reported through its chairman, Dr. Wm. F. Whyte, that in the judgment of the committee it was not deemed wise or expedient at the present time to endeavor to make plans for the consolidation of the two boards unless it could be done without compromising the public health work of the State Board of Health.

It was stated at the meeting of the committee that the members of the State Board of Medical Examiners were not all in accord with the suggestion of the consolidation of the two boards. It was the opinion of the committee appointed by the

State Board of Health that more efficient public health work could be accomplished by keeping the State Board of Medical Examiners and the State Board of Health entirely separate in their work. Dr. Hayes moved the report be accepted. Motion carried.

The Board approved of Dr. C. D. Fenelon, health officer of Phillips, Wisconsin, paying Dr. Spencer's bill of $\$ 41.63$ for inspection work January 23rd to 26th, 1912, which was made necessary through neglect of properly performing the duties of his office in the collection of vital statistics and forwarding the same to the State Board of Health.

The Secretary stated that in compliance with chapter 465, laws of 1911, a State Conference of Health officers for cities and villages was held in the Assembly Chamber at Madison, on June 12th and 13th, 1912. There were 132 health officers present at this Conference.

The Secretary of the State Board of Health certified as to the attendance of all health officers and health commissioners, who were present at such meeting, to the village or city council as the law directs.

Moved by Dr. Hayes that the Secretary's certification of the attendance of the Conference of Health Officers of the State held June 12th and 13th be approved by the board. Carried.

Dr. Ravenel, Director of the State Laboratory of Hygiene was present by invitation and rendered the following report.

Report of Work Done at The State Laboratory of Hygiene,
From January 1st, 1912 to June 1st, 1912.
Number of specimens received to be examined for diph- theria bacilli ..... 1007
Number of specimens of sputum to be examined for tu- berculosis ..... 794
Number of specimens to be examined for typhoid ..... 268
Number of water analyses made ..... 264
Number of examinations for rabies ..... 58
Number of miscellaneous examinations ..... 249
Specimens received but unfit for examination ..... 26
Total ..... 2666
Number of examinations for the month of June ..... 378
Total to June 27th, 1912 ..... 3044
Number of patients treated at Pasteur Institute during same period ..... 17 2-B. H.

Over 2000 doses of typhoid vaccine have been furnished since January 1st, 1912.

22 Cultures for staphylococcus were sent out.
The report shows that 17 Pasteur patients were reported to have taken the Pasteur treatment during the period of January 1st, 1912 to June 1st, 1912. By comparing the number of patients, taking treatment from June 1st, 1911 to January 1st, 1912, with the number taking treatment from January 1st, 1912 to June 1st, 1912, it was found that there were 19 less treated during the last period. Thirty-six patients having received treatment at the State Laboratory of Hygiene during the six months preceding January 1st, 1912.
The Secretary then stated that there had been a disagreement between Dr. M. P. Ravenel, the Director of the State Laboratory of Hygiene and Dr. F. F. Bowman, the licensed physician appointed by this board to give the Pasteur treatment in the state laboratory and thought that the board ought to understand the situation fully and hear both sides of the controversy.

It was agreed by the board that Dr. Ravenel and Dr. Bowman be given fifteen minutes each to present the case from their point of view. This arrangement was accepted by Dr. Ravenel and Dr. Bowman as being agreeable to each of them and in compliance therewith Dr. Ravenel and Dr. Bowman each made statements concerning the controversy that had arisen.

After the discusion, Dr. Ravenel and Dr. Bowman withdrew and the board took up the merits of the controversy between these two gentlemen.

As result of the discussion, the following Resolutions were adopted by the Board:

First;-"Moved by Dr. Hayes that the Executive Committee confer with the President of the University and the Director of the Laboratory, to draw up certain rules and regulations, such as we think are necessary and wise to follow out, and see if an agreement can be made with the State University to continue the present arrangement for the time being. If not, arrangements should be made for an independent laboratory. Seconded by Dr. Sutherland. Carried."

Second;-"Moved by Dr. Harper that in case arrangements cannot be satisfactorily made with the University, or a satis-
factory settlement to the State Board of Health in the present controversy, the matter be taken up with the committee governing the State Laboratory of Hygiene to consider the advisability of administering the Pasteur treatment in the Offices of the State Board of Health. The State Board of Health believing that since it is held responsible to the Federal Government for the proper administration of the cords, as now obtained from the Federal Government, it must exercise the authority in having this material administered by some one of its own selection, or some one wholly satisfactory to the Board. Seconded and Carried."

Third;-"Moved by Dr. Sutherland and duly seconded, that the Board through its secretary immediately purchase the necessary apparatus for the equipment of a Laboratory of its own, for the purpose of more fully assisting the board in carrying out public health work. Seconded and carried.' ${ }^{\prime}$

Dr. G. I. Hogue, a member of the Wisconsin Association for the prevention of blindness, and Mr. Simon Kander, also a member of this Association, appeared before the members of the board in behalf of further action upon Ophthalmia Neonatorum. After general discussion, the Board passed the following Resolutions:
"Resolved,-That the Secretary of the State Board of Health is hereby requested to instruct all local boards oí health to immediately prosecute all physicians, midwives or other persons being in charge of new born infants who fail or neglect to report any case of inflammation of the eyes of Ophthalmia Neonatorum in accordance with the law granting the State Board of Health authority for enforcement as defined in chapter 59, laws of 1909.'

Moved by Dr. Hayes and seconded by Dr. Barber that the resolution be adopted. Carried.

In compliance with chapter 59, laws of 1909 , pertaining to the prevention of Inflamation of the eyes and blindness of the new born babe by a disease called Ophthalmia Neonatorum, and specifically in compliance with section 409a-2.
"Resolved,-That the State Board of Health of Wisconsin hereby determines that in order to prevent the development of Ophthalmia Neonatorum, two drops of a one per cent fresh solution of nitrate of silver should be used in each eye of
every new born babe, and, we hereby in compliance with this chapter recommend its use." Moved, seconded and carried.

It was also recommended by the committee present from the State Association for the prevention of blindness that when new birth. certificates were printed that the following question and statement should be printed on such blanks :
"What preventive for Ophthalmia Neonatorum did you use? If none, state the reason therefor. In all cases a fresh solution of one per cent of nitrate of silver should be used. Two drops in each eye."

No official action as taken on this latter suggestion by the board.

The Secretary then stated that on the 14th day of May, 1912, he appointed Dr. L. E. Spencer of Wausau as State Sanitary Inspector for the State Board of Health, at a salary of $\$ 1800$ per year, and expenses necessarily incurred in the performance of his duties. The Secretary was authorized to make this appointment at the January meeting of the Board. The appointment being made, the name of Dr. L. E. Spencer was presented for confirmation by the board. It was moved and seconded that the appointment be confirmed. Carried.

The question of distributing antitoxin through the board came up for general discussion. The H. M. Alexander Company being desirous of extending the antitoxin to all boards for general distribution instead of only to the indigent cases.

Moved by Dr. Hayes that the Secretary be instructed to make an arrangement with the Alexander Company to furnish the Antitoxin at the given rates, if possible, forty cents per 1000 units and ten cents for the syringe, to the various health boards of the state for distribution in such manner as the health boards might direct. Seconded by Dr. Barber. Carried.

The question of changing the rules for quarantine and isolation of cases of smallpox came up for discussion. No changes in the rules were made. After general discussion, it was moved by Dr. Sutherland and seconded by Dr. Hayes, that the Secretary call a conference of the Secretaries from some of the adjoining states to obtain more dèfinite knowledge and specific ruling in regard to the method of handling smallpox cases and then take the matter up at regular or special meeting of the board. Carried.
Dr. L. E. Spencer's resignation caused a vacancy on theFinance committee.
Dr. Wm. F. Whyte, president of the board, appointed Dr.
L. P. Mayer, a member of the Finance committee.There being no further business to come before the board,a motion was made to adjourn. Motion carried. The board- then adjourned.
C. A. Harper, M. D.,
Secretary.
The following is a statement of the expenses incurred by theState Board of Health from October 1st, 1910, to June 30th, 1911.
Official Expenses of Members ..... \$114. 50
Telegraphing ..... 28.76
Stationery ..... 75. 35
Books and Subscriptions ..... 9. 00
C. A. Harper, secretary's salary. ..... 2, 438.98
A. A. Walter, stenographer and clerk. ..... 585.00
Total ..... $\$ 3,251.59$
Per Diem Fund.
From October 1st, 1910 to June 30th, 1911.
L. E. Spencer, M. D ..... $\$ 35.00$
Charles H. Sutherland, M. D. ..... 80.00
Wm. F. Whyte, M. D. ..... 10.00
L. P. Mayer, M. D ..... 10.00
E. S. Hayes, M. D. ..... 10.00
Total ..... $\$ 145.00$
Bureau of Vital Statistics October 1st, 1910 To June 30th, 1911:
L. W. Hutcheroft, statistician ..... \$1,354.40
May Wolf, stenographer ..... 330.00
Anna Wald, clerk and stenographer ..... 190.00
Alma Anderson, filing clerk ..... 450.00
Edna Pfister, filing clerk ..... 450.00
Winnie Warner, index clerk ..... 450.00
Leone Webster, index clerk ..... 135.00
Josephine Bennewise, index clerk ..... 90.00
Expressage ..... 121.77
Office Supplies ..... 731.11
Miscellaneous ..... 76.11
Total ..... $\$ 4,378.39$
State Board of Health
\&
Bureau of Vital Statistics
From July 1st, 1911, to June 30, 1912.
Official expenses of members ..... \$1,138.02
Expressage ..... 134.94
Miscellaneous expense ..... 230.06
Laboratory supplies ..... 1,305.55
State Printing Board ..... 339.96
Democrat Printing Co. ..... 427.52
Wm. F. Whyte, M. D. Per Diem ..... 20.00
C. H. Sutherland, M. D. Per Diem ..... 40.00
L. E. Spencer, M. D. Per Diem ..... 37500
E. S. Hayes, M. D. Per Diem ..... 40.00
C. A. Harper, M. D. secretary's salary ..... $3,250.00$
L. E. Spencer, state sanitary inspector ..... 240.00
L. W. Hutcheroft, statistician salary \& Off. Exp. ..... 1,811.66
Amelia A. Walter, stenographer and clerk ..... 795.00
Anna Wald, stenographer and clerk ..... 615.00
Alma Anderson, filing clerk ..... 615.00
Edna Pfister, filing clerk ..... 50.00
Lylia J. Owens, filing clerk ..... 529.55
Winnie Warner, index clerk ..... 615.00
Josephine Bennewise, index clerk ..... 555.00
Eddena Morey ..... 80.00
Marcella Casey ..... 80.00
Total ..... $\$ 13,287.26$

## SPECIAL FUND

(REATED IN ACCORDANCE WITII THE PROVISIONS OF SECTION 1023-62, of chapter 188, of the daws of 1909.

Chapter 469, laws of 1907, which provides a uniform and satisfactory system for the registration of Vital Statistics, provided that all original certificates of births, deaths and marriages shall be forwarded each month to the State Bureau of Vital Statistics. Before the monthly report was forwarded to the state office, the local registrar in each township, incorporated villlage and eity was required to make an exact copy of each certificate in a permanently bound record book furnished for that purpose. Two permanent records were therefore provided for: one to be preserved in the township, incorporated village or city where the birth, death or marriage occurred; and the other a state record to be preserved in the office of the State Bureau of Vital Statistics, at Madison.

This law eliminated a county record which had been kept in the office of the Register of Deeds in each county from the beginning of registration in Wisconsin.

At the 1909 session of the legislature, chapter 188, was enacted, which discontinued the local records in townships and provided that from and after October 1st, 1909, each local Registrar, before forwarding the original certificates of birth, death and marriage to the state office, shall make an exact copy for the register of deeds, to be forwarded to the register of deeds when the monthly report is sent to the state office.

The local records in incorporated villages and cities are to be kept in addition to the county record and the record in the state office.

For the period from October 1st, 1907, the date on which the uniform law became operative, to October 1st, 1909, when chapter 188, laws of 1909 went into effect, there was no provision for a county record of births, deaths and marriages to be filed and preserved in the office of the register of deeds.

Therefore, the State Registrar of Vital Statistics was required, by section 1022-62, laws of 1909 , to deliver to the register of deeds of each county, copies of all certificates of births, deaths and marriages occurring in said county which have been received and filed by the State Registrar from October 1st, 1907, to October 1st, 1909.

Each county was required to pay into the state treasury the sum of three cents for each certificate of birth, death and marriage copied by the State Registrar and delivered to the Register of Deeds. From the fund created in this manner, the State Registrar is paid his actual necessary expenses and disbursements in making the copies, upon vouchers properly audited by the Secretary of State. The vouchers on file in the Secretary of State's office, duplicates of which are also preserved in the office of the State Board of Health, show that for the period from July 1st, 1909, to July 30th, 1911, there was paid out of this fund for making copies of certificates for the Register of Deeds, the sum of $\$ 6,647.68$.

Approximately 220,000 certificates of births, deaths and marriages were copied and forwarded to the Registers of Deeds so as to make the county records continuous and as complete as possible. Seventeen persons were employed to tran-
scribe the records. In a few instances, the County Treasurer has not paid into the State Treasury the amount due from the county for this work and since all copies have been furnished, there will be a slight surplus, probably less than $\$ 100$, in this fund, when all of the accounts have been paid. If it is the desire of the legislature to distribute this surplus pro rata among the various' counties, this will be done, otherwise the unused balance will be left in the state treasury when collected.

## Embalmers

For the calendar year ending December 31st, 1911, 64 applicants for licenses were examined. Of this number 21 failed to pass the examination and as a result a license was not granted.

Seven licenses were issued on reciprocity relations with other states, and two special examinations were held.

For the year ending December 31st, 1911, there were 932 embalmers in the state holding licenses issued by the State Board of Health.

## FINANCIAL STATEMENT

On January 1st, 1911, there was in the treasury to the credit of the Embalmers' Fund, $\$ 1,778.47$. During the year the receipts amounted to $\$ 1,273.00$, and the expenditures to $\$ 1,062$.03.

The disbursements during the year were, as follows:
Printing and stationery ..... $\$ 122.10$
Postage ..... 75.00
Thos. Davidson, Secy. Dues Prov. Boards of Health ..... 19.00
C. A. Harper, M. D. secretary, official expenses and services ..... 66000
Wm. F. Whyte, M. D., services and official expenses ..... 19.65
A. A. Walter, clerical services ..... 60.00
Cadaver for examination June 23, 1911 ..... 20.00
O. E. Oldenburg, services embalmers examination ..... 10.00
Wm. Powers, services embalmers examination ..... b. 00
F. H. Pratt, services embalmers examination ..... 10.00
C. R. Fiss, services embalmers examination ..... 10.00
Wisconsin College P. \& S., rental rooms for exam. ..... 10.00
L. W. Hutchcroft, services and official expenses ..... 50.28
Total ..... \$1,062.03
FINANCIAL STATEMENT OF THE FUND FOR THE REGISTRATION OF
NURSES,
from march 1st, 1912 to december 31st, 1912.
Recelipts.
Cash received with applications ..... $\$ 2,670.00$
Number of licenses issued to December 1st, 1912 ..... 226
Number of applications not accepted ..... 14
Number of applications still pending ..... 27
Disbursements.
Anna J. Haswell, R. N. secretary, services ..... $\$ 92.50$
expenses ..... 27.23
Mary A. Hardaker, R. N. member committee, ser- vices ..... 45.00
expenses ..... 44.03
Mary Stoeber, R. N. member committee, services ..... 15.00
expenses ..... 85
Anna Dastych, R. N. member committee, services ..... 62.50
expenses ..... 83.89
Gertrude I. McKee, R. N. member committee, serv- ices ..... 30.00
expenses ..... 34.44
Mayers Electric Press, printing ..... 80.70
Schwab Stamp \& Seal Company ..... 4.50
H. G. Razall Manfg. Co., printing ..... 48.75
Parsons Printing \& Stationery Co., stationery ..... 4.60
Violet M. Rinder, stenographic services ..... 7.25
Anna Wald, stenographic services ..... 9.10
Postage ..... 45.00
Return of fourteen application fees ..... 140.00
Total ..... $\$ 775.34$
Balance cash on hand ..... 1,894.66

## CONTAGIOUS DISEASES.

The following is the table of contagious diseases for the calendar year of 1911 as filed in the office of the State Board of Health by the local health officers in the various townships, incorporated villages and cities.
The statistical table is made by calendar years instead of for the fiscal period so as to make the report comparable with similar statistics compiled in the various states and cities. Practically every state and all of the larger cities prepare the statistical tables for calendar years and it is desirable to follow this same general plan in Wisconsin so far as possible. Unless this is done proper enmparisens with the morbidity and mortality statistics in other places cannot be made.

The statistical table which follows this summary contains the reports of all cases of diphtheria, typhoid fever, whoopingcough, smallpox, scarlet fever, measles, tuberculosis, meningitis and acute anterior poliomyelitis or infantile paralysis reported to the State Board of Health by the local health officers.

The tabulation of deaths by counties from the various contagious diseases, found in Table No. 1, is taken from the actual mortality records as found on the original death certificates filed in this office. Whenever the number of deaths reported in any county from one of these diseases equals or exceeds the number of cases, we may be reasonably sure that the report of cases is very incomplete. This is especially true with reference to tuberculosis and meningitis.

The investigations made by the state office show that the local health officers report all cases of which they receive notice either by the attending physician or the responsible head of the family, if there is no physician in attendance. Thee discrepancy, therefore, in the cases reported as compared with
the number of deaths is due to the failure on the part of the at－ tending physician，responsible head of the family or other per－ son having knowledge of the presence of such disease to re－ port all the facts in regard to the case to the local health offi－ cer．

It is shown by Table No． 1 that for the calendar year of 1911，2，287 cases of diphtheria， 1,039 cases of typhoid fever， 612 cases of whooping cough， 587 cases of smallpox， 4,678 cases of measles， 928 cases of tuberculosis， 48 cases of meningitis and 70 cases of acute anterior poliomyelitis were reported to the state office by the local health officers．

TABIE NO．1．－SHOWING CASES OF CONTAGIOUS DTSEASES REPORTED＇JO THE S＇IATE BOARI，OF HEALI＇H BY T＇HE LOCAL HEAL＇H OFFICERS FROM JANUARY 1，1911， TO DECEMBER 31， 1911.

| （＇ounts． |  |  | $\begin{aligned} & \text { 둥 } \\ & 0 \\ & 2 \\ & 2 \\ & E \end{aligned}$ |  | $\begin{aligned} & \text { or } \\ & \frac{0}{0} \\ & 0 \end{aligned}$ |  |  |  |  |  | $\begin{aligned} & \dot{\sim} \\ & \frac{\tilde{n}}{\sim} \\ & \text { た } \end{aligned}$ |  | $\stackrel{5}{5}$ |  | $\stackrel{\frac{1}{6}}{\underset{\sim}{3}} \underset{\sim}{n}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \dot{\dot{~}} \\ & \underset{\sim}{c} \\ & \hline \end{aligned}$ |  |  |  | $\begin{gathered} \dot{0} \\ 0 \\ \tilde{n} \\ \tilde{\sigma} \end{gathered}$ | $\begin{gathered} \text { n } \\ \underset{\sim}{7} \\ \stackrel{\pi}{0} \\ \end{gathered}$ | $\dot{\infty}$ 0 0 0 |  | $\begin{aligned} & \dot{\text { B }} \\ & \text { en } \\ & \text { ن } \end{aligned}$ |  | $\begin{gathered} \dot{\sim} \\ \stackrel{\sim}{~} \\ \underset{\sim}{0} \end{gathered}$ | $\begin{aligned} & \dot{\Xi} \\ & \underset{\sim}{む} \\ & \stackrel{1}{6} \end{aligned}$ | $\dot{4}$ $\substack{n \\ \sim}$ | 完 |  |  |  |  |
| Adams | 12 | 3 | 1 | 1 |  | 1. | 9 |  | 71 |  | 5 | 1 | 1 | 8 |  | 2 |  |  |
| Ashland | 22 | 5 | 3 | 13 | 2 | 2 | 11 |  | 5 | 2 | 27 | 2 | 4 | 32 |  | 11 |  |  |
| Barron | 31 | 4 | 13 | 3 |  | ． | 13 |  | 126 | 1 | 47 | 1 | 5 | 15 |  | 2 | 1 |  |
| Bayfield | 24 | 5 | 7 | 2 | 24 | 6 | 2 |  | 40 | 1 | 65 | 2 | 2 | 13 |  | 4 |  |  |
| Brown | 75 | 11. | 8 | 6 | 2 | 5 |  |  | 35 | 6 | 65 | 11 | 11 | 63 | 1 | 17 |  |  |
| Buffalo | 2 | 1 | 1 | 2 |  | ． | 1 |  | 5 |  | 1 | 3 | $\cdots$ | 12 |  | 3 |  |  |
| Burnett | 10 | 4 |  |  |  | 2 | 1 |  | 3 | 1 | $\cdots$ |  | 1 | 13 |  |  |  |  |
| Calumet | 4 | 1 | 6 | 2 | 32 | 2 | $\cdots$ |  | 4 | 1. | 33 | 3 | 1 | 8 |  |  | 1 |  |
| ＇hippewa | 41 | 10 | 10 | 5 | 7 | $\cdots$ | 10 |  | 55 | 4 | 97 | 1 | 14 | 46 |  | 7 |  |  |
| Clark ．．． | 14 | 4 | 23 | 3 | ， | 5 | 1 |  | 33 | 5 | 161 | 3 | 3 | 9 | 2 | 7 | 1 | 1. |
| Columbia | 23 | 4 | 9 | 1 |  |  |  |  | 89 | 4 | 4 | 7 | 4 | 20 | 4 | 7 |  |  |
| Orawford | 3 | 1 | 2 |  |  | 1 |  |  | 15 | 1 |  | 1 | $\cdots$ | 10 |  | 11 |  | 2 |
| Dane ．． | 62 | 4 | 14 | 3 | 13 | 4 | 38 |  | 48 | 6 | 79 | 13 | 5 | 91 | 1 | 11 | 1 | 2 |
| Dodge | 12 | 5 | 9 | 5 | 3 | 2 | $\therefore$ ． |  | 30 | 2 | 85 | 5 | 1 | 27 |  | 11 |  |  |
| Door | 10 | 2 |  | 1 | 1 | 3 |  |  | 20 | 2 | $\cdots$ | 4 |  | 23 | 1 | 1 |  |  |
| Douglas | 192 | 19 | 14 | 14 | ．．． | 6 | 151 |  | 48 | 2 | 9 | 2 | 1 | 52 | 3 | 11 |  |  |
| Dunn ． | 11 | 2 | 1 | 2 |  | 1 | 15 |  | 27 |  | 3 | 1 | 7 | 24 |  | 1 | 3 |  |
| Eau Claire | 6 | 4 | 6 | 3 |  | ．．． | 8 |  | 2 |  |  | 1 |  | 36 |  | 3 |  |  |
| Florence |  |  | 2 |  |  |  |  |  | 1 |  | 1 |  |  | 1 |  |  |  |  |
| Fond du L | 121 | 11 | 15 | 4 | 2 | 4 |  |  | 80 | 5 | 21 |  | 4 | 50 | 1 | 12 | 9 | 2 |
| Forest | 26 | 1 | 7 | 2 | 3 | 6 |  |  | 10 |  | 29 | 1 | 1 | 10 | 1 | 1 |  | ． |
| Grant | 2 | 2 | 3 | 6 | 10 | 5 |  |  | 41 | 1 | 127 | 1 | 9 | 30 |  | 5 |  | 2 |
| Green | 6 | 2 | 12 | 1 | 1 | 1. | 2 |  | 11 | 1 | 10 | 3 | 1 | 21 |  |  | 13 | 1 |
| Green Lak | 1 | $\ldots$ | 3 | ． | 1 | 1 |  |  | － 5 | $\ldots$ | 2 |  | 1 | 16 |  | 2 | 3 | 1 |
| Iowa | 6 | 1 | 1 | 2 | 1 | 2 | 100 |  | 33 | 2 | 2 |  | 6 | 18 | 1 | 3 |  |  |
| Iron | 7 | $\cdots$ | 1 | 3 | ． |  | 1 |  |  |  |  | 1 |  | 10 |  |  |  |  |
| Jackson |  | 1 | 3 | $\because$ | 2 |  |  |  | 9 | 4 | 170 | 2 | 2 | 16 |  | 7 |  |  |
| Jefferson | 24 | － | 6 | 7 | 4 | 3 | 4 | 1 | 83 | 4 | 131 | 5 | 2 | 36 | 1 |  |  |  |
| Juneau | 28 | 1 | 2 | 2 | $\cdots$ | 1 |  | ．．． | 9 |  | 11 | 4 | ${ }_{2}^{2}$ | 20 |  | 11 |  |  |
| Kenosha | 37 | 4 | 22 | 12 | 30 | 7 | 1 |  | 46 | 5 | 15 | 4 | 23 | 31 |  | 11 |  |  |
| Kewaunee | 6 | 1 |  |  | $\cdots$ | 3 | 자 |  | － 14 | 6 |  | 10 |  | 19 |  | 8 |  |  |
| La Crosse | 78 | 11 | 9 | 5 | 24 | 9 | 18 |  | 128 | 3 | 61 | ．．．． | 24 | 66 | 11 | 8 |  |  |
| Lafayette | 8 | 1 | 1 | $\cdots$ |  |  | 6 |  | 9 |  |  | 1 | 5 | 21 |  | 6 |  |  |
| Langlade | 8 | 1 | 2 | 1 |  |  |  |  | 53 | 1 | 44 | $\ldots$ | 1 | 8 |  | 6 |  |  |
| Lincoln ． | 12 | 3 | 5 | 4 | 4 |  | 1 |  | 62 | 5 | 9 |  | 1 | 11 |  | 3 |  |  |
| Manitowoc | 25 | 1 | 9 | 7 | 21 | 5 | $\cdots$ |  | 49 | 3 | 4 |  | 10 | 52 | － 4 | 18 |  |  |
| Marathon | 51 | 15 | 19 | 9 | 1 | 8 | 7 |  | 321 | 16 | 511 | 11 | 8 | 42 |  | 8 |  |  |
| Marinette | 24 | 1 | 46 | 12 | 7 | 11 |  |  | 16 | 1 | 160 | 4 | 8 | 30 |  | － 4 |  |  |

TABLE NO. 1.-SHOWING CASES OF CONTAGIOUS DISEASES REPORTED TO THE STATE BOARD OF HEALTH BY THE LOCAL HEALTH OFFICERS FROM JANUARY 1, 1911 , TO DECEMBER 31, 1911-Continued.


## Diphtheria

TABLE NO. 2-SHOWING THE TOTAL CASES OF DLPH'THERIA REPORIED TO THE STATE BOARD OF HEALTH BY LOCAL HEALTH OFFICERS SINCE 1902.

| Month. | Year. |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1902 | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | $\begin{aligned} & 1909 \\ & \text { Quar } \end{aligned}$ | $\begin{array}{r} 1910 \\ \text { terly } \end{array}$ | 1911 |
| January | ...... | 141 | 131 | 105 | 100 | 182 |  |  |  |  |
| Febriuary | ....... | 94 | 100 | 55 | 84 | 180 | 461 | 647 | 564 | 626 |
| March .. |  | 80 | 71 | 74 | 84 | 110 | 461 |  |  |  |
| April |  | 58 | 63 | 41 | 48 | 117 |  |  |  |  |
| May |  | 70 | 54 | 45 | 70 | 117 | 315 | 286 | 493 | 442 |
| June |  | 91 74 | 40 89 | 30 87 | 63 | 121 |  |  |  |  |
| August |  | 74 <br> 78 <br> 8 | 89 | 87 59 | ${ }_{6}^{47}$ | 84 |  |  |  |  |
| September |  | 78 | 97 | $\begin{array}{r}59 \\ 133 \\ \hline 1\end{array}$ | 60 | 103 | 248 | 382 | 614 | 395 |
| October | 140 | 108 | 204 | 133 138 188 | -78 | 81 |  |  |  |  |
| November | 231. | 74 | 98 | 187 | 255 | 698 | 680 | 663 | 786 | 324 |
| December | 163 | 104 | 118 | 163 | 252 |  |  |  | 180 | 324 |
| Total | 534 | 1,050 | 1,137 | 1,117 | 1,413 | 1,793 | 1,704 | 1,984 | 2,457 | 2,287 |

During the calendar year of 1911, 2,287 cases of diphtheria were reported to the State Board of Health. 332 deaths from diphtheria, were recorded. This shows a mortality rate of 14.5. For 1909, the mortality rate was 20.7 and for 1910, 17.4 per cent. The apparent steady decline in the mortality from this disease is due, we believe, in part to the more general use of antitoxin and particularly to increased accuracy in the report of cases.

377 different townships, incorporated villages and cities reported cases of diphtheria during this year. This shows a wider distribution of the disease for any year since 1908, when the presence of diphtheria was reported from 441 different municipalities.

Table No. 3 shows the mortality from diphtheria by years since 1905. Also the number of places reporting and the mortality rate.

TABLE NO. 3-SHOWING MORTALITY FROM DIPHTHERIA BY YEARS SINCE 1895.

| For year ending |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |

## Typhoid Fever

TABLE NO. 4 SHOWING TTHE TOTAL OASES OF TYPHOID FEVER REPORTED JO THE S'M'TE BOARD OF HEALI'H BY LOCAL HEALTH OFFICERS SINCE 1902.

| Month. | Year. |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1902 | 1903 | 1904 | 1905 | 1906 | 1907 | 1808 | $\begin{aligned} & 1909 \\ & \text { Ouar } \end{aligned}$ | $\begin{array}{r} 1910 \\ \text { terly } \end{array}$ | 1911 |
| January |  | 54 | 26 | 15 | 60 | 92 |  |  |  |  |
| February |  | 20 | 33 | 6 | 93 | 88 | 142 | 234 | 644 | 211 |
| Marel |  | 21 | 21 | 43 | 48 | 30 |  |  |  | .... |
| April | ..... | 27 | 17 | 3 | 63 | 26 |  |  |  |  |
| May |  | 22 | 32 | 112 | 75 | 33 | 187 | 156 | 692 | 212 |
| June |  | 24 | 17 | 21 | 33 | 31 |  |  |  |  |
| July | $\ldots$ | 8 | 19 | 42 | 51 | 39 |  |  |  |  |
| August |  | 24 | 24. | 55 | 64 | 32 | 197 | 225 | 677 | 242 |
| September |  | 20 | 102 | 97 | 75 | 58 |  |  |  |  |
| October | 60 | 125 | ${ }^{242}$ |  |  |  |  |  |  |  |
| November | 70 24 | 35 42 | 62 54 | 59 81 | 119 69 | 295 | 319 | 319 | 433 | 374 |
| Total | 154 | 422 | 649 | 614 | 909 | 724 | 845 | 934 | 2,446 | 1,039 |

It is shown by table No. 4 that for the calendar year of 1911, 1,039 cases of typhoid fever were reported to the state office by the local health officers. This is less than one-half the number of cases reported during 1910 and we hope that the year 1911 will mark the beginning of a general and rapid decline in the number of cases of this easily preventable disease.

Table No. 5 shows the mortality from typhoid fever by years since 1905. Also the mortality rate and the number of places reporting the presence of the disease.

During 1911, cases of typhoid fever were reported from 199 different municipalities. The apparent increase in the number of places having cases of typhoid fever is due, we believe, to increased accuracy in the reports. More municipalities reported the presence of typhoid fever during 1911 than for any previous year since 1902, but there is practically no increase in the average number of cases for the state as a whole during a series of years.

319 deaths from typhoid fever were recorded during 1911. This represents a mortality rate of 30.7.

We believe that it is impossible to prevent outbreaks of typhoid fever in cities and incorporated villages unless the public water supply is properly safeguarded and we hope that provision will soon be made for amply protecting the public water supply in every municipality of the state.

The average increasing number of people who spend their summer vacations away from home is a problem of great concern with reference to the spread of typhoid fever. Many of the cases which develop near the close of the vacation season are traceable to a polluted water or milk supply at some summer resort. Everyone, therefore, when away from home, should be especially concerned with the purity of the drinking water and if it is suspected that the water is polluted, it should not be used under any circumstances unless purified by the use of chloride of lime or some other approved methorl.

The following simple method of water purification, which is adapted for use by private families, campers and those living in summer resorts, has been demonstrated to be efficient and is recommended for use in all cases where the water supply is suspected of being polluted. This is the same treatment as is used in purifying public water supplies described in this bulletin.

The method of treatment is as follows: Dissolve a teaspoonful of chloride of lime in a cupful of water, making sure that all lumps are thoroughly broken up and then add three more cups of water. Stir the mixture well and allow to stand for a few seconds in order that any solid particles may settle.

This mixture, if kept in a tightly stoppered bottle, may be used for four or five days when a new solution should be prepared. Add one teaspoonful of this milky solution to each two gallons of water to we purified, stir thoroughly in order that the weak chlorin solution will come in contact with all the bacteria and allow to stand for ten minutes. This will give approximately one-half part of free chlorin to a million parts of water, and will effectually destroy all typhoid and colon bacilli or other dysentery germs in the water. The water will be without taste or odor and the trace of free chlorin will rapidly disappear.

This simple method for purifying the drinking water is inexpensive and can be used by anyone. People who contract typhoid fever as a result of drinking impure water, which they knew to be polluted before drinking it, have only themselves to blame.

TABLE NO. 5-SHOWING MORTALI'IY FROM ITYPHOID FEVER BY YEARS SINCE 1895.

| For year ending | Number of places reporting. | Cases. | Deaths. | $\begin{gathered} \text { Mrrtality } \\ \text { rate. } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| September 30, 1895. | 59 | 993 | 144 | 14.5 |
| September 30, 1896. | 66 | 1,234 | 171 | 13.8 |
| September 30, 1897. | 146 | 658 | 126 | 19.9 |
| September 30, 1898. | 165 | 1,085 | 109 | 10. |
| September 30, 1899. | 224 | 1,312 | 120 | 9. |
| September 30, 1900. | 233 | 1,465 | 178 | 12. |
| September 30, 1901. | 291 | 1,304 | 236 | 13. |
| September 30, 1902. | 208 | 1,007 | 153 | 15. |
| September 30, 1903. | 62 | 374 | 80 | 21. |
| September 30, 1904. | 126 | 393 | 20 | 5. |
| September 30, 1905. | 111. | 752 | 34 | 4.5 |
| September 30, 1906. | 132 | 782 | 112 | 14. |
| Oct.-Dec. 1906... | 58 | 348 | 23 | 6.6 |
| Calendar year of 1907. | 153 | 724 | 97 | 13.3 |
| Calendar year of 1908. | 183 | 845 | 319 | 37.5 |
| Oalendar year of 1909. | 110 | 934 | 352 | 37.6 |
| Calendar year of 1910 | 154 | 2,446 | 558 | 22.8 |
| Calendar year of 1911. | 199 | 1,039 | 319 | 30.7 |

## WHOOPING COUGH.

Table No. 6 shows the total cases of whooping cough reported to the State Board of Health by the various local health officers since 1902.

During 1911, 612 cases of this disease were reported. This disease is especially fatal to young children and every precaution should be taken to prevent its spread instead of exposing young children to the infection as is so often done. Parents often wilfully expose children to whooping cough, measles and even scarlet fever, for the reason that they desire their children to have the disease while they are young believing that it is practically impossible for a person to escape the infection at some time during life.

224 deaths from whooping cough were reported during 1911.

It is now provided by chapter 248, laws of 1911, that all homes where cases of whooping cough exists must be placarded during the presence of the disease in the family and until patient and premises are disinfected. The placarding does not imply quarantine and is merely for the purpose of warning the general public of the presence of such disease in the home.

TABLE NO. 6-SHOWING THF TOTAI CASES OF WHOOPING COUGH REPORTEN
TO THE STATE BOARD OF HEALTH BY LOCAL HEALTH OFFICERS SINCE 1902.

| Month. | Year. |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1902 | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | $\begin{aligned} & 1909 \\ & \text { Quar } \end{aligned}$ | $\begin{array}{r} 1910 \\ \text { terly } \end{array}$ | 1911 |
| Tanuary |  | 19 |  | 1 | 17 | 71 |  |  |  |  |
| February | ..... | 37 |  | 1 | 21 | 24 | 130 | 106 | 265 | 199 |
| March |  | 21 | 3 |  | 77 | 40 |  |  |  |  |
| April . |  | 5 | 1. |  | 35 | 66 |  |  |  |  |
| May |  | 5 | 1 | 50 | 24 | 61 | 159 | 64 | 406 | 172 |
| June | . | 5 |  | 4 | 79 | 28 |  |  |  |  |
| July |  | 2 |  | 56 | 37 | 33 |  |  |  |  |
| August |  | 3 |  | 12 | 27 | 16 | 218 | 241 | 28 | 103 |
| September |  | 20 |  | 31 | 37 | 22 |  |  |  |  |
| October | 43 | 50 | 12 | 4 | 129 |  |  |  |  |  |
| November | 130 | 23 | 9 | 12 | 83 | 92 | 65 | 271 | 207 | 138 |
| December | 38 |  |  | 23 | 58 |  |  |  |  |  |
| Total | 211 | 190 | 26 | 194 | 623 | 453 | 572 | 682 | 1,156 | 612 |

3-B. H.

## Smallpox

Table No. 1 shows the distribution of cases of smallpox by counties for 1911. During this year there were severe epidemics in Douglas, Iowa and Wood counties. In several of the counties no cases were reported and so far as we can determine there were no cases of smallpox during this period of time.

Table No. 7 shows the total cases reported by years since 1905. With the exception of 1910 , when there were only 488 cases of smallpox reported in the state, there were fewer cases during 1911 than for any year since 1905. No reliable statistics concerning the prevalence of this disease prior to 1905 are available.

Chapter 113, laws of 1907, which prohibits the attendance at school of teachers or pupils who have not been vaccinated or who fail to show a certificate of recent vaccination when smallpox is present in a school district, or any part thereof, makes it an incentive for people to become vaccinated, and it is becoming an easy matter to control this disease in any locality where the people will submit to general vaccination. When cases of smallpox appear in a school district, we usually advise against the closing of the schools and recommend the general vaccination of all school children who do not show signs of recent vaccination.

But two deaths from smallpox were reported during 1911, one being in Jefferson county and one in Wood county.

TABLE NO. 7.-SHOWING THE TOTAL CASES OF SMALLPOX REPORTED TO THE STATE BOARD OF HEALTH BY LOCAL HEALTH OFFTCERS SINCE 1904.

| Month | Year |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1904 | 1905 | 1906 | 1907 | $\begin{gathered} 1908 \\ \text { Qu } \end{gathered}$ | $\begin{gathered} 1909 \\ \text { arter } \end{gathered}$ | $1_{19} 1910$ | 1911 |
| January |  | 256 | 143 | 144 |  |  |  |  |
| February |  | 108 | 101 | 109 | 566 | 719 | 197 | 134 |
| March |  | 161 | 128 | 122 |  |  |  |  |
| April |  | 59 | 50 | 151 |  |  |  |  |
| May |  | 91 | 116 | 138 | 594 | 273 | 128 | 129 |
| June | . | 77 | 41 | 137 |  |  |  |  |
| September |  | 9 | 8 | 26 |  |  |  |  |
| October | 44 | 8 | 19 |  |  |  |  |  |
| November | 37 | 151 | 135 | 490 | 589 | 103 | 109 | 222 |
| December | 227 | 130 | 195 |  |  |  |  |  |
| Total | 308 | 1,115 | 1,070 | 1,410 | 1,922 | 1,255 | 488 | 527 |

Scarlet Fever.
TABLE NO. 8.-SHOWING THE TOTAL CASES OF SCARLET FEVER RFFORTED TO THE STATE BOARD OF HEALTH BY LOCAL HEALI'H OFFICERS SINCE 1902.

| Month. | Yeat |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1902 | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | $\begin{aligned} & 1909 \\ & \text { Quar } \end{aligned}$ | $\begin{array}{\|c} 1910 \\ \text { terly } \end{array}$ | 1911 |
| Tanuary |  | 434 | 233 | 144 | 84 | 109 |  |  |  |  |
| February |  | 206 | 176 | 153 | 93 | 84 | 365 | 831 | 1,856 | 1,5غ1 |
| March |  | 168 | 194 | 163 | 54 | 59 |  |  |  |  |
| May |  | 161 | 101 | 99 127 | 37 138 | 60 108 | 295 | 802 | 1,371 | 98 |
| June |  | 102 | 109 | 36 | 53 | 53 |  | e2 | 1, | 9.0 |
| July |  | 72 | 50 | 33 | 25 | 34 |  |  |  |  |
| August |  | 49 | 76 | 36 | 27 | 33 | 163 | 722 | 782 | 460 |
| September |  | 45 | 59 | 51 | 26 | 27 |  | 2 | \% | 4 |
| October | 124 | 117 | 134 | $\bigcirc 50$ | 60 |  |  |  |  |  |
| November | 215 | 124 | 155 | 140 | 97 | 208 | 622 | 1,184 | 1,036 | 1,114 |
| December | 215 | 133 | 144 | 84 | 84 |  |  |  |  |  |
| Total |  | 1,711 | 1,519 | 1,116 | 778 | 775 | 1,445 | 3,539 | 5,045 | 4,148 |

During the calendar year of 1911, 4.148 cases of scarlet fever were reported by the local health officers. The following report of cases by calendar years, since 1908, will be interesting for the purpose of comparison:

| 1908 | 1,445 |
| :---: | :---: |
| 1909 | 3,539 |
| 1910 | .5,045 |
| 1911 | 4,148 |

The high water mark in the number of cases of this disease in Wisconsin appears to have been in 1910, and we hope that there will be a general decline in the number of cases and in the number of deaths from this disease from year to year.

The amendment to the rules adopted by the State Board of Health for the prevention and control of scarlet fever, especially for the quarantine of this disease, will aid materially in preventing the development of new cases. The following is the latest rule adopted by this board for the quarantine of scarlet fever:
"Quarantine of the patient for at least twenty-one days from the beginning of the discase and as much longer as the severity of the case may demand, that is,-until complete desquamation
or scaling of the skin of the patient and disinfection of the patient and premises.
"Quarantine of all adults living in the family with or in any way exposed to the patient while the house remains quarantined, unless said adults submit to thorough disinfection of their person and clothing and take up their residence in some other building during the time that said quarantine is maintained.
"Children in a family associated with a case of scarlet fever may be removed to a separate building after disinfection of their person and clothing and must be kept in isolation for a period of ten days or until the symptoms of scarlet fever develop.
"When a patient suffering from scarlet fever is removed to an isolation hospital, the premises from which such patient is taken must be thoroughly disinfected and all children in the same houschold must be leept in isolation for a period of ten days from the date on which the afficted patient was removed from the home.
"Isolation of patient and children associated with the patient for ten days after removal of quarantine and disinfection of premises.
"Children convalescing from scarlet fever must not attend school for at least six weeks from the beginning of the disease, Children who have been associated with the patient suffering from scarlet fever shall not attend school for ten days after disinfection of premises and removal of quarantine in quarantined home."

Table No. 9 which gives the number of places reporting, the number of cases and the mortality rate by years since 1895 shows that for 1911 the mortality rate was 5.4. This is based on the actual mortality of 225 deaths from scarlet fever. 392 different townships, incorporated villages and cities reported cases of scarlet fever during 1911. This is the largest number of places reporting the presence of the disease since 1895 and shows that the infection was quite generally distributed throughout the state.

TABLE NO. 9.-SCARLET FEVER-FROM REPORTS MADE BY LOCAL HEALTH OFFICERS.

|  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| For year enting |  |  |

## Measles.

Measles is the most contagious of all infectious diseases, with the possible exception of smallpox in the unvaccinated, and, consequently, nearly every adult has, at one time or another, suffered from it. Those who reach adult life, are, therefore, apt to look upon measles as a disease which every one must have, and are, consequently, apt to underrate its importance and to underestimate its dangers.

In children under two years of age, the disease is exceedingly fatal. Among older children the death rate is lower and it is generally true that when death occurs it is due, not to measles itself, but to complications. But complications and untoward sequelae are so frequent in measles that the occurrence of the disease should be a matter of concern to the community. The most common of these complications is pneumonia. Inflammation of the ear, necessitating mastoid operations, is also not infrequent, while bronchitis and inflammation of the eyes, sometimes of a very serious nature, are invariable accompaniments. It is thus evident that measles is a disease which should be avoided, and the old-time idea that it is better to expose children to measles in order that they may
contract it and be done with it should be discouraged. Cases of measles should be strictly isolated.

Many of the diseases of adult life are clearly traceable to the effects of the contagious diseases of childhood. It has been established to the satisfaction of the best teachers in America and Europe that all acute infections decrease one's general vitality to the extent that they lessen the surplus reserve which the later life strain has to draw upon. Thus whooping cough and measles pave the way to lung troubles; scarlet fever and smallpox to kidney troubles; diphtheria to heart trouble.
Table No. 10 shows the number of cases of measles reported by months since 1903. During 1911, 4,678 cases of this disease were reported by the various local health officers. The apparent increase in the number of cases during 1910 and 1911 is due, we believe, to increased accuracy in the report of cases rather than an unusual prevalence of the disease.

TABLE NO. 10.-SHOWING THE TOTAL CASES OF MEASLES REPORTED TO THE STATE BOARD OF HEAL'TH BY LOCAL HEALIH OFFICERS SINCE 1902.

| Month. | Year |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1902 | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | $\begin{aligned} & 1909 \\ & \text { Quar } \end{aligned}$ | $\begin{gathered} 1910 \\ \text { terly } \end{gathered}$ | 1911 |
| January | .... | 87 | 154 |  | 259 | 89 |  |  |  |  |
| February |  | 75 | 59 | 2 | 519 | 105 | 557 | 1,353 | 944 | 1,871 |
| March ... |  | 29 | 57 | 35 | 433 | 165 |  |  |  |  |
| April |  | 30 | 43 | ${ }_{21}^{2}$ | 340 | 138 |  |  |  |  |
| May |  | 97 | 94 | 31 | 285 | 317 | 570 | 1,334 | 2,483 | 1,810 |
| June |  | 17 | 50 | 41 | 165 | 340 23 |  |  |  |  |
| July ... |  | 27 5 | 28 | 17 29 | 55 31 | 23 16 | 192 | 302 | 728 | 141 |
| August ${ }_{\text {September }}$ |  | 5 1 | 11 5 | 29 9 | $\stackrel{3}{2}$ | 28 | 192 |  |  |  |
| October | 4 |  | 14 | 10 | 3 |  |  |  |  |  |
| November | 15 | 15 | 36 | 63 | 34 | 369 | 431 | 94 | 576 | 856 |
| Dccember | 64 | 55 | 31 | 187 | 48 |  |  |  |  |  |
| Total | 83 | 440 | 582 | $42 \times 6$ | 2,154 | 1,590 | 1,750 | 3,083 | 4,731 | 4,673 |

## Tuberculosts

The report of cases of tuberculosis by counties is shown in Table No. 1. A sareful examination of this chart reveals the fact that with but one exception the report of cases does not equal or exceed the number of deaths reported from this disease. In Milwaukee county 641 cases of tuberculosis were reported during 1911 and the mortality statistics show that there were 599 deaths from this disease. An earnest effort is being made in the city of Milwaukee to obtain an accurate report of all cases of tuberculosis in the city and this will account for the large number of cases reported for Milwaukee county.

Based on a mortality rate of about 20 per cent instead of 928 cases of tuberculosis being recorded, there should have been reported during the calendar year of 1911, 12,000 cases. Not more than one-twelfth of the actual cases of the disease are reported to the local health officers by the attending physician, responsible head of the family, if there is no physician in attendance or any citizen having knowledge of the case who are required under the law to report that fact to the local health officer.

Physicians should be required to report the cases which they are called upon to attend and any failure to do so should be reported to the district attorney for prosecution. It is fair to assume that nearly all of the cases of tuberculosis in Wisconsin come under the observation of a physician at some time during the progress of the disease. If all physicians reported the cases which they are called upon to attend, we would soon have a very complete census of all cases of tuberculosis in the state. This information would be exceedingly helpful in locating the areas where tuberculosis is especially prevalent. The information thus obtained could also be used to great advantage in arousing county boards to the necessity of establishing county sanatoria for the care and treatment of the secondary or advanced cases. Until every active case of pulmonary tuberculosis is located and proper precautions taken to prevent a spread of the disease to other members of the family or persons coming in contact with the patient, it will be practically impossible to entirely eradicate tuberculosis from Wis-
consin. It is impossible, we believe, to so educate all people having tuberculosis that they will exercise the necessary precautions to prevent a spread of the disease. We, therefore, must know where the cases are located so as to enforce the known regulations for the prevention of this dread disease.

Table No. 11 shows the total number of cases of tuberculosis reported to the State Board of Health by the local health officers since 1902. The apparent decline in the number of cases reported for 1911 as compared to 1908, 1909 and 1910 does not indicate any material decline in the number of cases since the actual number reported represents only a small per cent of the total cases.

TABLE NO. 11.-SHOWING TOTAL CASES OF TUBERCULOSIS REPORTED TO THE STATE BOARD OF HFALTH BY LOCAL HEALTH OFFICERS SINCE 1902.

| Month. | Year |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1902 | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | 1909 | 1910 | 1911 |
| January |  | 5 |  |  | 47 | 75 |  |  |  |  |
| February |  | 10 | 11 | 3 | 93 | 60 | 217 | 226 | 358 | 154 |
| March |  | 8 | 3 | 2 | 57 | 78 |  |  |  |  |
| April |  | 11 | 48 | 3 | 66 | 59 |  |  |  |  |
| May |  | 10 | 10 | 53 | 125 | 68 | 280 | 251 | 307 | 307 |
| June |  | 2 | 5 | 3 | 71 | 79 | ..... |  |  |  |
| July |  | 2 | 14 | 2 | 54 | 63 |  |  |  |  |
| August .. |  | 2 | 12 | 70 | 77 | 56 | 238 | 337 | 380 | 231 |
| September |  |  | 12 | 87 | 60 | 45 |  |  | ..... |  |
| October | 12 | 2 | 45 | 44 | 79 |  |  |  |  |  |
| November | 7 | 4 | 15 | 49 | 62 | 206 | 238 | 229 | 227 | 236 |
| December | 4 | 3 | 18 | 59 | 50 |  |  |  |  |  |
| Total | 23 | 59 | 193 | 375 | 841 | 789 | 973 | 1,043 | 1,272 | 928 |

## Meningitis

The report of cases of meningitis by calendar years, as shown by Table No. 12, is as follows :-

| 1908 | 138 cases |
| :---: | :---: |
| 1909 | 42 cases |
| 1910 | 36 cases |
| 1911. | 48 case |

The report of deaths from this disease by counties as given in Table No. 1 shows that for 1911 there were 437 deaths from
meningitis. This includes both epidemic cerebro-spinal meningitis and simple meningitis. Nearly all of the deaths reported from this disease were diagnosed by the attending physician as simple meningitis. The cases of traumatic meningitis which resulted fatally are included with the deaths from violence found in another part of this report.

TABLE NO. 12.-SHOWING TOTAL CASES OF MEININGITIS REPORTED TO THE STATE BOARD OF HEALTH BY LOCAL HEALTH OFFICERS SINCE 1903.

| Month | Year |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1908 | $\begin{gathered} 1909 \\ \text { Quar } \end{gathered}$ | ${ }_{\text {terly }}^{1910}$ | 1911 |
| January ... |  |  |  |  |
| February .. | 15 | 9 | 14 | 11 |
| March ... |  |  |  |  |
| April .... | 20 | 10 | 8 | 18 |
| May ...... | 20 | 10 |  |  |
| July ... | 93 | 5 | 9 | 10 |
| August ... | 93 | 5 | 9 | 10 |
| September ... |  |  |  |  |
| October ${ }^{\text {November }}$.... | 10 | 18 | 5 | 9 |
| December |  |  |  |  |
| Total | 138 | 42 | 36 | 48 |

## Acute Anterior Poliomyelitis

The report of cases and deaths from acute anterior poliomyelitis or infantile paralysis by counties is given in Table No. 1.

During the calender year of 1911, the health officers reported 70 cases of this disease and the death certificates show that there were 12 deaths where acute anterior poliomyelitis or infantile paralysis was given as the cause of death by the attending physician.

Chart No. 13 shows the cases and deaths from this disease during 1911 tabulated by counties.

The State Board of Health in conformity with the authority granted by the statutes has declared and classified anterior poliomyelitis as a dangerous contagious disease, and has adopted and published the following rule for the prevention and control of this disease:
"It shall be the duty of every physician called to attend a person sick or supposed to be sick with anterior poliomyelitis to report within twenty-four hours, in writing, the name and residence of such person to the board of health or its proper officer within whose jurisdiction such person is found, and where a person is taken sick with anterior poliomyelitis and a physician is not called, it shall in like manner be the duty of the owner or agent of the building in which person resides, lives or is staying, or of the head of the family in which such disease occurs, to report in writing the name and residence of the patient to the local board of health or its proper officer.
''It shall be the duty of the health officer of every board of health in this state, where a case of anterior poliomyelitis is found to exist, or supposed to exist, to establish and maintain quarantine for at least three weeks from the beginning of the disease and until patient and premises have been thoroughly fumigated and disinfected as provided for in section 1416-17 of chapter 279, laws of 1909."

The specific organism or germ causing this disease has not been discovered. Recent investigations conducted under the direction of the Massachusetts' State Board of Health and the Marine Hospital Laboratory at Washington proves that the stable fly is capable of transmitting the disease. It remains for further investigations to determine whether this is the usual or only method of transmission. If it is found that the stable fly (stomoyxz calcitrans) is the only carrier of the disease quarantine will not be required, but the room or bed in which the patient is confined will have to be carefully screened so as to entirely exclude flies and other insects. All excretia from the patient will also have to be thoroughly disinfected before it is finally disposed of and kept entirely away from flies.

Prof. M. J. Rosenau of Harvard University has succeeded in transmitting acute anterior poliomyelitis or infantile paralysis from sick to well monkeys by the bite of the common stable fly. These investigations have been confirmed by Dr. J. F. Anderson of the Marine Hospital Laboratory. Prof. Rosenau allowed a number of these flies to bite monkeys sick with anterior poliomyelitis in the various stages of the disease and then later allowed these same flies to bite 12 well
monkeys. Of the 12 well monkeys thus bitten six became sick with well marked symptoms of anterior poliomyelitis and of these three died.

Prof. Rosenau concludes from his experiments that if the virus of anterior poliomyelitis is taken into the body of the fly by biting an infected animal or person some time must elapse before the fly is capable of transmitting the disease. The period of incubation, he believes, is probably less than twenty-one days.


CHAR' NO. 13.-SHOWING THE LOCATION BY COUNTIES OF CASES AND DEATHS FROM INFANTILE PARALYSIS DURING THE CALENDAR YEAR OF 1911.

REPORT OF SPECIAL INVESTIGATIONS MADE BY MEMBERS OF THE STATE BOARD OF HEALTH AND REPRESENTATIVES OF THE BOARD FROM OCTOBER 1sT, 1910 TO JUNE 30тщ, 1912.

Cadott, Chippewa County.
Scarlet Fever Epidemic. Investigated by Dr. E. S. Hayes.
I did not see any active cases and therefore had only a history of the disease. Since the last of December 1910, there have been about fifteen cases of mild rash, lasting a day or two, without vomiting. Slight fever, little or no sore throat, and so far as I saw, no case was peeling. Most of the cases were not sick. One of the cases had had Scarlet Fever, apparently marked with pronounced peeling. Two or three adults gave a history of having had a rash, continuing their work, and with no peeling or sore throat. The mother of one child, however, stated that her child had sore throat and a pronouned rash. She had no physician and about the first of the year went to Minneapolis on a visit and while there peeled in a marked manner. Dr. F. the health officer, seemed to be reasonable and wanted to do the right thing. He believes that the epidemic is Scarlet Fever, although of a very mild type. Dr. C., who has seen several cases pronounces three cases German measles, and has advised doing away with quarantine. Dr. F. removed quarantine in one family where the children had the rash of a mild type. I advised him to quarantine the family with the other cases.

Cornell, Chippewa County.
Trachoma. In Construction Camp. Investigated by Dr. E. S. Hayes.

The Company employ at present 283 men constructing a dam at Cornell. They have taken extra pains to insure good water and drainage. The closets are either over the river or well away from the water supply and buildings. The sleeping camps with bunks are like logging camps, with bedding used for warmth, and not changed often. However, the general condition of the camps was better than the average.

About August 19th, Dr. Seyburth sent a man to Eau Claire with sore eyes. Dr. Curtiss treated him for a time and diagnosed it Trachoma. About September 6th the case passed into Dr. Cook's hands and he has been treating it since, under the direction of the Power Company. Dr. Cook is of the opinion it was not Trachoma, but some (acute) infection. About two weeks ago the Power Company asked Dr. Curtiss and Dr. Cook to inspect the camps at Cornell to find if there were other cases. For some reason Dr. Curtiss did not go, but Dr. Cook made a thorough inspection of the camps and found three Austrians having chronic Trachoma. These men were sent to Eau Claire and the Power Company offered to pay for their treatment at the Hospital, but they did not accept the offer. They were reported to Dr. Farr, Health Officer, and have since left town and I have been unable to find where they are at the present time.

The Power Company is anxious to protect the men from contagious diseases, and have been fair in the case, so far as I can see, having gone to the expense of a general inspection and removed the cases when found. Dr. Seyburth states there are no diseased eyes in the camp at present.

## Sharon, Walworth County.

Scarlet Fever Diagnosis. Investigated by Dr. C. H. Sutherland.

Two families, which have been quarantined for Scarlet Fever complain that the quarantine was unjust for the reason that the disease was not Scarlet Fever, and therefore no quarantine should have been provided.

The Health Officer maintained a strict quarantine on the premises and the investigation showed that there were cases of Scarlet Fever in both families and that the quarantine was fully justified.

Some time after this investigation was made, other citizens asked that a representative of the State Board of Health be sent to assist in making a proper diagnosis for Scarlet Fever. In order to evade the quarantine restrictions, several of the citizens maintained that the disease was not Scarlet Fever.

The investigation proved that the disease was properly diagnosed by the local health officer and that strict quarantine was the only proper course to pursue.

This situation is typical of a great many complaints received by the State Board of Health and requests for investigations. Ordinarily, there should be no occasion to call upon the officials of the State Board of Health to assist in making a proper diagnosis. If the health officer suspects that the attending physician has not accurately determined the nature of the ailment, he is fully authorized to make such investigations as he may deem necessary in order to determine the character of the disease present in the home and to take such action as may be necessary in order to safeguard the health of the general public. Whenever there is a question regarding diagnosis, if the disease is suspected of being a quarantinable one, quarantine should be established until the exact nature of the disease is known.

Mineral Point, Iowa County.
Smallpox investigation. Investigated by Dr. C. H. Sutherland.

When the request for an investigation was made, it was stated that there was an epidemic of smallpox at Mineral Point, Darlington, Linden and the township of Fayette. The complainant also recited that proper precautions were not being taken to prevent a further spread of the disease. A personal investigation was made in each of the towns mentioned above.

In the town of Fayette, the local health officer was interviewed and requested to insist upon a thorough investigation to discover, if possible, cases of the disease which were under quarantine. At Mineral Point and Linden, a representative of the State Board of Health met with the local health officer and mayor. The subject of vaccination was discussed and it was recommended that the provisions of Chapter 113, laws of 1907 be enforced. This law prohibits the attendance at school of teachers or pupils who have not been successfully vaccinated or who fail to show a certificate of recent vaccination when smallpox is present in a school district or any part thereof.

At the time the investigation was made, no cases of smallpox were found in the town of Darlington. In the town of Fayette there was one case; in Mineral Point three cases; and
in Linden five cases. All of these cases were properly quarantined and quarantine was being satisfactorily maintained.

The following recommendations were made;

1. A house to house canvass to discover and quarantine unreported cases.
2. General Vaccination.
3. Unless the local health authorities take immediate action to control the spread of smallpox in these towns, it probably will be necessary to establish a quarantine against the township of Mineral Point and Linden until the epidemic is under control.

Elkhorn, Walworth County.
Smallpox Diagnosis. Investigated by Dr. C. H. Sutherland.

This investigation was made to verify a diagnosis of smallpox on the part of the local health officer. The cases had been properly quarantined as a precautionary measure, and the diagnosis was verified. A strict quarantine of all cases was recommended and the general vaccination of all persons in the community that have not been successfully vaccinated.

## Footville, Rock County.

## Typhoid Fever Epidemic. Investigated by Dr. C. H. Sutherland.

An epidemic of typhoid fever was found to exist in this locality and apparently little had been done to properly control the disease. The water from several private wells had been examined and found to be polluted. Therefore, an order had been issued to several families using water from these wells to boil their drinking water. Since June 1911, there had been nine cases of typhoid fever in Footville. Six of the penple who had contracted typhoid fever used water from the same well. Most of the wells in the village were dug wells, reaching the water at a depth of about eighteen feet. No sewerage system or water supply system was provided and no precautions were taken to properly dispose of household sewage or garbage waste. There were no local regulations relating to the sanitary conditions of the community which greatly handicapped the health officer in the proper performance of his duties. Samples of water were taken from five
different wells and sent to the State Laboratory of Hygiene for examination. I recommended to the health officer and also to the citizens at a general meeting, that all drinking water be boiled; that the village be given a thorough cleaning and that rules and regulations be formulated and adopted to assist the health officer in this work. I also advised that placards be printed and posted in public places, stating that the water supply is polluted and that it should be boiled before drinking.

## Brodhead, Green County.

Epidemic, Anterior Poliomyelitis. Investigated by Dr. C. H. Sutherland.

It was reported that there were several cases of Acute Anterior Poliomyelitis, or Infantile Paralysis at Brodhead, which were not quarantined as provided for in the rules and regulations adopted and published by the State Board of Health. At the time, when the investigation was made, all cases which had been positively diagnosed as Infantile Paralysis had been quarantined. The schoolhouse had been fumigated and all possible precautions taken to prevent a further spread of this disease.

In the course of the investigation, one unrecognized case of the disease was discovered and quarantine was ordered. The health officer'did not understand just what should be done in regard to the quarantine of this disease or the fumigation of the premises after the death or recovery. In the town of Brodhead there were four cases of Infantile Paralysis with one death.

## Barneveld, Iowa County.

Smallpox Investigation. Investigated by Dr. C. A. Harper.
There were several suspected cases of smallpox at Barneveld, but the health officer failed to quarantine for the reason that he was not positive as to the proper diagnosis.
The investigation proved that all of the cases were smallpox in a mild form. Immediate quarantine was insisted upon, and the health officer was instructed that in all suspected cases of a dangerous quarantinable disease, quarantine should be established until a positive diagnosis is made.

## INVESTIGATIONS AND REPORTS MADE BY THE STATE SANITARY INSPECTOR.

Chapter 626, of the laws of 1911, authorizes the State Board of Health to provide for and establish in connection with the present public health organization, a State Sanitary Inspector.

The inspector is authorized, under the direction of the board and with full authority to act for the board, make thorough and complete investigations of nuisances, sources of sickness, infections or contagious diseases, water supplies, and sewerage disposal systems, the sanitary condition of public buildings, jails, schoolhouses, school grounds, hotels and such other work as is found necessary to improve the general sanitary and hygienic conditions of the state.

Dr. L. E. Spencer, a former member of the State Board of Health, from Wausau, was appointed by the board as the State Sanitary Inspector.

During the biennial period ending June 30th, 1912, Dr. Spencer, reported the following investigations, part of which were made while a member of the board and the remainder in the capacity of the State Sanitary Inspector.

## Athens, Marathon County.

On Saturday last I visited Athens at the request of Mr . Schmidt, Village President, and Dr. Fiedler, Health Officer. I find there are three cases of smallpox in the village at the present time, and there are a number of cases (The exact number it is impossible to say correctly) throughout the towns of Reitbrock, Johnson, and Halsey. In company with Dr. Fiedler I visited four farmhouses where they had smallpox scattered throughout the town of Reitbrock.

At a conference held at the village hall, the health authorities of the Village of Athens, Chairman of the town of Johnson and a number of citizens were present. The Chairmen of the towns of Reitbrock, Halsey and Bern were in Athens the day before, expecting I would be there, and leaving word that they would coöperate in any work laid out at our conference on Saturday.

Section 1413, laws of 1907 have been applied in village of Athens, and I am promised that same will be applied in the towns of Reitbrock, Johnson and Halsey, as soon as a doctor can be engaged to do the work of vaccinating the school children after obtaining the vaccine points. I advised the authorties to make the vaccination free as it would round up the situation much more quickly and be more satisfactory to all concerned.

## Ashliand, Ashland County

I spent Monday in Ashland going over the water situation with Mayor Dodd, Health Commissioner Hosmer, and Superintendent Wheeler of the water company.

The Ashland Water Company now has three-sixths of an acre filter area and they propose to add a new filter with an area of one-sixth of an acre. This will increase filter capacity $331 / 3$ per cent. With this filter area and the proposed new reservoir and regulating apparatus there is no doubt a sufficient supply of slowly filtered water can be had for the city of Ashland for many years to come.

The old intake pipe has been taken up this spring to within 500 feet of the shore line, it was broken in many places due to the dragging of anchors. They propose to lay new intake straight out from present terminus about 3,500 feet into the bay making intake about 4000 feet from shore line.

I am inclosing a map, loaned by the water company. Please note area marked in red belonging to the water company. They propose to go straight out from present terminus so as to be protected to a certain extent by their riparian rights. The old intake was laid in a shallow trench and never covered properly. In laying new intake they will cover as fast as they lay and I suggested to Mr. Wheeler that new intake should be laid at least six feet below floor of bay in order to insure against anchor trouble in the future. Mr. Wheeler is willing to agree to this.

The main sewer empties raw sewage into the bay at the foot of Stutzer Ave., only a short distance north of the present intake. For this reason, the Company is at present treating the water with hypochlorite of lime and delivering a safe water. This sewage should be treated and I suggested to Dr. Dodd
and Dr. Hosmer that the city ought to coöperate with the water company by taking care of this sewage, now that the water company was about to make extensive improvements. They tell me this matter is now under consideration and that it is only a question of time before improvements are made along this line.

I was down in one of the filters after the water was drawn off. I find they carry a bed of sand $3^{\prime} 6^{\prime \prime}$ deep, over $6^{\prime \prime}$ of gravel. Everything appeared to be in good shape.

With the new filter added, the rate ought to be $1,500,000$, to $2,000,000$ gallons to the acre in 24 hours. In the past the rate has run as high as $7,000,000$ gallons which of course is forcing the filters. With a regulating apparatus and reservoir they expect to carry between two and three feet of water over the filter bed instead of four, five or six feet as they had been forced to do many times in the past.

I went out to Prentice Springs and saw some nice flowing wells. This appears to be a fine spring water, it is certainly very palatable, but there are several things to take into consideration in regard to this supply. In the first place we have no positive assurance as to whether the supply is sufficient and if we had, we must consider the financial end of the question, for to go to these springs for a water supply would necessitate almost a new plant and a big expense which would fall eventually on the water consumer in the way of increased rates. For these reasons I think we better leave the springs out of consideration.

The water company is anxious to get to work as soon as possible and so I will recommend that the plans submitted be approved, and would suggest that you take the matter up with the Ashland Water Company at once so that the matter can be considered and disposed of.

I think the proposed improvements will guarantee a good safe water supply and Dr. Hosmer, Dr. Dodd and others feel the same way about it. Dr. Hosmer has studied this matte: closely and his opinion is especially valuable. The added filter area, the regulating apparatus to maintain filter efficiency, the new reservoir and old flowing well will act toward maintaining an even supply of slowly filtered water.

## Appleton, Outagamie County.

I spent Friday afternoon and all day Saturday in Appleton taking up the Fifth ward sewer proposition and putting in the rest of my time until six o'clock Saturday in looking into the general sanitary condition of the city. I did not have time to cover everything and will report as far as I went.

In regard to the Fifth ward sewer, this sewer follows the big ravine and was completed last year from Atlantic street to Packard street and no doubt would have been entirely completed except for the heavy rains coming on in the fall. An open sewer now extends from Packard street to Northwestern right-of-way, and I am told positively by the mayor and the two commissioners of the city that this uncompleted portion of the sewer will be built this season and that they are ready to go ahead just as soon as the ravine dries up enough to permit their doing work. At the present time, on account of the heavy rains we have been having, there is a lot of water going through these sewers and of course on that account it is not a nuisance at present.

I had a talk with Mr. Bradford, attorney for Mr. J. J. Herb, and the substance of our conversation was this: Mr. Bradford is willing to wait a reasonable time to see if actual construction work is commenced. If not started within a month or six weeks, he wishes action taken by the State Board.

Dr. F. P. Dohearty is health commissioner; he was appointed a year ago last spring by the commissioners of the city. There is no salary connected with the office and all he gets directly is fees as local registrar of vital statistics. However, the office of city physician goes with this and that pays $\$ 500$ a year and the city buys medicine and dressings. The health board consists of the mayor and two commissioners and the health officer acts as secretary and is a member ex officio of the board. The board has no regular meetings, and I find Dr. Dohearty's records in good shape and copies and transcripts made right up to date.

Dr.Dohearty has successfully prosecuted the Wisconsin Rendering Company under local ordinances for keeping refuse and dead animals in city over night. Five dollars and costs was assessed by the judge, the defendant pleading guilty and promising to do better in the future.

I cite this case to show that the health department is active in Appleton. The mayor and commissioners of the city suggested to me that it might be wise for me to see the plant of the Wisconsin Rendering Company, so, acting on this suggestion, I secured a livery rig on Saturday morning and drove to this plant which is about four miles from the city in the town of Menasha, Winnebago county. The plant is located on Mud creek, a branch of the Fox river and this company collects all the dead animals and slaughtering wastes within a distance of fifteen miles, taking in the city of Menasha, also Neenah and Kaukauna. The very nature of the business makes it an awful place to visit but they are well isolated from any habitation and the way they are handling their product, I do not think the waste which comes into Mud creek and then into Fox river can be considered of any importance when water gets to Appleton. Tank water in which refuse and dead animals were boiled went directly into the creek formerly, but at the present time this tank water is pumped into evaporators. The water is converted into steam leaving a substance called liquid stick which is barrelled and sold to make fertilizer, so that the only waste water there is, is used for cleaning the floors, etc. Waste pipe running out to Mud creek has been broken owing to washing out of embankment, and there is a dripping direct onto the bank and it makes an excellent breeding place for flies of which I saw thousands. I ordered this pipe continued into the stream and filling in of the washout. I enclose copy of letter I am writing to the rendering company on this matter. I thought it wise to visit this plant as it is not well known in Appleton just what disposition is made of the waste, and while the water supply of Appleton which comes from the Fox river is not fit to drink, still the thought of contamination by the Rendering plant might make matters still worse.

Water supply for Appleton is from the Fox river. It is used very little for drinking, for domestic purposes nearly every one buying bottled spring water or having a well.

You know the city of Appleton has recently purchased a water works system, and the commissioners tell me that they are now asking for plans and specifications for practically a new system excepting the mains. The main sewers of the city empty below the city water intake. Mason street sewer emp-
ties into the Fox river above the intake, but there are very few connections with this sewer and consequently little sewage. Health department advises the boiling of city water when used for domestic or drinking purposes. There has only been one case of typhoid during the last year and the diagnosis in this case was questionable.

I spent what time I could spare in the Register of Deed's office. I met D. J. Zuehlke, Register of Deeds and Julius Zuehlke, his father, who is deputy register of deeds. They insist they are not getting anywhere near the number of births they did years ago before the present law went into effect. I argued with Mr. D. J. Zuehlke stating that I could not believe it unless he could prove it to me and that he could give me no good reasons for same. He said there was no reason for it except possibly that the register was not compensated for his work as in former days, and therefore there was no incentive to get after the local registrars when they did not send in their certificates. He has promised to furnish me totals of births in former years compared with last year. He has no fault to find with the law, but is of the opinion that the state will never get complete and accurate returns until they successfully prosecute some local registrars for not reporting as required by law.

There is no contagious disease in Appleton at the present time. There was a case of diphtheria and the house was being fumigated the day I was there. The physicians report diphtheria, scarlet fever, etc. promptly, but report tuberculosis cases only when they die.

I visited the following meat markets: Three markets owned by Peterson and Rhebein. They all do their manufacturing in market No. 1 and only make sales at markets No. 2 and No. 3.

The plants of Arnold \& Meisse, Voaks Brothers, F. Stovel, Chas. Hepfensperger, and Joe Dorn have their slaughtering done by the Wisconsin Rendering Company, the firm already alluded to who have a slaughtering plant in the country.

These markets are all in good shape and I have only made orders in two places, copies of which I enclose.

The two principal hotels in Appleton supply individual towels for their patrons and everything is in good shape. At the

Hotel Sherman I noticed they also had roller towels and Health Commissioner Dohearty told me he had given them permission to use them in addition to the individual towels.

At the Milwaukee House, Commercial House, Globe Hotel and Union House I found roller towels in use and no individual towels in any of them. They are low priced places and not in very good shape. I am enclosing copies of letters I am sending proprietors of these places.

## Arcadia, Trempealeau County.

I started for Arcadia Monday morning so as to put in a part of the afternoon going into the surface water problem which they have to contend with in the village.

This collection of surface water had no relation to the breaking of the mill dam, but is simply the accumulation of surface water in a depression in the village from the high lands around. In seasons of heavy rains, water runs in on the pasture of Mrs. Littlefield and inundates her place to the extent of five to fifteen acres according to the extent of the rainfall.

This property is used as a pasture and of course the water standing there for some days, I think twelve days before it is all drained off entirely, destroyed the vegetation, but it had pretty well dried out when I reached there and we walked all over it without getting our shoes soiled very much.

I attach a little sketch showing the lay of the land and also showing how the place has been tiled for drainage, the owner of the land and the village ointly bearing the expense.

This drain runs north across Minnesota street, draining into a creek, and would probably take care of all the water if Mrs. Littlefield had not allowed a farmer east of her to tap into her sewer thereby bringing surface water from the hills to the east in the township of Arcadia.

The mayor feels satisfied they could take care of any of the surface water on this place if the surface waters to the east in the town of Arcadia were diverted by the town north into this same creek by sewer the same as Mrs. Littlefield has done.

The village authorities would like to have the board take this matter up and see if anything can be done to restrain the township or the residents in the township to the east of the
village from allowing the surface water to flow down on to this low ground of Mrs. Littlefield's in the village limits.
I was unable to give them any positive reply in the matter, but told the mayor and others whom I met that we would take the matter up, and if in our power, would do what we could.

Kindly correspond with George Bornstedt, the village President, at your convenience.

I would state at the time I was there, there was practically no decaying vegetation, the grass entirely disappeared and there was just the bare ground. I did not detect any foul odor and with two or three days of sunshine, it will be hard and dry.

Here I visited two cases of smallpox under care of Dr. Hidershide, both light cases and both occurring in middle aged men. There is no doubt about the diagnosis. The first cases were not diagnosed by Dr. Palmer the health officer of last year. Dr. Palmer tells me he probably was careless, that the first cases were very mild and that he did not realize it was smallpox until a well marked case appeared. He does not dispute the diagnosis now. Quarantine is being well maintained and these two cases will be out in a day or two. Dr. Rosenberry and Dr. Palmer tell me tuberculosis is quite prevalent among the Norwegians in this section of the state. I understand the doctor's report is as provided by State Board Rules. Fine water supply here from artesian wells. No typhoid here in years.

Dr. Hidershide has been health officer for many years. Except for the past year of Dr. Palmer's administration, sanitary conditions are good and Arcadia is a very neat pretty place.

## Alma Center, Jackson County.

It was a pleasure to meet and have a visit with Dr. Breakey. He has been health officer here for twenty-three years, and in that time has so educated the people of his community that his wishes are respected as law in regard to health matters.

There was no smallpox here this past winter. In fact, they have had no epidemic of any kind in years, except measles.

Sanitary conditions are excellent. Dr. Breakey is a model health officer. Water supply from flowing wells of fine quality.

## Blair, Trempealeau County.

Smallpox broke out at Blair in February, 1912. Dr. Kelly, the health officer, immediately put the Twenty-five day law in effect and vaccinated all the school children and has had no trouble since. In town of Preston, adjacent to the village, there are four cases of scarlet fever in one family. Blair has a pumping station with good water supply from wells, but no sewage system. General sanitary conditions are good, except stockyards which should be cleaned up this spring. Dr. Mork' is the other physician here. He is not aware of any contagious disease in that neighborhood at the present time.

## Beaver Dam, Dodge County.

Regarding the complaints of residents of the town of Beaver Dam, in regard to disposition of waste from gas works into Beaver Dam river.

The Gas Company's plant is situated on the bank of the Beaver Dam river below the dam. They use crude oil and coke in the manufacture of gas. Originally the company used to let the water used in washing the gas, pass into the sewer. This was found objectionable and discontinued long ago. After that the waste passed through a pipe to the bank of the river and still later, the pipe was extended to the middle of the river. This pipe was removd last spring, about May or June, on the order of Health Officer Schoen and since that time there has been no waste going into the river from the gas plant. The Gas Company has taken up the pipe and disconnected with the sewer and altered their system so that this waste water is pumped into a tank and is used over and over again. Formerly this tank was not used. The waste went to the river and fresh water from city tap was used all the time.

From personal observation, I can say that the company is not depositing waste materials into the river and have not been doing so since early last summer. No doubt the trouble continued for some time last summer, after the change in the plant, as the bank near the gas works was saturated with this tarry water, but there ought to be little trouble this coming season.

The signers of this complaint are residents of the town of Beaver Dam with possibly one or two exceptions.

The only cases of death cited among fish, fowl or animals, due to polluted waters, occurred on a farm about two miles south of the city. This farmer lost thirty or more ducks in one night last November and laid it to the polluted water from the gas works. It seems rather strange that all these ducks should die so suddenly, after being in the river all summer, if it was due to polluted water.

I told Dr. Grosse that the Gas Company had remedied conditions which he complained of and that we would wait developments during the coming summer, when the stream gets low and the weather gets hot, and if there is further trouble that the State Board will be glad to take this matter up again. This I think is satisfactory to all concerned.

Dr. Schoen will be succeeded as health officer, May 1st, by Dr. Tarnutzer. I am enclosing some printed matter used by Dr. Schoen last year. I forgot to state the waste did not go into mill-pond at any time. The dam is above the gas works. I also state that the city sewer which runs south past the gas works empties into the river about one mile below the gas works. This no doubt helps to make the stream objectionable during the season of drought.

I met Dr. Tarnutzer, the new health officer, and he will write you about this matter, as he knows all the people along the river, who signed this petition and can give you some information of a personal nature bearing on the situation.

I have the following report to make with reference to the complaint of Miss Anna Zinkie : There is a lot made of ground between the gas company's plant and the river and before the gas company put in cement vats the ground, in all the immediate neighborhood became thoroughly saturated with this tarry product and is still saturated to such an extent that the Zinkie well water looks like-ink. While I feel sure the gas company is not discharging any of their refuse in the river or into the sewer or on the ground, it is impossible for me to say how long it will be before this saturated ground will not have effect on this well and stream.

The mayor and I went down the river about half a mile at a pnint where the people who live along the river complain of
the stench when the water is low. I visited the outlet of the main sewer of the city and find it discharging right close to the bank of the stream. The sewer opening was not covered by water and the raw sewage lay there in stagnant water at the shore and makes an awful stench. I have no doubt, whatever, that this awful smell that they complain of in this neighborhood comes principally from this outlet.
I took the matter up with the mayor and he promises me he will immediately have this sewer extended to the middle of the stream where the end of the pipe will be covered and where there will be current to take the sewage down the stream. It is only a question of time when a septic tank must be installed at this point. Some of the people living near this sewer opening were inclined to lay the smell at certain times to the oily matter in the water from the gas plant, but if any one will visit this sewer opening and see the condition it is in, they cannot help but see that it will make an awful stench in that neighborhood when the water is low.

I have no doubt the city will remedy this situation as to the sewage at once and the only thing that I can suggest to help stop the seepage from this new ground back of the gas works is to recommend to the gas company to put in a concrete wall beginning below the water line and extending along the bank of their premises. This would wall off this ground that is saturated with tarry material and possibly might entirely clear up the situation.

This is Dr. Schoen's idea, and I think it is a good one. I wish you would take this matter up with Senator W. C. North, one of the principal owners of the gas works. He lives at Fox Lake. It is very unsatisfactory to discuss the matter with the manager at Beaver Dam as he is only a hired man and can do nothing except what he is told to do.

I am reliably informed that Senator North is inclined to do anything that is reasonable to satisfy the people there and anything that is in his nower.

There is no doubt the gas company is liable for contamination of the Zinkie well, and I have no doubt that they would settle with her on any basis that was fairly reasonable. In fact, they might buy the property, if the price was reasonable. I will advise that you keep in touch with the situation there
during the summer and see that the improvements are made that I suggest.

## Camp Douglas, Juneau County

I put in a short time here between trains and visited the druggist, Dr. Cron, the village clerk, and a few citizens. I have nothing in particular to report in regard to this little place except that the village clerk tells me (and I saw his minute book) that while he reported to the State Board of Health that D. A. Wilcox had been appointed health officer, no such action was really taken.

The Board of Health has been selected from the Board of Trustees of the village but there is nothing to show that a health officer has been appointed and I asked that this matter be taken up and acted on at an early date.

There is one small meat market here that the local authorities had some little trouble with last summer, but there is no complaint concerning it now.

There is no contagious disease here now of any kind.

## Chilton, Calumet County

I spent Tuesday in Chilton in company with Mayor Eggerer, City Clerk Grassold, and Engineer Donahue of Sheboygan.

We went over the plans submitted by Donahue and Sinz. We also went all over the proposed route of the main sewer, proposed site for septic tank, etc.

I made it plain to the authorities that the septic tank must be planned for, and they are willing to agree to provide for same. This site for the septic tank may be changed slightly, but if so, not so much as to interfere with present plans in a general way. It will not be possible to get sewerage from septic tank to proposed site for filter bed in this instance without pumping. There is a good flat stretch of land just beyond the proposed site of septic tank, but at a level that will require pumping. Conditions are not so favorable for the filter bed as at Hartford, where the sewerage can be carried by gravity, but I think there is no way to overcome this objection at Chilton. At any rate the septic tank should take care of Chilton for many years, as at the site where it will be located
the river has a good fall, in fact there are regular rapids for a considerable distance below the dam, so the objection is of little importance. It is my opinion that Chilton being an old town, it will take a long time before the conservative retired farmers, who make up a large percentage of the population, have connected their properties with the sewer system.

Chilton, as you know, is divided by Manitowoc river. The town rises quite rapidly from the river and the topography is such that the sewerage of all the city can be carried to one septic tank without any pumping station. With the septic tank added to the plans proposed, I see no reason why they should not be approved by the State Board of Health, and I so stated to the city authorities.

I was surprised to learn that there is no system of water works in Chilton, and it seems to me a rather queer proposition to install a sewer system without a water system. I stated these views to the Mayor and all others I talked with, and they felt the same as I do about it, but explained that they were trying to start in a small way, "One thing at a time". However, they have been thinking of late that to have a successful sewer system they must have a water system, and recently had Donahue and Sinz draw sketches of proposed plans and submit estimate of probable cost of plant in Chilton.

To build this sewer system, the city proposes to sell bonds, and I am told there is a good show of the proposition being defeated at the polls when voted upon. I am also informed that many of the citizens who would vote against bonding for sewer system would vote in favor of bonding if water works are also installed. I advised the authorities to take this sewer and water works question up together, to agitate in its favor as much as possible before putting it to vote. The Mayor and the council will do all they can, but as I understand it the question must be put up to the voters before bonds can be sold. Mayor Eggerer would like to have the State Board of Health order the city of Chilton to provide and put in a sewerage system, thinking we had the power. I told him I did not think we had any such power, but that we would aid in every way possible to help the matter along by urging the necessity of the improvement, pointing out that the city is liable to damage suits owing to contamination of the river.

This is to be the plan of campaign :-The city authorities are to urge upon the citizens the great need of these improvements through the Press, by mass meetings, and in personal ways. They will also ask this board to use its influence with the people, so that when the matter is brought to a vote it will be carried.

Now with reference to specific complaints in regard to sewage going into the river. No complaints could be entertained at the present time for one moment. The stream is high and the current swift below the dam and there is no odor or anything objectionable at the present time. However, the river is small and in the season of heat and drought is quite dry, and then the sewage discharged from the brewery, the Malting Company's plant, and several private places must render the stream very objectionable.

I see no way to remedy the situation, however, without sewers, and wouid suggesi that the people who are complaining turn in and boost so that the city can construct a system of sewerage and water works, as the Mayor and common council wish to do.

In the plans submitted by Mr. Donahue, the Malting House and brewery can tap their sewerage directly into the large main, and they will be very glad to do so ; they seem to be very liberal fair-minded people and willing to do anything that is right, but they are there in business and the city should provide a system of sewerage, not only for them, but for all the people to run their sewage into.

There are several swales, or low places, in the city where private sewers run out to surface ditches beyond the curb. Of course, this is objectionable, but there is no way to remedy it that I can see except for the city to install sewerage mains, as the surface ditches cannot be carried deep enough to drain to the river.

In regard to Keller's complaint, they live on the bank of the stream below the dam; there are many homes situated in just the same relation to the river as the Keller home, and they are all subjected to the same smells that may arise in the dry season, and, no doubt, they have cause for complaint the same as Kellers, but if so, let them help now with a boost and a vote for a sewerage system, as that is the only way the nuisance can be abated.

I saw Dr. Knauf and told him that I saw no way to help matters without these improvements, which would cost money, and that here was a chance for him and his relatives and friends to help get a sewerage system by voting for the improvement and helping to pay for it. Dr. Knauf is Health Officer of Chilton.

The sanitary conditions in a general way are not good in Chilton. It is an old town, no water works, no sewerage except private ones, drainage in some parts of the city poor, so you will see the proposed improvements are needed badly.

At the present time there is one case of typhoid fever at Chilton. It had not been reported at the time I was there, but the doctor said he would attend to it. It seems that in the last three years there have been several cases in the neighborhood of the present case. Dr. Knauf understands the history of the cases and thinks he can see the source of the contagion. He will look into the matter carefully and report his findings to you, and then we may possibly be able with his coöperation to prevent further outbreaks of the disease.

Tuberculosis is not reported, but promises were made that it would be in the future. Other health regulations are fairly well lived up to.

Of course the city can do nothing in the way of sewer or water works construction until next summer, but the authorities want to get things rounded up this winter, if possible, so they can start work next summer.

## Columbus, Columbia County

As you have been on the ground at Columbus and as I have also reported to you concerning my trip in person, I will not make a further report. I would repeat, however, my verbal suggestion that you take the matter up with the Columbus city officials and insist on their building a sewer to take care of this stream so as to take outlet below the dam or insist that a sewer be built from the brewery to connect with the Water street sewer, thereby taking care of the malt house waste and prevent contamination of stream. This latter plan would not have any effect on the sluggishness of the stream, but it would eliminate practically all waste going into it, and the water of stream would still be stagnant, but no doubt the bad smell
would be done away with to a great extent. This is a matter for the city to determine, and decide which is the best way to remedy the situation.

The mayor is anxious to go ahead, but the council needs to be made to understand that this nuisance must be abated.

## De Pere, Brown County

I was in De Pere parts of Tuesday and Wednesday of this week and I find that the first case of diphtheria probably occurred in the case of Mr. Trudeau, an employee in the moulding room of the C. A. Lawton Co. foundry. I understand Mr. Trudeau consulted Dr. Senn four or five weeks ago and was given a dose of antitoxin. Diphtheria must have been suspected, but the case was not reported, and there was no quarantine, and no fumigation of premises following recovery. Trudeau went to work and in ten days to two weeks these cases developed in the room where he was working, and up to the present time nine cases have developed among the men working in this foundry, eight of them out of the moulding room and one out of the machine shop adjoining the moulding room. In many of these cases the minimum quarantine period has not been observed, and no doubt these cases have followed one another by contact with uncured cases. The men in this room work side by side handling the same utensils and tools, and it seems reasonable that the infection is transferred here in the shops. There is nothing unusual about this moulding room; it is a big, high, well ventilated room, pure water furnished through a public fountain. The closets for these men are not in good sanitary condition, although I do not think this has any bearing on the epidemic. I have ordered the foundry company to clean up these closets.

Many of these cases were of the nasal type of diphtheria, and I have directed Dr. Gregory to make swabbings in all cases of those who have returned to work, and I think we will get a positive culture in some of these cases, and if so, that will explain where the trouble is. In case this does not locate the trouble I advised an immunizing dose of antitoxin to all the employees in this moulding room. At the present time there are four cases quarantined in De Pere.

Dr. D. H. Gregory has been elected health officer at De Pere this spring. His salary, including the care of the city poor is $\$ 275$. The Board of Health has been organized regularly, and Dr. Gregory has taken the oath of office.

I tried to see Dr. Senn and have him explain about the Trudeau case, but was unable to find him Tuesday; he was not in, and Wednesday I finally located him up at Green Bay, but could not get an appointment with him. From information about town and from physicians, I am inclined to think the whole trouble came from this case not being reported, and handled properly.

De Pere has an excellent.water supply from artesian wells, also a good sewer system, the main sewers emptying into the Fox River. The ice supply is from the Fox river above the dam and a few private sewers empty above the point where ice is taken out. Dr. A. M. Kersten tells me that in a practice of 28 years here that he has not known of over five or six cases of typhoid fever that could not be classed as imported cases.

There is one high-school, one grade school and two parochial schools on each side of the river. They are all supplied with drinking fountains and modern up-to-date plumbing. There are two jails, one on each side of the river, small, but neat and clean. In only one of the three hotels did I find individual towels. I am enclosing copies of letters I am mailing these hotel people.

I visited five meat markets and find them in fairly good condition. They all manufacture sausage on a small scale in rear rooms. I ordered Max Franz to whitewash and clean up. I enclose copy of letter. Some slaughtering of small animals has been done in some of these shops although against local ordinances.

## Dodgeville, Iowa County

W. P. Peters has been elected mayor and Dr. Lincoln's reappointment as health officer is uncertain. A committee on health has been appointed by the council, but they have not organized yet as a board of health and appointed a health officer. There is no salary attached to the office. Payment for service is made same as for private practice.

There is no contagious disease here now except whooping cough. They have had three cases of chicken pox recently which Dr. Lincoln says can be traced to Madison. He states that all three of these children have been successfully vaccinated.

Water supply here is good. Comes from well and there is no public sewage system, but many private sewers and cesspools.

The two public school buildings are in good condition. Jail is in an old stone building rather out of date, but kept clean.

I visited the four meat markets. They are all small places and two of them manufacture sausage on a small scale. They are in fair condition and slaughtering is all done in the country.
T. J. Paynter, Register of Deeds, tells me he has had trouble in the past in getting some original certificates. He returns them and says he rarely gets an original. Mr. Paynter, as well as the Register of Deeds at Darlington, showed me a bunch of copies written on originals with the word "Original" marked off. They are on paper cut to a different size, and the Registers complain that it makes a bad looking volume for binding.

Only one hotel here getting transients, the Higbee. I find roller towels, but not hung on rollers; also individual towels are furnished. Common drinking cups are furnished in lobby. Urinal in basement of this hotel is bad, slab and tray style, but water turned off. The rest of the plumbing is fair.

The general sanitary conditions are fairly good. Of course, there are many vaults and cesspools, but Dr. Lincoln has had the bad ones attended to. He states that so far his orders have been obeyed without much trouble.

## Darlington, Lafayette County.

Dr. Carey succeeds Dr. Peck as health officer here, Dr. Peck having been elected mayor at the spring election. Dr. Carey is an old man and out of practice. The salary is thirty-five dollars per year.

I told Dr. Carey that the city ought to pay a reasonable sum that would induce an active man to take office and give it attention. He replied that he did the work for the same salary,
that there was not much to do and if anything out of the ordinary came up the city would pay the health officer extra.

The privy vaults and alleys were inspected just before election, and I find considerable cleaning up has been done this spring.

There is no public sewer system, but many private sewers, many of them emptying into the Pecatonica river and others into cesspools. Water supply is from wells. Plant consists of pumping station and reservoir. The supply is plentiful and pure. The milk supply is good; no typhoid here in years.

The high school at Darlington is equipped with the Smead dry system of closets. This system was installed, I understand, before the water pumping station was put in. It seems to give fairly good service, and while I detected no bad odor, the looks of the system did not appeal to me. Boys' urinal is in an unsanitary condition in this school, dry slab system, washed out each night with permanganate of potash solution. It must have excellent care to keep in decent condition. I find sink but no soap for use of pupils. The ward school building has modern system of plumbing, the city water piped in and sewers connected with cesspools at some distance.

There are three small meat markets here in good sanitary condition. None of them are doing any killing at the present time. Slaughtering, when done, is outside the city where no trouble will arise.
S. P. Nelson, Register of Deeds, tells me he has no trouble now in getting complete returns of copies of original certificates. Formerly he did, but returned all original certificates and feels sure that returns are regular and complete now.

There is a feed mill opposite the depot using a 25 horsepower gasoline engine for power. 1 muffler is used, but still there is a pretty loud report and as residences are near, it must be considerable of a nuisance. I interviewed the proprietors of the mill and they will take the matter up with the International Harvester Company at once and see if anything can be done to quiet the exhaust.

## Grand Rapids, Wood County

At the conference of health officers at Grand Rapids last Saturday, all the places were represented except the follow-ing:-Auburndale, Village of; Auburndale, Town of; Lincoln, Town of ; Marshfield, Town of; Marshfield, City of; Richfield, Town of; Vesper, Town of; and Hanson, Town of.

I am enclosing a list of those present. Kindly mail certifications to the clerks of the respective towns so these men can draw their expense money.

We had a successful meeting and I think those in attendance felt repaid for the trouble they were put to in attending.
The situation at the present time is this:-Grand Rapids, (City of) has now ten cases of mild smallpox quarantined in five homes. As near as I can tell quarantine is being fairly well maintained but I am afraid that vaccination is not being urged as vigorously as it should be by Dr. Pomainville. The doctor is induced to believe the disease is less to be feared than vaccination, although he thoroughly believes in the efficiency of vaccination as a preventative of smallpox. I could not agree with him and urged that he vaccinate where it is possible, as quarantine without vaccination will never eradicate the disease.

These cases in the city evidently came in from the surrounding towns, especially from the towns of Siegel and Mansen. There are two cases reported in Siegel now and no telling how many unreported as the health officer there, Mr. Adams, has done practically nothing to control the disease and it has run its course among the farmers of that town. I insisted that Mr. Adams hire a doctor and canvass that town at once to find out conditions and correct them. He hired a doctor that day and promises to do better in the future.

There is one case in the town of Hiles, one in village of Biron (recovered) and none in the other places represented. There are scattering cases in Hansen and Vesper, so I was told, but these health officers did not show up. Port Edwards, Nekoosa and Pittsville are all cleaned up. now. The health officers in these three towns are especially good men as is also Dr. Jackson of Rudolph.

The trouble originally seems to have worked up from Adams county where there are scattering cases yet. I think the epidemic is subsiding and I urged general vaccination and a sharp outlook for new cases. It seems that Dr. Whitehorn diagnosed early cases in the town of Siegel as chicken-pox, but is now diagnosing the same thing as smallpox.

According to reports of the gentlemen present at conference, Wood county has been especially free of other contagious diseases the past winter and that outside of the smallpox trouble conditions were, and are, good.

## Green Bay, Brown County

Dr. H. P. Rhode is health officer and board of health is regularly organized. He keeps his records in first-class shape, having a regular record book of diseases reported showing everything in detail. He also keeps a minute book of proceedings of the board of health and anything of interest that may come up in the meantime. Dr. Rhode tells me that all the doctors report contagious diseases promptly except tuberculosis and that he keeps urging the doctors to report their tuberculosis cases also. His records of births, deaths, etc. were in good shape and kept up-to-date. Dr. Kelley is the only man he has difficulty in getting certificates from. I find no reports from Dr. Kelley since December, 1911, and Dr. Rhode tells me he has asked Dr. Kelley time and again to send in his birth certificates, but with no success so far. I tried to see Dr. Kelley on several occasions, but found him out or busy so am directing him a letter, a copy of which I enclose.

A special officer is detailed to Dr. Rhode as a kind of sanitary inspector. This man investigates all complaints, posts quarantine notices, does the fumigating, etc., and is a very handy man for the health department.

The only contagious disease at Green Bay at the present time is two mild cases of scarlet fever. There is no typhoid fever and practically the only cases they ever have are reported.
Water supply of Green Bay is from artesian wells sunk ovèr 900 feet. The supply is plentiful and pure. There are two pumping stations, one on each side of the river, and three reservoirs on the East, and an elevated tank on the West side.

Green Bay has a good sewer system which pretty thoroughly covers the city but Dr. Rhode tells me that there are probably forty or fifty per cent of the houses in the city not connected with the sewers. The main sewers discharge into the Fox river. The city cleans private vaults when orders from the health department are not complied with and puts the expense in the tax roll.

Ice supply is from the bay and from river above the sewer between here and Green Bay. Ice from both sources is used for domestic purposes. Private cesspools are not allowed and where found are cut out and sewer connections ordered.

The salary of the health officer is three hundred dollars, but he has about three hundred dollars additional for the care of sick at the isolation hospital.

I spent a couple of hours in the register of deeds' office looking over the files. The death certificates, I believe, are complete and the birth certificates fairly so. Out of 600 certificates filed since September 11, 1911, I found sixteen originals from small towns throughout the county, but most of them from towns of Bellevue and Allouez. While these certificates were marked "Original" I think most of them are copies made out on original blanks and the local registrars have forgotten to cross out the word "Original". The register of deeds volunteered to take the matter up with the different local registrars and straighten the matter out.

## Hancock, Waushara County

I enclose tabulation of scarlet fever cases in and around Hancock up-to-date.

I find first case resulted from visit to the country (town of Plainfield) at a place where scarlet fever has existed in light form. Hubbards came home and were taken sick shortly afterward. Can tracē Robertson and Barton cases directly or indirectly to the Húbbard or first cases. This group of cases occurred in December. Quarantine was not maintained the minimum of twenty-one days and disinfection was faulty. Dr. McCallin says he thinks he was a little hasty, but did not know of the minimum period of twenty-one days.

February 16th, the first Bergh case was reported when it was discovered that another child in the family had had the
disease and was all over the acute symptoms of an attack, in the meantime (while the unreported case was sick) another child was attending the public school. Contagion in the Bergh family was traced to one Olson, of Wautoma, (a relative of Bergh) who visited Berghs' with a child who was peeling with scarlet fever. Of course, the four following cases, as per list enclosed, (all school pupils) can easily be traced to this one focus of infection.

The Bergh family live in the town of Hancock. Two children have died there and probably because they could not be properly cared for in such unsanitary quarters. It is thought that the old hut can be bought for $\$ 50$ or $\$ 75$, and if it can be legally acquired the authorities will buy it and burn it to the ground.

Dr. McCallin and the board did not understand that it is their duty to disinfect premises at expense of village after the cases of contagious disease, and as the people have been doing their own disinfecting and at their own expense without the supervision of the health officer, it is reasonsable to suppose that the work was faulty and not well done. Dr. McCallin and the board realize this and are going to do different in the future. The board has now directed Dr. McCallin to personally see that the disinfecting work is done thoroughly and at the expense of the village. Town of Hancock will also do the same.

There are no feuds or anything of that kind in this neighborhood. All are working in harmony and realizing that perhaps they have not handled the first cases as well as might, are willing and anxious now to follow out all suggestions I made for the future.

School was closed Monday for two weeks. I advised opening schools at the expiration of that time and inaugurating school inspection for a time, if necessary.

There is no smallpox in village or town of Hancock at present time. In the village of Plainfield there is one case of smallpox. Can trace this to Almond, Portage county. In the town of Plainfield, Dr. Andrae, the health officer, has two cases each of smallpox and scarlet fever. He says that the board treats him liberally and that he will have no difficulty in handling his cases properly.

Dr. Borden reports three cases of smallpox in the town of Oasis. Doctor says it is hard to get good supervision of cases on account of remoteness of cases from village and unwillingness of town officials to incur expense of doctor visiting premises frequently to keep tab on the situation.

## Hartford, Washington County

I spent nearly all day Wednesday, October 25, 1911, in Hartford, in company with Mr. Leins, the engineeer, looking over the plans and going over the proposed route of the new sewer system.

Mr. Leins is now altering the plans so as to do away with the septic tank for District No. 2, taking all that sewage from the point where the proposed tank was to be, down the bank of the pond or in the river bed near the bank to River street, thence up to the Rural street tank. This will cost considerable more money, but will do away with letting any sewage into the pond. There is fall enough from the proposed plant for District No. 2 to the Rural street tank to carry the sewage nicely by gravity.

A filtration bed can be installed later very nicely at a point west of the Rural street tank between the River and Summer street. There is a nice level place there and low enough, apparently, so that sewage can be taken by gravity from the septic tank to filtration bed, if one should be installed in later years. The engineer says the conditions are ideal for carrying out of such plan, and it certainly appears so to me.

We talked this matter over with Mayor Werner and he instructed the engineer to alter plans conforming to these ideas and submit them to the next council meeting to be held the first week in November. Mr. Leins will be at that council meeting with his plans, also Dr. Hoffman, the health officer and, I have no doubt, the alterations as submitted to this board will he satisfactory to all concerned.
Regarding the septic tank proposed in these plans, I went over to West Bend in the afternoon, looked up Dr. Wehle, the health officer, and we inspected the tanks in operation there. From all I could learn, they are giving excellent satisfaction in West Bend and capacity seems to be sufficient for present needs.

I went down into the river bed and gathered some of the effluent. It seemed to be very clear and odorless. I am not familiar with the different types of construction for these tanks and I told Mr. Leins, the engineer, that you will take up the matter of settling tanks with him; but that with my proposed changes the rest of the system would be approved by this board.

While at Hartford, I called on Dr. Rogers, Dr. Rockwell, and Dr. Benson. Dr. Hoffman, the health officer, who is a partner of Dr. R.ogers, was out of the city. Dr. Rogers submitted the city health records to me and everything seemed to be fairly well kept. The reports of sanitary conditions, fair; and from what I could observe the sanitary conditions are as good there as in the average town of that size.

Tuberculosis is not being reported, but the doctors all promised they would report in the future and I assured them it was not a matter for local publicity. Dr. Rogers has two cases of tuberculosis, now waiting admission to Wales; Dr. Rockwell has one case of tuberculosis also which he will report. Dr. Keating was out of the city so I did not have the pleasure of meeting him.

At West Bend, Dr. Wehle and myself visited four meat markets and slaughtering places of the city. We found them all in fairly good condition.

In the sausage factory of Herbst and Becker, I recommended the replacing of wood floor with cement and tapping in city water, which they promised to do in the near future.

Tuberculosis is not being reported in West Bend. Dr Wehle promised to try and get the doctors to report in the future.

## Hawkins, Rusk County

As per your request by wire, I left for Hawkins Monday night and beg leave to report as follows:-The epidemic ** eruptive disease reported to you has gone through the little settlement pretty thoroughly confining itself principally to the younger children.

I find the disease commenced about six weeks ago and was little thought of as children having the rash would be sick from half a day to one or two days and be back in school, while many never lost an hour in school. I will cite some ex-
amples :-Family of C. K. Ellingson; two children had slight indisposition and rash which disappeared inside of twentyfour hours; one child out of school about three days and the $\cdot$ others out two days. This occurred about five or six weeks ago.

St. Clair family; three out of four children had the rash, and were out of school one to three days. Cases occurred second week in March.

Kahlman family; two chilidren about March first; sick slightly about one day, noticed rash, one out of school one day, other not out at all.

Dr. Baker; three children, last case last Friday night; none of children sick at all, but rash noted by Dr. Baker.

Ed. Richardson, young adult; only case I learned of in an adult; says he broke out last Sunday night and rash disappeared next day.

I visited all of the above cases and there was absolutely nothing to see to base a diagnosis on. All seemed all right, no complications, nó sequellae, no desquamation.

Thinking I might gain some information, I visited the schools. They have the township system and bring the pupils living at a distance by team to the settlement for the one school, the only school in the town of Hawkins.

In the kindergarten, Miss Daigneau, the teacher, reported regular attendance now and all the time during the epidemic except in case of Knudson family, living about one and onehalf miles away. These children out about one month on account of suspected disease. Regular attendance thirty-five to forty. In this room twenty-seven out of thirty-nine present stood up when asked who had had the rash.

Miss House, teacher of third and fourth grades, reported regular attendance of about fifty. Attendance not affected by the epidemic although large proportion of pupils say they had the prevailing rash. Full attendance yesterday except Knudson children referred to above.

Miss Salschieder, fifth, sixth and seventh grades, regular attendance thirty-five. All present. Reports regular attendance in the past.

Mr. Sergent, upper grades, regular attendance fourteen to sixteen. Reports no trouble past or present.

You will see by the above that the rash has been quite general among children, but has passed away so quickly that the doctors have seen few of the cases, as the children were not considered sick and a doctor was rarely called. The most recent cases I saw were those of Dr. Baker's child and the young man Richardson, but there was absolutely nothing to see.

The history is of a rash a little brighter than measles, coming out in a day or less and disappearing the same day or the day after. As near as I could learn the rash was not confined to any particular part of the body, but was quite general, in some instances the legs and arms were most affected. I am inclined to think it was an epidemic of Rotheln as it seems incredible that all the younger children in the community should have scarlet fever without having a single complication or sequellae or a case genuinely sick.
It seems that Dr. Christensen was called March 2nd to see the Knudson child in the country, which had then and now has bronchitis. There are six children in the family and the mother told the doctor of a rash all the children had previously had. Dr: Christensen immediately pronounced the cases scarlet fever and notified Mr. Kahlman, health officer, but tells him quarantine is unnecessary. The health officer insisted that if the cases were scarlet fever, he should quarantine and he did so. This is Mr. K.'s version. I did not get Dr. C.'s statement in regard to this. The quarantine was removed the first of the week. I was out in the country to see these cases but the children appear all clean and there is no evidence of the disease now except in the one child previously referred to who still has a bad bronchitis.

I visited a family a little further on in the country, the second and only other family outside of the settlement that was known to have had this trouble. This was in the family of Mr. Skilbed and also reported by Dr. Christensen as scarlet fever. This is the only case I saw that would arouse suspicion. The child is apparently well, but shows desquamation and harsh, dry skin on wrists, finger tips and knees.

It seems that Dr. C. was not called to see any of these cases that occurred in the village and after reporting the Skilbed and Knudson cases out in the country, he made charges that the cases in town were all scarlet fever. The health officer
then asked Dr. Baker to see the Christensen cases in the country. Dr. Baker visited these cases and reported no evidence of scarlet fever. Dr. Lundmark of Ladysmith was then called and he agreed with Dr. Baker as above stated.

There is not a case at the present time or a child in bed with the disease and I am of the opinion that scarlet fever has not existed at Hawkins for the reasons I have already given.

I can recommend Mr. Kahlman for his earnestness and willingness to do all he can and I believe he has tried to do his duty as he saw it. (All for the magnificent salary of $\$ 10$ per year). Of course this disagreement between the doctors made Mr. Kahlman lots of trouble and the affair has resolved itself into a "scrap" and the epidemic of sickness is in the background at the present time.

## Hillsboro, Vernon County

Dr. P. H. Hansberry is the health officer. He receives no salary but is paid for actual work done at the end of the year. The board of health consisting of three members has been regularly organized from the village board and Dr. Hansberry has qualified.

At the present time there are two cases of smallpox in this village and quarantine is being maintained. The patients are nearly ready to be discharged and probably will be released by the end of this week. There are three doctors and there has been no disagreement as to diagnosis. The criticism has been as to the action of the health officer of releasing patients too early and I think this came about in this way:-Some very light cases were not discovered until pretty well over the disease; quarantine was then enforced, but of course, only for a short time. The more severe cases were seen early and kept in for a period of several weeks and the public could not see the distinction, and why one place should be quarantined a week and another possibly three or four weeks. I think that this is the true situation.

The health officer was sick in bed while I was there and Dr. Pinch was acting health officer and I think was doing all that could be reasonably expected. The situation is pretty well cleared up now, the people are over their "panic" and I do not think we will have further trouble there. Vaccination has
not been pushed as it should have been, otherwise cases would have been cleaned up quicker in Hillsboro and the surrounding country with less trouble.

I had quite a long visit with Mr. C. F. Rose, the mayor. He is very much interested in health matters, especially in school inspection work and wants to install inspection in the Hillsboro schools.

Sanitary conditions are fair except for a few bad alleys and manure piles in connection with stables. The water supply is from wells. There is a small pumping station and the water is good. No typhoid has occurred here in years. There is no public sewer system, but a few private sewers empty into a stream above the dam and ice supply is taken from this point.

The village had two days of cleaning up this spring, the village paying for all the hauling. There is some complaint as to the disposal of garbage and refuse at the present time, and a place to incinerate this waste will be constructed in the near future, so I am informed by the authorities.

Referring again to the smallpox situation I forgot to state that Dr. McKichney pronounced the first cases in the country chicken pox, but later changed his diagnosis. This is no doubt where the trouble began. I met Mr. L. A. Sheldon, health officer of the town of Hillsboro. They have had some cases out there, but are all cleaned up now.

## Johnson Creek, Jefferson County

Albert Greenwood, cashier of the bank, is health officer here. He receives no salary and is paid only for work actually done.

One case of smallpox was reported in the village May 6th, and there has been none here since. Dr. Boyne, health officer of the town of Farmington, who had three cases in that town in April, says there is none there now, and thinks the situation is pretty well cleared up in the territory in and around Johnson Creek.

I was instructed to look into the sewage problem in this town, and find that a sewer system and septic tank is being installed and actual construction work is going on at the present time.

Water supply here is fine. It comes from flowing wells, is pumped by gasoline engine into reservoir, and thence distributed throughout the village.

Fred C. Mansfield Co. have a large condensing milk and cream plant here. They have no waste butter milk. Everything is converted into some by-product for which there is a sale. It is a nice plant and everything is in good condition around it.

At the H. J. Grill Butter and Egg Co.'s creamery, I ordered joints tightened on waste pipe outside of building and cleaning of milk spout going into sewer.

## Lake Mills, Jefferson County

I find they have been having trouble here for a month or more with what has been pronounced as malignant chicken pox. It appears that the local doctors have put the diagnosis up to Dr. Dodge, the health officer, and he has taken the responsibility and made the diagnosis as stated. Dr. Dodge is an active gentleman who has been in practice here since 1863. There was only one suspected case there at the time, and not being able to get hold of Dr. Engsberg, the attending physician, I insisted on Dr. Dodge going with me to see the case. Before we reached the house Dr. Dodge told me that Dr. Engsberg had become uneasy the night before about the case and was inclined to think it was smallpox.

When we got in the house it was unnecessary for me to say a word, as the patient, a man of fifty or more had a marked case of smallpox confluent on the face and one of the worst cases I have seen for a long time. Before going in the house I had met Mr. Halsted, who was waiting out on the sidewalk. I did not say a word, but let Dr. Dodge tell him it was a case of genuine smallpox, when we came out. A card had been put on the back door that morning, and I ordered a card placed also on the front side of the house.

I think they will wake up there now and when any of the doctors get a case of what they have been calling malignant chicken pox they will pronounce it smallpox and take care of it.

Regarding the sewage problem at this place. The sewage empties into the creek below the dam and in seasons of drought there is not water enough to carry it away thereby creating a bad odor. There was no trouble so far this year, but a septic tank will have to be installed sooner or later.

## Mauston, Juneau County

Dr. W. T. O'Brien is the health officer. His salary is $\$ 25$. For this compensation the doctor is expected to perform all the duties of health officer, including quarantining and fumigating after contagious diseases, the city only paying for the chemicals used. There are two other doctors here and they are prompt in their dealings with the health officer.

There are two hotels here, the Mauston Hotel and Central House. They both have neat wash and toilet rooms and supply individual towels.

There are two small markets in neat condition and I have no recommendation to make in connection with same.

Water supply is from drive wells, the supply furnished through pumping station and reservoir.

Mauston has public sewer system, but no ordinance to force connection with same. I took this matter up with the authorities. There are two blocks of open ditch parallel with andone block west of the main street. Sewer should be laid to drain this ditch of stagnant water connecting with the main sewer at the south end of the ditch if there is pitch enough to allow of same.

The health organization here is made up of two councilmen and Dr. O'Brien. The doctor has not qualified as health officer and I asked him to go before the city clerk and attend to this matter.

In the office of the Register of Deeds I find all certificates filed and indexed up-to-date. I spent about two hours in looking over the files and their returns come in quite complete from all places except the town of Kingston and Lyndon Station. I could not find a thing from Lyndon Station since January and I am sure there must have been births, deaths or marriages there since that time.

## Marinette, Marinette County

I spent all day Friday investigating the typhoid situation at Marinette, putting in the forenoon at the plant of the city Water Company, in company with Mr. Broug, the Sup't. and Dr. Jones, city health officer. The afternoon was spent in a general inspection of sanitary conditions in the city.

As you know the source of water supply for the city is from the Bay, the intake being located about 1,000 feet from shore in shallow water. The raw water is highly polluted, as is generally known, and as regular examination by the water company shows. I am enclosing letter from water company showing results of their examinations of the raw water from Sept. 27th to Nov. 15th, 1911.

You will note that during the period of heavy rains this fall, the bacterial count runs high. The fact that regular examinations of the filtered tap-water every two weeks by the Hygienic Laboratory shows no pollution or very slight pollution in one or two instances is the strongest kind of evidence that the filter plants of the company are doing remarkably good work. With the highly polluted raw water it seems quite wonderful to me that the water company is able to deliver water fit for domestic purposes to its customers.

Now the question arises "If the water delivered by the water company is safe, the milk supply and other possible sources of contagion are not suspected, where is the source of the typhoid?"

In answering this question I would say there are several things to be taken into consideration. In the first place typhoid has been present in Marinette for several years. There were twenty-two cases with four deaths in $\mathbf{1 9 0 9}$, twenty-six cases with seven deaths in 1910, and so far in 1911 twenty-four cases with four deaths. Some of these cases are imported. In some of the present cases reported, it is possible an error in diagnosis has been made.

Will cite one case out of the list of cases enclosed. Child taken sick November 16th, on November 24th up and playing around the house. It is a significant fact that Dr. Colter, one of the leading physicians and surgeons of the city has not seen a case of typhoid this season, while in the fall and winter of 1891 and 1892 he cared for 189 cases.

The ice supply is poor. The ice furnished by the Twin City Ice Company is taken from a slough of dead water just above a point where the slough joins the river and below where three or four large sewers empty into this slough. I am told there is another ice company that gets its supply from a small lake and that the ice is good, but that the Twin City people are
doing the bulk of the business. I do not think this ice taken from the river and slough is fit for domestic use.

Another condition pointed out by Dr. Jones and Mr. Broug may have a direct bearing on the relation of the water supply to the typhoid infection. It was pointed out that many water consumers get their supply from an ordinary "goose neck" with a stop and waste connection. Mr. Broug rigged up a connection in a pumping station and by use of colored water in a pail covering the stop and waste to represent surface water. We demonstrated that in a place like Marinette, where at the present time surface water is not a foot below the surface in many places, that it is not only possible but probable, and in many cases certain, that the first water taken from a "goose neck" is surface water which in this instance is no better than raw water from the Bay, as Marinette lays very flat and low and all the surface and well water practically is polluted. When the stop and waste is cut off there is nothing to prevent the mingling of the surface water with the waste and afterward filling the "goose neck" up to the level of the surface water, so that the first water drawn would not all be filtered.

I am enclosing a report of all the cases existing in the city at the present time except five cases in the hospital. By studying this report you will note that out of sixteen places in the city where the disease exists, six get water supply from " goose necks," two from wells, one imported, three cases doubtful as to diagnosis. To me this looks significant, the "goose necks" and wells supplying directly one-half of all the cases. Dr. Jones is to investigate this plumbing proposition at once and advise in the meantime that all using this "goose neck" connection let the water run a little before drawing any for domestic use.

To sum up the situation: The raw water is bad. The wells no doubt are nearly all polluted. The City Water Company is doing all in its power to give the citizens safe water. They have a modern plant and an excellent filter system. The epidemic is apparently now abating. Water from "goose necks" should not be used without flushing or boiling. All well water should be boiled. I am informed that there are many broken connections to the private taps especially in these "goose f--B. II.
necks." Dr. Jones is very active and is doing all in his power to remedy the situation. He has an assistant who is also doing good work, acting as a kind of local sanitary inspector, inspecting all fish and meat on market for sale, helping Dr. Jones in getting data in relation to contagious diseases, etc. I think the health department there is doing very good work.

Dr. Jones tells me that tuberculosis is reported there promptly and that as a rule the physicians are careful in observing all the rules of the State Board of Health.

## Marathon City, Marathon County

Per your request of the 6th I visited Marathon on Saturday the 9 th. Surface water from the main street runs down a steep grade in wooden gutters until it gets to block Keller is in. It is then diverted back to alley in pipes and then passes along in an open ditch back of Keller's store (and, of course, back of all other buildings in that block).

There is no sewage system at Marathon and except for seepage along the course from manure piles and privy vaults there is no sewage. By draining out the ditch I think they can get along all right for a time. The village president promises to do this at once. The village is to put in a system of water works and no doubt will lay a sewer on main street at same time in event of which this matter will be disposed of. In case sewer is not in by another season the authorities will put in a wood or iron pipe culvert to take care of this said to be nuisance. I could not smell any bad odor when I was there, but no doubt it is objectionable in very hot dry weather.
I would add, however, that there are many objectionable conditions in Marathon and they are not all pointed out and taken care of.

I will follow this up and see that the ditch is cleaned and deepened this fall and hope this temporary relief will satisfy the party making complaint.

## Muscoda, Grant County

I attended the conference at the village hall at which the village board, (which also constitutes the board of health) the health officer, Mr. Orchard, who has made a specific complaint, and probably forty or fifty other citizens were present.

The scarlet fever situation was threshed out at great length and many personal matters brought up which really had nothing to do with the present trouble. Dr. James, the health officer, has been criticized severely by many of the citizens and many think he is not the man for the place. I am inclined to think he has made some errors, but at the same time I feel sure that the war against him would not have been waged as hard had there not been personal feuds back of it.

Now, taking up Mr. Orchard's complaints. In matter of removal of patient to another house:-

This case was reported by Dr. Gobar late on the afternoon of February 7th. Message was taken by Dr. James' wife. On his return home ip the evening, Dr. James called up Dr. Gobar, who told him of the case and to quarantine it. Dr. James then called up Mr. C. Marcus, where the servant girl was working (the patient) and told them he was coming up to quarantine them. Mr. Marcus tells Dr. James arrangements have been made to care for the girl at another home and that the girl has already gone there on foot. Dr. James then quarantined this place.

Objection is made that transfer was not right and quarantine not promptly made. Dr. James did not make arrangements for transferring the patient, but told the people at the conference that he had a perfect right to and could have made the arrangements if called upon as the Marcus people did not want to keep the girl. The girl is practically well now.

Mr. Viktora, who made the affidavit in regard to this case, complains that a tin pail has come out and gone back, also a pair of mittens were handed out, that urine and wash water have been thrown out in the yard without proper precaution and that the house cat comes over in his yard. He does not claim that any individual has broken quarantine. He says the authorities have no right to make a pest house next door to him. I told him and his attorney that complaint regarding waste, cat and articles going out of house were justified, if true, but not his contention that we had no right to put a scarlet fever patient into a home next door to him. This is Dr. Gobar's case and naturally the health officer would expect the attending physician to instruct the quarantined family as to their duties.

Now in regard to a serious criticism of the health officer in my opinion:-This is the charge of covering up cases of scarlet fever in the Marcus home, where the servant was removed from. This was openly charged in the conference by one physician and by another citizen. I then told Dr. James I must go into the home of this family. He finally and reluctantly invited me there Wednesday forenoon. I found Ethel Marcus, six years old, peeling from scarlet fever. The hands were peeling in big strips of epidermis, and the child's back was beginning to show evidence of desquamation, but Dr. James insists the little girl has not been sick, only a little indisposition, due to bowel trouble some ten days or two weeks ago. Dr. James was inclined to take issue with me publicly in this while admitting privately to me that he would agree with me that it was scarlet fever. He certainly has made a big mistake. If he was not sure he should have quarantined on suspicion on account of the recent case in the household. He has been going to the house right along, but claims only to watch and see if anything developed. Great care has been observed and he must have suspected scarlet fever as the father, who is the principal merchant in the city, was instructed not to have anything to do with the little one and the wife and children have not been out of the house. In fact, great care has been exercised, and why so, if no disease or suspicions existed? The people feel that he has been protecting the Marcus family because they have a big department store there.

There were fourteen cases that occurred in and near the village. There are several cases in the country about, specially in the towns of Muscoda, Pulaski and Eagle, but I have no exact data on them.

You will note that shortly following "Booster" week the cases increased rapidly. "Booster" week lasted from January 22 to 27 th inclusive and farmers came from all the surrounding country. Free dances, free lunches, free shows, etc., were given and no doubt this gathering helped to aggravate the condition.

On the breaking out of the first two cases, the schools were closed, two days in advance of the regular Xmas vacation, opened again January 2nd, and closed on February 2nd, for ten days. School called again Friday February 12th and
closed the same day and has remained closed since. At the conference I advised reopening the schools, and instituting medical inspection. Action on my suggestions was immediately taken and the schools will open next Monday, and Dr. Pickering was appointed medical inspector. Dr. Pickering, by the way, is a very able man. He will inspect the schools every morning until the trouble is over.

## Mineral Point, Iowa County

The health board is regularly and legally organized and consists of three men selected by the council. They have appointed Dr. Smieding health officer, and at a meeting held on the evening I was there raised the salary from $\$ 50$ to $\$ 100$. The point was raised that the outgoing council had fixed the salary, but I told them that the board of health had the power to fix the salary, and they raised it to $\$ 100$ as stated.

Dr. J. P. Palmer is mayor, and he as well as the board of health, all seem interested in doing good work in the future. Dr. Smieding seems to think the State Board went after him pretty strong last winter in a letter concerning the scarlet fever situation, when he says all concerned were doing all in their power to stop an epidemic.

There are four places where meats are sold and they are all in good sanitary condition, far above the average in cities the size of Mineral. Point. Slaughtering is all done outside the city except an occasional small animal and that is now prohibited. In the sausage factory connected with the markets of Jench Bros. and H. E. Graber, I ordered walls and ceilings to be whitewashed.

There is no public sewage system and it would be a very difficult matter to install a system owing to the very irregular character of the surface.

Cells are to be taken out of old city hall (which has been condemned as being unsafe) and placed in engine house until a new jail is constructed. This will be a great improvement over present conditions.

The principal hotel has roller towels in use, but also is furnishing individual towels.

The alleys and back yards are fairly clean and considerable cleaning up has been done this spring. Water and milk sup.
ply is good and there is no contagious disease in Mineral Point at the present time.

## Monroe, Green County

Dr. Gnagi has just been reappointed health officer for two years and has been confirmed by the council and taken the oath of office. Salary is $\$ 100$ with extra allowance for conditions out of ordinary routine.

Scarlet fever has been all cleaned up here. Dr. Gnagi released the last case the day I was there.

Monroe has an excellent sewer system and there are few privy vaults in the city. Water supply is excellent and general sanitary conditions good.

I visited the markets and found them neat and clean with the possible. exception of the basement of H. J. Zimmerman where I ordered a general cleaning up and whitewashing.

Wash bowls and slop basin are right in the lobby as you enter the court house here, and the plumbing is of the old boxed in style, the woodwork has rotted out on the wall back of the slop sink. I called the attention of Dr. Gnagi and the health board to this and ordered that the condition be remedied. The Register of Deeds told me it was hard to get public property committee to do anything.
F. E. Corson, Register of Deeds, is getting fairly complete returns on certificates. He knows the county well, and is in a position to know if he is not getting the ordinary number of certificates for the different villages and towns. He complains of getting duplicates made out on the original form. I met Mr. West, the mayor, and two of the health board. We went over the health matters in general and I think possibly stimulated a little more activity and interest in sanitary affairs in that city.
The court house occupies a square and the business houses face it on four sides. Posts connected with chains surround the whole court house square, and the farmers hitch their teams here by the hundreds. With a row of horses around the court house you can imagine the amount of droppings that accumulate when cleaning up is done only once or twice a season. Agitation is going on now to pave the street around the square. In the meantime the droppings should be attended to
daily, or at least weekly, and the board of health are anxious to find a remedy for present conditions if they can.

## Merrillan, Jackson County

At Merrillan, Dr. Moore, the health officer, has one case of smallpox in quarantine, which will be raised in a few days. Very little vaccinating has been done here as the doctor seems to think vaccination is worse than smallpox of the mild type he has seen.

No other contagious disease present. Sanitary conditions good.

## Marshfield, Wood County

I was in Marshfield only a few hours. I called on Dr. Hayward, who has been succeeded by Dr. Vedder as health officer, Dr. Vedder having bid in the combined positions of health officer and city physician for a salary of $\$ 100$.

## Mọundville, Marquette County

Complaints have been made to board regarding a dead horse which was hauled out on a marsh adjacent to this place and left unburied. Since these complaints were made the carcass has been buried. After that a complaint was made that it was not buried deep enough and it was re-buried. I visited the premises and can say that the carcass has been properly disposed of.

I met J. E. Simpson, the health officer of this town. The Board is regularly organized and Dr. Simpson has qualified as health officer. He receives no salary but is paid for any work he may do at regular prices. Dr. Simpson tells me he has one case of smallpox at the present time. He has the case well isolated and expects no further trouble.

## Montello, Marquette County

Dr. E. H. Federmann is health officer, having succeeded Dr. Callahan who has removed to Portage. There is no salary at-tached to the office and the only compensation allowed by the village is for quarantining and fumigating in case of contagious disease. Dr. Federmann tells me there has been no con-
tagious disease here since he came last November and that so far he has received no compensation for any services.

The village board is organized as a board of health, and Dr. Federmann has qualified as health officer before the village clerk. They had no trouble with smallpox in this village last winter, but had it all around them.

Montello has no public water works or sewer system. However, it appears to be a neat and healthy little village. It lays above Bass Lake and there is good drainage.

Hotels:-The Montello and Tremont are the only hotels taking transients. The Montello is a good clean place, toilet rooms being in good sanitary condition and only individual towels are furnished. In the Tremont I ordered toilets put in better condition and I enclose copy of order for same.

Marlets:-O'Brien \& Co. and Henry Freitag each conduct small markets. In Freitag's place I have ordered general cleaning up. See copy of order enclosed.

Schools:-One large building is used for high school and grades. Drinking fountains are being installed in this building now. Fairly good building, but without modern sanitary conveniences.

County Jail:-This consists of one large steel cage in a dark rickety old building. It is poorly lighted and ventilated and not a fit place to confine any human being in. It is a disgrace to any community and the sheriff, is ashamed to keep prisoners in there. In fact, when he has a prisoner he keeps him confined to the cell only a part of the time. I had a talk with the authorities concerning this matter and the Montello people are anxious to remedy conditions even to the extent of building a new jail and court house combined.

There are only two doctors here and Mr. Arthur Barry, Village Clerk, says they send in their birth and other certificates promptly. Mr. Barry has given Dr. Federmann a book of . . transcripts of births to report originals on. Kindly send supply of bianks to the clerk.

Mr. C. R. Roskie, Register of Deeds, has records all complete and indexed up to January 1911. He has 1911 certificates at home and is getting same in shape to file in index now. I suggested that he keep his file and index up to date. Mr. Roskie has been Register of Deeds since 1900 and is well ac-
quainted in the county and feels sure he has gotten more complete returns under the present, than under the old law. I looked over the 1912 certificates and find reports from all places in the county.
M. McCuddem is maintaining a nuisance by keeping a pig pen in the rear of his building on the main street. The local health officer did not care to push this matter so I ordered McCuddem to get the hogs out of here and he promised to take them into the country this week.

## Ricilland Center, Richland County

I was in Richland Center Thursday evening, October 26th, 1911, and visited the market of John Kaizerman. I looked the place all over and find that it is, as you have been advised in former complaints, in a bad sanitary condition. I cannot say that it is much worse than many places of the kind I have seen about the state, at the same time he certainly can improve conditions very much with a little labor.

The manufacturing room, where sausage is made in the rear of the shop, has a cheap wooden floor. This should be replaced with cement, and city water tapped in so the place can be flushed easily and often. This improvement, Mr. Kaizerman promised to make early in the spring. I ordered a general cleaning up, whitewashing of the walls in the hallway and work-room, which Mr. Kaizerman promises to do immediately.
I visited three other meat markets in the city and found them all to be in a fair sanitary condition.

I also called on Dr. Mitchell, the health officer. He reports conditions fairly good from a sanitary standpoint in the village. There is no contagious disease there of any kind at the present time.

Tuberculosis is not being reported, but Dr. Mitchell says he will try and have the doctors report in the future any case they may have.

New Richmond, St. Croix County

New Richmond is a neat little city of about 2,000 inhabitants. It has a good water works system, source of water from well which is palatable and healthful. It also has a sewer system, the main outlet of which goes into the mill-pond of the

Willow river discharging the sewage without treatment. The pond is so large that the dilution is great and I understand it has not given any trouble so far.

The local ice supply comes from this pond and it does not seem that the ice would be very desirable for domestic purposes.
I visited the hotel and public boarding houses and have to report as follows:

The National Hotel has 22 rooms, is a cheap wooden structure and is in a very poor sanitary condition. Toilet room in basement has two ordinary closets with high flush tanks, one urinal and three wash basins, with hot and cold water supply. Toilet room on second floor has one high tank closet in order, but not clean. In the kitchen I find the sink connected with sewer and hot and cold water supply. Roller towels were the only ones available and I ordered them out. Drinking fountains for guests had common drinking glass, which I also ordered out.

The toilet rooms, above mentioned, I found in a poor sanitary condition; one closet broken and out of commission and all the bowls, closets and the urinal dirty. I stated specifically to the proprietor what I wanted done and was promised that my orders would be carried out at once. There was a very foul place back of the kitchen door where old tin cans, dish water, etc., had been thrown, which I ordered cleaned up at once. I also suggested painting the wood work and kalsomining the walls in the kitchen. The bed-rooms in this hotel are poorly furnished and the bedding poor. The mattresses are of the cheapest kind, and in some instances, not clean. While the bedding was poor and the quilts showed hard service, the sheets and pillow cases were clean and they insist that they changed linen every day in rooms where there is a change of guest.
I ordered a general cleaning up and asked Health Officer Knapp to see that my recommendations and orders were carried out.
The Willow River House has twenty guest rooms: It is a common wood building and they take a cheap class of trade. Have city water and private sewer, privy vaults in rear of hotel, wash basins in office, roller towels in use, hot and cold
water in kitchen. I find this hotel is in fairly good condition considering the class of patronage. Kitchen, is clean and well ventilated, beds and bedding fair quality and clean. I ordered roller towels out.

Russell House and North Side Restaurant: Thirteen sleeping rooms, hot and cold water in kitchen, waste kitchen water hauled away in barrels to pond, garbage gathered by private individuals. Proprietor is to put in cess pools, city sewer not accessible. Roller towels now in use, ordered them out. This place needs a general cleaning up which I ordered, although I did not find the specific conditions mentioned to you.

Central House: Rooming house only. Has city water and sewer to cess pool. Sixteen rooms. Does not serve meals. This is a cheap dirty place. They run a bar and the class of patrons they have is very undesirable. Roller towels in use, which were ordered out. I ordered a general cleaning up but with the character of the patronage and the looks of things in general about the place, I cannot expect much.

The four hotels, heretofore mentioned, are the principal ones catering to a cheap trade. There are a number of private places taking roomers and boarders which I did not think it necessary to visit.

The Commercial is the principal hotel and gets all the commercial traveler's trade. It has city water, sewer, hot and cold water in kitchen and in both toilet rooms. First floor toilet room has urinal, three wash bowls and one high tank closet. Roller towels in use, ordered them out.

I visited the high school in company with Mayor Donahue and Health Officer Knapp. This is a beautiful building and a credit to the city. It has a modern system of heating and ventilating, city water, city sewer, shower baths, and first-class toilet accommodations. I suggested some slight repairs in urinal in boys' toilet and ordered out roller towels. My suggestion will be carried out at once. Drinking cups have been abolished and bubbling fountains installed in this school.

I visited the jail in company with City Marshal Martin. It is a nice neat little jail, new and modern, and I have no suggestions to make in regard to it, as it is in good sanitary condition.

The sanitary conditions as a whole in the city are fair. The
only contagious disease at present is one case of diphtheria, imported from Minneapolis. The case is in the care of Dr. Wade and strict quarantine is being maintained.

I was told they have an anti-spitting ordinance in New Richmond, but that little attention has been paid to it. I urged upon the mayor that he bring about more publicity concerning this ordinance through the press by printed signs, etc. I also talked with Dr. Epley, president of the county society, along the same lines. They promised to do all they could in this matter.

Tuberculosis is not being reported by the doctors in general. Dr. Wade says he reports his cases but the other four doctors have not been reporting so far, I believe. I called their attention to the law.

## New Lisbon, Juneau County

S. E. Cooper, a merchant, is health officer here and his salary is $\$ 25.00$ per year. He has been reappointed this spring. He seems to be a conscientious man and tries to do his duty and tells me that the two doctors here are very kind in assisting him in any matter that comes up that he does not understand.

There is no contagious disease here of any kind. Last spring they had one case of smallpox.

Water supply here is entirely from domestic wells. A water tower has been built as the start of a public supply but no mains have been laid yet.

There is no sewer system here and there are some bad vaults and Mr. Cooper has these in hand now. There is no board of health or committee on health here, Mr. Cooper having been appointed by the mayor and confirmed by the council.

There are two meat markets here, both in fair condition. The high and grade schools are combined in one nice new modern building.

Park Hotel is the only one taking travelers and everything seemed to be in a clean condition and they furnish individual towels.

## Packwaukee, Marquette County

Kempley \& Thomas operate a small meat market and restaurant at this place. They also have a small sausage plant in the rear of the market. The hogs complained of are in the rear of the restaurant and market. It seems that they have been keeping a number of hogs in this yard but at the present time they have only two there, on account of the wet weather which made it hard to keep the yard in decent shape and no doubt conditions looked better when I was there after a few days of sunshine than previously. Killing was formerly done in the ice house, but this building has been cleaned out and filled with ice, and I am sure no killing is done on the premises now. Mr. Cole, Mr. Burnham, and Mrs. Bundy are the people living nearest and most affected by this pig yard. Mrs. Bundy is directly in the rear and complains of conditions as they are at present. Mr. Burnham, postmaster, who has his office on one corner and his residence on another corner says conditions are all right so far this year. Mr. Cole, clerk of the village for fifteen years, says that he complained last year and that the killing was stopped and sand drawn into the yard to put it in better condition, and that he has no fault to find at the present time. It is a question in my mind whether this pen with two or more animals in it can be continued without being a nuisance, although at the present time Kempley \& Thomas seem to be doing all they can to keep it decent. I directed these people to keep this yard in as good shape as possible and we would await developments and that if the same became a nuisance the state board would have to order the pen closed. I gave verbal orders in regard to cleaning up their sausage plant. I am confirming same by letter, a copy of which I enclose.

The salary of the health officer is five dollars per year. A board of health is regularly organized and the health officer has qualified.
W. A. Cole has been clerk for fifteen years and he makes an excellent clerk and gets complete records. He keeps track of births, deaths, etc. and in case there are no reports he gets right after the delinquents.

## Portage, Columbin County.

Portage now has a commission plan of government. Dr. Batty has been appointed health commissioner at a salary of $\$ 120$ per annum. He has taken a great interest in this health work and I am sure is going to do excellent work as a health officer. I spent the greater part of two days in Portage, much of the time with Dr. Batty in looking over the sanitary condi-* tions of the city.

Portage has recently completed a good sewer system and in the future there will be a lot of work for the health officer in enforcing connections with sewer where old privy vaults now exist. They have no local ordinance to compel this but he will have the City Attorney draft an ordinance and submit it to the council at an early date. I also suggested to the doctor an ordinance providing for receptacles for manure and the removal of same. He is in hearty accord with this idea and will put it through.

Water Supply: Source of water supply is Wisconsin river. Plant consists of pumping station and stand pipe and the water is used for drinking to a considerable extent. The water looks bad and one would think with all the sewage flowing into the Wisconsin above, that it would be unsafe for domestic use, but it is used to quite a large extent by the poorer class of people and no typhoid and other bowel trouble seems to have resulted. In fact, they have had no typhoid here for several years.

The doctors are all prompt here in reporting contagious disease and in sending in their certificates. There is no contagious disease in Portage at the present time. Tuberculosis is not reported.

I spent two or three hours looking over the files in the Register of Deeds office here in Portage. The files are not kept in good order and there is no systematic arrangement of the same. The certificatës áre not filed by years separately and much can be done to make the files neat and handy for reference. I made several suggestions to the Register of Deeds and I think files will be put in better order in the future.

I find no returns of births, deaths or marriages from the town of Courtland, village of Doylestown and the village of

Poynette since December, 1910. The Register of Deeds had not noticed the absence of these reports and I would suggest that you take the matter up with the clerks of the respective places. I find many original certificates of births and deaths which are probably intended as copies, the word "Original" not being erased. Portage is an old town and has just completed a sewer system and there is lots of work to be done by the health officer in the next few years and the salary fixed is inadequate if any work is to be done. I had a talk with Mayor Downey and the two council men, Mr. Goss and Mr. Belinghausen and pointed out to them that they are not paying their health officer a decent salary. The mayor took very kindly to my idea and would be very glad to raise the salary and Mr. Goss will concur. Mr. Belinghausen is a friend of Dr. Bentley, the former health officer, and probably thinks that the new health officer is not entitled to any more salary than Dr. Bentley had in the former administration.

## Valley Junction, Monroe County.

At Valley Junction, I found Frank Baker and wife ill with well marked cases of smallpox. Good quarantine is being maintained.

The first case reported here was a Mr. Salsbury. Dr. Bell of Tomah pronounced it smallpox and Dr. Parks of Camp Douglas pronounced it "pancake itch". The Baker cases followed and no doubt came from this case. The Bakers have well marked cases of smallpox.

Mr. Armstrong, the health officer, tells me these are the only cases he really knows of, but he is of the opinion that a number of cases in the country have never been reported. Mr. Armstrong has been health officer here for a long time and takes considerable interest in the work.
I did not see any other matters to look into here as it is only a railroad crossing in the country.

## Warrens, Monroe County.

Typhoid Fever has been present in Warrens and vicinity for many years. Below is a compilation of cases I gathered while there on Monday and Tuesday of this week. This list may not
be accurate or complete, but I think it is fairly so as Dr. Seidel is the only physician and I took pains to confirm his report of cases by inquiries among the citizens. I did not go back farther than 1905 in the typhoid history, as it is difficult to get good history on old cases.

## 1905.

1. In July 1905, Mrs. Baker took the Strand milk to sell while Mr. Strand was away. Strand is the barn man for the Warren Land Company, and does the milking. 2. A daughter. of Mr. Strand had Typhoid in 1905.

## 1906.

1. Jay family one case in 1906 , milk supply at that time - from the Warren Land Company.

## 1907.

1. David Gillett, March 1907, lived two miles out of town in country. Came to town and helped to clean up residence where Schnurman, the buttermaker, died of Typhoid Fever the month previously.
2. Schnurman, butter maker, February 1907. Was unable to determine whether any of the Warren Land Company milk went to the Creamery at that time. Warren Land Company say it is impossible.
3. J. A. Johnson, July 1907, lived near Strands and supplied by Strand with milk from Warren Land Company barn.
4. Clinton Gillett, September 1907, says he got milk from country and none from Warren Land Company.
5. Barber, daughter Edith, August 1907, milk supply Warren Land Company.
6. 
7. Shovers family, ten miles in country. Mr. Schover is a brother-in-law of Wilson's in town who had typhoid later. Shovers do trading in town. Three cases in this family.
8. 
9. Benson family. One case, young lady visitor. Milk Supply, Warren Land Company.
10. Strand. One case, Milkman for Warren Land Company. Another daughter had typhoid this year, with milk supply the same as above.
11. Family F. R. Barber (One of the Warren Company). One case in servant. Gehrke girl taken with typhoid in February 1909, sent home in country and four cases followed in family of the girl in country. Barber milk supply, the Warren Land Company.
12. McNute. One case. Lived near Strand's milkman for Warren Land Company, and got Warren Land Company's milk.
13. Mr. Jay. One case. Milk supply at that time Warrens Land Company.
14. Wilson, 2 cases in 1909. Milk Supply, Warren Land Company.
15. 
16. Larson, 2 cases, April and May 1910. Milk Supply from Warren Land Company.
17. 
18. H. C. Olsen, one case. May 1911.
19. J. Colton, one case January 1911. Mr. Colton is manager of Warren Land Company. In above two families the water supply is from the same well and milk supply is same, namely,-Warren Land Company.

## 1912.

1. Gibson, January 1912. Two cases, one child three years, one infant seventeen months. Infant died. Milk supply; Warren Land Company.
2. Snippen family, January 1912, two cases. Mr. Snippen now in Eau Claire hospital convalescing. Miss Dores, sister-in-law on visit to Snippen's, now convalescing. Milk supply from Warren Land Company,

7-B. Н.
3. Miss Porter, June 1912. Well polluted. Milk supply uncertain. Miss Porter worked at Barber's, also was at Snippen's week or ten days before being taken ill. She does washing and it is difficult to trace source of infection in her case.

This history leads one to suspect an infected milk supply. The Barbers, Warrens and Bensons are associated in business and they get their milk from the company's herd. Mr. Strand is chore man and does the milking. I suspect that he, or some one in his household is a "Carrier" or that there is an infected water supply on some of the premises where the milk utensils are washed and cared for. Mr. Strand gives the Warren Land Company people what milk they need and sells the remainder. The Warren Land Company people too, often give away or sell some of their allotment of milk.

I have advised the Warren Land Company, through Mr. Benson, Mr. Barber and Mr. Colton, the manager, to discontinue selling or giving away any milk or dairy products until we can more fully determine if it is safe to do so. They agree to do as I advise. I also asked Dr. Seidler to get "Weidal" tests of those most intimately associated in the handling of the milk, especially the Strand family.
I also advised examination of the water supply of the places where milk is handled, especially the well and reservoir of Warren Land Company, the Strand well and any other wells that may be suspected.

I advised a thorough cleaning up of all privy vaults in the spring and the using freely of strong disinfecting solutions recommended by the State Board of Health.

The matter of vaccination was taken up and discussed with the citizens, about thirty of which attended a meeting held Monday evening. There is quite a sentiment in favor of it and I told them Dr. Smith would come and do the work with. out any expense to the individuals or the town.

There are no cases of typhoid present in Warrens now. Mr. Snippen is convalescing and Miss Dores left for home on the same train I left on. Miss Porter is well. She had a slight case.

Fault is found that Dr. Seidel does not make public the recommendations of the State Board of Health and that he makes light of the trouble.

The recommendations I make in this letter, I made in public at the meeting.
I would suggest that you send a letter to Dr. Seidel recommending the measures as incorporated in this report, at the same time ask him to advise the public as to your recommendations.

## Wautoma, Waushara County.

I find the first case of scarlet fever was reported about December 25th, 1911, in the case of Marjoric Person. She recovered and the house was fumigated by Dr. Wilson, Health Officer. About April 1st, Dr, Vanderlinde was called to the home of Mrs. Fritz and found her and three children ill with scarlet fever, three of them peeling. The health officer had been called here previously on account of suspected disease, but found nothing. They are all well now and quarantine has been raised but children are still isolated.

A child of Wm. Court was seen by Dr. Wilson on April 7th and scarlet fever was suspected, but no quarantine was established and the child died April 16th, with Dr. Poppe in attendance, who pronounced death due to Brights Disease. After investigating this case, I feel sure it was a case of postscarlatinal nephritis.

The second case in this family is an infant, now ill and under quarantine since the 17 th . This is the case Dr. Vanderlinde wanted me to see and I can concur with Dr. V. in his diagnosis.

In the town of Wautoma there are two cases which can be traced to the Fritz cases in the village. In Dakota there are four cases in one family. In town of Richfield, Miss Person, a teacher, and a sister of Marjorie Person, the first case, took sick at her boarding place in the country and died of scarlet fever in February. She had been home twice over Sunday after the Person home was disinfected, and no doubt contracted the disease at home, owing to poor disinfection.

A boy named Whaley living in the family where Miss Person boarded also contracted the discase and died.
Dr. Wilson, as health officer, has not done good work. I told him that he must do better work in disinfecting and be more alert in handling contagious diseases.

## Whitehall, Trempealeau County.

Whitehall is a prosperous and pretty little village. Dr. Berg and Dr. Storey are the physicians here and Ole Torson the health officer. I visited them all. They tell me they had two cases of smallpox during the winter but are free from any contagious disease now.
In the town of Preston a pupil was taken ill in February.' Case was diagnosed smallpox by Dr. Storey and vaccination of school recommended, but refused by school authorities. Later on the teacher came down with smallpox and of course the school was then closed. Later on the school children were vaccinated and the situation cleared up.

The Green Bay road maintains stockyards right in the village and in close proximity to residences in Whitehall and there has been severe complaint of late. The health department has taken the matter up with the railroad and they were putting in three cars of cinders after having cleaned out the yards. This will keep the yards in good shape for some time to come.

Whitehall has water works and sewer system. The water supply is from mill pond and is not used for drinking purposes.

## WATER SUPPLIES AND SEWERAGE SYSTEMS.

Chapter 433, laws of 1905 , provides that "Before any city or village shall institute a water system, or system for water supply for the domestic use of its inhabitants, or a system of sewerage for the disposition of its sewage, such city or village shall submit to the State Board of Health the plans and specifications for such system, and both of the water system and the sewerage system if a sewerage system exists or is proposed, and the State Board of Health shall examine such plans and specifications for the proposed system and the sanitary and hygienic features thereof; and no such system shall be installed or put in operation until the State Board of Health shall issue its certificate that such proposed system will not be in any respect unsanitary or dangerous to the public health."

This law was enacted for the purpose of safeguarding the public water supply where new systems are to be installed. It also makes it possible to provide for the sanitary disposal of sewage so as to prevent the creation of a nuisance and also to prohibit the discharge of crude sewage into the rivers and lakes of the state.

Since this law was adopted near the close of the 1905 session of the Legislature, plans and specifications for a public water supply system have been approved in the following places:-

Marshfield, Argyle, Readstown, Port Washington, East Troy, Middleton, Reedsville, West Bend, Withee, Sheboygan, Johnson Creek, Independence and Walworth.

Plans for sewerage systems have been approved in the following places:-

Athens, Beloit, Burlington, Ellsworth, Marshfield, Manitowoc, Phillips, North Milwaukee, Lake Mills, Waupaca, Richland Center, Port Washington, Menomonee Falls, Oconomo-
woc, Platteville, Sturgeon Bay, Tomah, West Salem, Waupaca, Algoma, Cedarburg, Portage, Stoughton, Washington County Insane Asylum, West Bend, Blanchardville, Beloit, Chilton, Colfax, Evansville, Hartford, Johnson Creek, Independence, and the Porcelain Enameling Works at Sheboygan.

The law, which prohibits the establishment of a public water supply system or a sewage disposal plant without the approval of the State Board of Health applies only to new systems which are being established. It is impossible under this provision to prohibit the discharge of crude sewage into public waterways, if the sewerage system was established prior to 1905. The same situation pertains to water supplies.

There is a very strong sentiment throughout the country in opposition to further pollution of the rivers and lakes by the discharge therein of crude sewage. In their efforts to provide a legal means whereby this practice can be prohibited in the plants established prior to 1905 the last Legislature enacted Chapter 412, Laws of 1911. This law authorizes the State Board of Health upon the complaint of the common council, town board, village board or board of health of any sity, incorporated village or township to prohibit the discharge of crude sewage or other waste into any stream, watercourse, lake or pond, provided it has been determined by the State Board of Health, after proper investigation, that such sewage or waste creates a public nuisance detrimental to health or comfort, or is polluting the source of any water supply.

The findings of the board must be approved by the Governor before they are enforced. If the order of the board, when approved by the Governor, is not acceptable to the city, village, corporation or owner affected thereby, the right of appeal to a board of experienced sanitary engineers is provided.

Section $1407 \mathrm{~m}-4$ of the same chapter authorizes the State Board of Health to prohibit the sale of water or ice which is so contaminated or unwholesome that its use endangers the public health. There are many places in the state where the ice supply is obtained from lakes, rivers or ponds which are badly polluted by the discharge into such waterway of crude sewage or manufacturing waste.

If it is suspected that the ice supply is unfit for domestic use, samples of it should be forwarded to the State Laboratory of

Hygiene for examination. If upon the completion of these examinations it is found that the ice is unfit for domestic consumption, the State Board of Health will issue an order prohibiting the sale or use of such ice so as to endanger the public health.

The circuit court by this section is given jurisdiction and power upon the application of the State Board of Health to enforce by proper order and decree the orders, rules and regulations of the board, made under and by virtue of this section.

> Plans Examined.

During the biennial period covered by this report, the plans and specifications for water supplies and sewerage systems in the following municipalities were approved by the State Board of Health, as provided for by chapter 433, laws of 1905.

Independence. Water Supply System.
The plans and specifications of a water supply system for the village of Independence as presented to the State Board of Health by the engineer, Mr. W. E. Miller, were approved on November 28, 1911.

Prior to granting permission for the establishment of this public water system samples of water from the wells were examined at the State Laboratory of Hygiene and the examinations showed that a pure water supply was obtainable.
Detailed specifications for this system are fully set forth in the plans which are on file in this office.

## Walworth. Water Supply System.

The plans for the public water supply system at Walworth were approved January 28th, 1911.

The source of the water supply is a drilled well one hundred feet deep, covered by concrete floor and a brick pump-house.

The plant was completed on January 21, 1912.
As soon as the well was drilled, containers were sent for the purpose of collecting samples of water for analysis in the State Laboratory of Hygiene. These examinations showed that the water was fit for domestic use.

The specifications provided for a pumping capacity of 8,000 gallons per day.

Only a small part of the population will use the public water system.

## Blanchardville. Sewerige System.

The plans for a partial sewerage system for Blanchardville were approved on April 26, 1911.
The sewer, as shown by plan, will be for four blocks on Main Street. There is sufficient fall so that a septic tank can be installed. The village cannot afford to install a tank at this 'time, but the outlet in the Pecatonica River is so arranged that at some future time, if it is found necessary, a tank can be installed without changing the system in any respect, except a short piece of pipe leading from Mills street, to the proposed outlet.

The village has a water works system. Water is obtained from two deep wells, located several blocks from the river, so that there would be no possibility of polluting the water from the sewage which would be discharged into the river.

Argyle, the nearest village located on the river, is about fourteen miles below Blanchardville.
The stream where the sewage will be discharged is deep and swift flowing. The river and banks are thoroughly flooded by rains many times during each season. The river water is not utilized either for drinking or commercial purposes below the point where sewerage outlet is made.

The sewer will be used mainly by business houses, located on Main street. At the present time, a sewer leading from Elm street across Mills street, to the river, is being used. The sewage is discharged in the river below low water mark and no bad results are shown.

The plans were approved under the provision that the State Board of Health, whenever in its judgment such change is necessary, order the installation of a septic tank or some other approved method for treating the sewage before it is discharged into the river.

The board granted permission in this case for the establishment of a sewerage system without there being installed at the same time a septic tank or filter beds through which the sewage must pass before it is finally disposed of. The small volume of sewage per day and the population using the sewerage
system, in the opinion of the board, warranted this action with the reservation above stated.

Beloit. Sewerage System.
The plans on file in this office provide for the extension of sewer, District B, of the city of Beloit, and were approved on April 4, 1911.

The State Board of Health granted permission to install sewer connections in this district, providing a settling basin, or septic tank, is constructed through which all sewage from the district must pass before the effluent is deposited into Turtle Creek.

The board reserves the right in granting permission for the installment of this system to order additional treatment of the sewage as conditions may warrant.

The population which will make use of the sewer connections in this district is estimated at approximately 3,000 . 15,000 gallons of sewage will be handled every day.

## Chilton. Sewerage System.

A permit for the construction of a sewage disposal system for the city of Chilton was approved by the State Board of Health on February 3, 1912.

A septic tank is provided for through which all sewage must pass before it is finally disposed of. In addition the State Board of Health reserves the right to demand the construction and operation of filter beds in conjunction with the sepfic tank, if conditions warrant such action. The plans were not approved until the septic tank was so located that filter beds could be added without materially changing any part of the present proposed system.

The system has not yet been installed and probably no ac-tion wil be taken to provide sewerage facilities until a public water supply system is also provided.

## Colfax. Seweráge System.

Plans and specifications provide for the establishment at Colfax of one and one-half blocks of sewer mains. These sewer connections will accommodate a population of about forty-four persons.

The plans were approved under the following conditions:-
The sewage disposal system may be constructed without mak-
ing provision for passing the material through a septic tank or filter beds on account of the small volume of sewage and the few persons to be accommodated by the sewerage system. The right is reserved, however, to require the installation of a settling basin, septic tank or filter beds when, in the opinion of the board, the health and safety of the inhabitants may require it.

The sewage, according to the plans, will be discharged into the Red Cedar river, which is a rapid flowing stream. At a place about three miles below Colfax a creek is formed about eight miles long created by a fifty foot dam at Cedar Falls, which is well adapted to serve as a settling basin.

The investigations which have been made prove that there is an urgent demand for a sewerage system at Colfax on account of the large number of cesspools maintained, especially in the business districts.

## Evansville. Sewerage System.

On March 6, 1911, the State Board of Health authorized the City of Evansville, through its common council, to install a sewerage system with a capacity of 100,000 gallons per day.

Provision is made in these plans for a settling basin or septic tank to be operated in connection with the filtration beds. The filter beds are to be installed either when the plant is constructed or upon the order of the State Board of Health at some future time.

The effluent, according to the plans, is to be discharged into the river. The sludge will be used for fertilizing purposes.

## Hartford. Sewerage System.

The plans and specifications for a sewerage system for the city of Hartford were approved by the State Board of Health on January 25, 1912.
Prior to the establishment of this system no sewerage facilities were provided with the exception of a number of private sewers from homes which discharged the crude sewage directly into the Rubicon River, a small stream flowing through the city.

The original plans, as filed in the office of the State Board of Health, provided for the use of two septic tanks. This was unsatisfactory to the board and approval was withheld until
the plans were changed so as to eliminate the septic tank to be installed near the mill dam.

The revised plans provide that all sewage shall be gathered into one system and passed through the septic tank, the effluent to be discharged into the river below the mill dam. Provision was also made in the revised plans for installing filtration beds when the necessity demanded further treatment of the sewage. No sewage will be permitted to pass into the mill-pond.

## Johnson Creek. Sewerage Disposal.

The plans and specifications for a sewage disposal plant to be installed in the village of Johnson Creek were submitted to the State Board of Health by the engineer, Mr. Geo. Davis. The system, plans of which are on file in this office, were approved on October 23, 1911.

Provision is made in this system for disposing of approximately 1,500 cubic feet of sewage per day, this being approximately the present discharge from the creameries located at Johnson Creek. According to the plans, all sewage must pass through a sedimentation tank before the effluent is discharged into a small stream which flows through the village. Sludge beds are also provided near the tank.

## Independence. Sewerage System.

The proposed sewerage system, as outlined in the plans and specifications on file in this office, were approved by the State Board of Health on the condition that, if at any time this method of disposing is found inadequate or dangerous to the public health, the system must be so altered as to provide the village with a safe and satisfactory method for the disposal of sewage.

The population of the village is given as 634 and the number of people who will probably use the public sewerage system is estimated at 500 .

The sewer mains will be flushed from the public water system and the effluent discharged into the Trempealeau river, after passing through a catch basin which is to be cleaned whenever necessary.

The Porcelain Enameling Association of America. Sewerage System.
This company operates an enameling company, which employs about three hundred men and women, about one-fourth of a mile north of the city limits. All of the sewage from this plant was formerly discharged into a small creek flowing into Lake Michigan about one-fourth of a mile north of the city pumping station. The creek into which this raw sewage was discharged was so badly polluted that a nuisance was created and in addition there was great danger of contaminating the city water supply.

The plans and specifications for a sewage disposal plant to be operated in connection with the factory were approved by the board on Aug. 25th, 1911. Provision is made for the operation of a septic tank and filtration beds through which all sewage and waste material from the factory must pass before the effluent is discharged into the creek.

# ANTITOXIN FOR INDIGENT PERSONS AFFLICTED WITH DIPHTHERIA 

The agreement with the Alexander Antitoxin Company of Marietta, Pennsylvania, to furnish diphtheretic antitoxin to local boards of health for use on indigent cases suffering from diphtheria, has been continued throughout the present biennial period. This arrangement is made to comply with chapter 140, laws of 1907.

The details regarding the local distributing stations, and the method by which the antitoxin can be obtained, was fully discussed in the last biennial report. Under this agreement, antitoxin is furnished to local boards of health at the rate of forty cents per one thousand units and ten cents additional for each syringe. Three sizes of packages are supplied, as follows:

Syringes containing 1,000 units
Syringes containing 3,000 units and
Syringes containing 5,000 units.
The 1,000 unit packages, which are used to prevent diphtheria if a person has been exposed to the disease, will cost the local board of health fifty cents; 3,000 units will cost $\$ 1.30$, and the 5,000 units will cost $\$ 2.10$.

The following is a brief summary of the method by which the antitoxin is supplied to local boards of health.

Distributing stations are established by the State Board of Health in all of the principal cities and in other places as the necessity arises. The local distributor, whenever possible, is either the health officer or a retail druggist, preferably a druggist, who agrees to keep a supply of the state antitoxin on hand and distribute it upon requisitions properly filled out and signed by the local health officer of the township, incorporated village or city where the antitoxin is to be used.

The requisition, a copy of which is given below, is retained by the distributor and forwarded to this office once each month.

## "ANTITOXIN REQUISITION BLANK

Antitoxin Distributor:
(Name)
(Address)
Please deliver, without charge, to Dr.
Town or city .County State

ALEXANDER'S DIPHTHERIA ANTITOXIN, as specified below: Syringes, 1000 Units each

|  | " | 3000 | " | " |
| :---: | :---: | :---: | :---: | :---: |
|  | " | 5000 | " |  |

Same to be used under the direction of the State Board of Health.

## (Signature of Health Officer or Agent)

Date
To be charged to account of
(Upon presentation of this blank, properly filled in and signed by a duly authorized officer of a Board of Health or a Health Officer or Agent, any Distributor in the State shall deliver the specified quantity of antitoxin)"

All requisitions are sent from here direct to the Alexander Company, at Marietta, Pa., and the amount due the Company for the Antitoxin used upon indigent persons afflicted with diphtheria is collected by the Company from the various townships, incorporated villages and cities where the state antitoxin is used.

During the Calendar year of 1911, we distributed antitoxin, as follows:

983 Packages of 1,000 units.
659 Packages of 3,000 units.
763 Packages of 5,000 units.

This material cost the local boards of health, at the special price for indigents, the sum of $\$ 2,949.20$.

For the period ending June 30th, 1912, the following supply of antitoxin was distributed:

497 Packages of 1,000 units.
206 Packages of 3,000 units.
392 Packages of 5,000 units.
This antitoxin was furnished to the local boards of health at a total cost of $\$ 1,339.50$.

The total cost, therefore, of the antitoxin distributed during the eighteen months ending June 30th, 1912, is $\$ 4,288.70$.

The cost of this antitoxin, if purchased at the usual retail prices, would have been $\$ 15,942.50$. This represents a saving to the poor people of the state of $\$ 11,653.80$. The actual saving in human life as a result of poor people being able to obtain antitoxin when needed is greatly in excess of this amount and really cannot be properly estimated.

It is no longer necessary to advance arguments favoring the use of antitoxin in all cases or suspected cases of diphtheria. The physicians, almost without exception use antitoxin very freely and if there is any failure on the part of the attending physician to make use of this remedy, the parents usually insist that the patients be given antitoxin at once.

The State Board of Health is now endeavoring to make the necessary arrangements with a reliable Antitoxin Company so that diphtheretic antitoxin can be obtained for use on all cases, whether indigent or not, at the indigent rate or at a rate slightly in excess of the price paid for antitoxin used on indigent persons suffering from diphtheria.

## PASTEUR TREATMENT FOR THE PREVENTION OF RABIES.

During the interval from November 14, 1909, when the Pasteur institute was started at Madison, to June 30, 1912, 228 persons received the Pasteur treatment, at the State Laboratory of Hygiene for the prevention of rabies.

Chart No. 14 gives the location by counties of all patients who took the treatment during this time. An examination of this chart proves conclusively that the cases of rabies are confined almost entirely to the Fox River Valley, the Wisconsin River Valley, and adjacent territory.

Practically no examinations to determine the presence of rabies in the lower animals or in man were made in Wiscon$\sin$ prior to 1907 and as a result it is impossible to even estimate the prevalence of this disease in Wisconsin before this time.

During 1907 a number of cases of rabies among the lower animals were discovered at Beloit. From this place rabid animals were reported at Janesville, Milton Junction, Oshkosh, Green Bay and Marinette. This shows that rabid animals, especially dogs, must have traversed the entire Fox River valley and part of the eastern coast of the state, especially Marinette and Oconto counties. This tendency of the disease to spread practically across the entire state in a northeastern direction emphasizes the danger of a severe epidemic of rabies, provided ordinances requiring the muzzling of dogs are not enforced. Rabid dogs have been known to travel long distances, thus carrying the infection to districts where no cases of rabies have been known to exist for many years. This also will account for the sporadic cases and the danger of a severe epidemic if muzzling ordinances are not enforced.

The virus, which is injected hypodermically for the prevention of rabies, is furnished free of charge by the Marine Hos-
pital Laboratory at Washington, D. C. Twenty-one injections are given each patient at the State Laboratory of Hygiene by a practicing physician employed by the State Board of Health for this purpose.

A nominal charge of twenty-five dollars per case is made to cover the cost of administering the treatment. The usual charge for the treatment, before the virus was supplied by the Marine Hospital Laboratory, varied from one hundred to one huadred and fifty dollars per treatment.

If the two hundred twenty-eight persons who were bitten by rabid animals, or by animals suspected of being rabid, had been compelled to pay for the treatment at the rate of one hundred fifty dollars per case, it would have cost $\$ 34,200$. The actual cost of administering the treatment at our own laboratory is $\$ 5,700$, which represents a fee of twenty-five dollars per case. In many instances the patients were too poor to pay for the treatment received and the township, incorporated village or city did not guarantee the payment of this fee. As a result, many poor people received the Pasteur treatment free of charge, so the total cost of treating the two hundred twen-ty-eight persons is considerably less than $\$ 5,700$. The facilities offered for taking the treatment at our laboratory have saved the people of the state who were so unfortunate as to be bitten by rabid animals $\$ 28,500$ in addition to the amount saved in railroad fare and other expenses incident tol a trip to Chicago or some other city where the Pasteur treatment could be obtained.

Out of a total of 228 persons treated in the Pasteur institute, 148 were males and 80 females.

The classification for the age groups is as follows:-
Under one year ..... 00
From 1 to 4 years ..... 16
From 5 to 9 years ..... 49
From 10 to 19 years ..... 61
From 20 to 29 years ..... 48
From 30 to 39 years ..... 24
From 40 to 49 years ..... 15
From 50 to 59 years ..... 9
From 60 to 69 years ..... 5
From 70 to 79 years ..... 2
80 plus ..... 00
Age not stated ..... 00

161 of the persons who availed themselves of the Pasteur treatment were bitten by rabid animals and in 49 additional cases, there was a history of rabies and the people bitten insisted upon taking the Pasteur treatment so as to prevent any possibility of contracting the disease. Five persons who took the treatment were either bitten by human beings who were rabid or were suspected of being infected by scratches on the hands or face caused from caring for an individual suffering from rabies. In thirteen cases there was no evidence of rabies and the people who had been bitten were permitted to take the treatment as a safeguard.
Classifying the 228 cases according to the kind of animal by which the person was bitten, it is shown that 206 persons were bitten by dogs which were rabid or which were suspected of being rabid. Three were bitten by cats, seven by cows, six by horses, five by human beings and in one case the animal causing the laceration was not stated.

From the examinations as made in the laboratory and from the report of patients who were treated, the following species of rabid dogs is presented:-all of these dogs bit one or more persons.
Curs ..... 35
Shepherd ..... 32
Scotch Collies ..... 16
Bull-dogs ..... 13
Spaniels ..... 12
Fox terriers ..... 11
Hounds ..... 10
Spitz ..... 6
Setters ..... 2
Coach dogs ..... 1

One person was bitten by a pet coyote which was suspected of being rabid.

The classification according to location of bite is as follows:
Bitten on face ..... 31
Bitten on hands and arms ..... 108
Bitten on upper extremity ..... 38
Bitten on lower extremity ..... 51
Bitten more than once ..... 29

The following interesting tabulation shows the number of persons bitten by the same animal:


We believe that this tabulation will emphasize most strongly the great danger to human life by permitting a rabid animal to run at large. It is just as dangerous, however, to allow dogs, which have come in contact with a rabid dog to remain unmuzzled and unconfined as it is impossible to state with any degree of certainty whether or not any of these animals will develop rabies in a short time.

The following statistics are presented to show the variety of local treatments used:
Carbolic acid ..... 37
Hot water and iodine ..... 8
None ..... 62
Nitric acid ..... 2
Phenol ..... 3
Hydrogen peroxide ..... 28
Cauterized ..... 25
Salve ..... 3
Watkins liniment ..... 1
Don't know ..... 27
Vinegar and tobacco ..... 3
Alcohol ..... 8
Boric acid ..... 3
Silver nitrate ..... 3
Vaseline ..... 1
Liniment ..... 3
Pain killer ..... 2
Turpentine ..... 7
Bichloride ..... 3
Vinegar ..... 1
Camphor ..... 1
Plaster ..... 1
Flax seed ..... 1
Brandy ..... 1
Salt water ..... 1
Formalin ..... 1
St. Jacob's Oil ..... 1

Much of the material used in these local treatments was practically worthless in destroying the disease germs and proves conclusively the great need of a state Pasteur institute
for preventing one of the most terrible diseases known to mankind.

Dr. M. P. Ravenel, the Director of the State Laboratory of Hygiene, who was formerly connected with the Live Stock Sanitary Board of Pennsylvania, has published in Bulletin No. 79 of the publications of that Board an excellent treatise on rabies, extracts from which follow.

Rabies is an acute and very fatal disease, communicated from animal to animal, or from animals to man by the bite of an animal which already has the disease. As seen under natural conditions, it is always an inoculation disease, that is, communicated directly through a wound usually inflicted by the teeth, and the infective material being tre saliva, which contains the poison or virus.

Animals Affected.-All mammifers, including man, are liable to rabies. Birds also may contract the disease. The dog is the animal most constantly affected, but it is seen not infrequently in wolves, foxes, hyenas and jackals. Rabies in the cat is relatively rare and usually caused by the bite from a dog with which it is associated. Cattle, sheep and goats are affected in relatively about the same degree, cattle and sheep being especially exposed. It is more rarely seen in the horse. Swine contract the disease less frequently than other domestic animals.

The disease is rarely transmitted from one of the domestic animals to another. Bites from these animals are less dangerous than from dogs on account of the blunt character of their teeth, which inflict contused wounds rather than punctured ones. The disease may, however, be transmitted in this way, and also by the deposit of virulent saliva on wounds of the skin by licking. Deer are said to be able to transmit the disease to others by biting.

Cause of the Disease. Nature of the Virús.-Although we have every reason to believe that rabies is due to a specific germ, all attempts to isolate it have so far failed. We, however, understand much of the nature of the virus, the condition which affects it, etc.

In rabid animals it is found principally in the saliva and in the central nervous system, although it is known to pass sometimes into other glands as the lachrymal and pancreas and also into the milk. It has never been found in the blood or in any of the organs such as the liver, spleen and kidneys, nor is it ever contained in the muscular tissues. The contents of the stomach may contain it, owing to the swallowing of the saliva previous to the paralysis of the throat. It affects principally the central nervous system, and it is found most certainly, and in the most concentrated condition in the medulla oblongata. The virus may be present in the saliva for at least three days before the animal shows any symptoms of madness, as proven by Roux and Nocard, and, perhaps, as long as eight days. It may be present in the central nervous system for two days before the appearance of symptoms. The symptoms do not show themselves until the poison or virus has remained in the nervous tissues long enough to bring about changes in their structure and functions.

Method of Invasion.-When introduced into another animal either experimentally or in the natural course of the disease, the virus remains for a time without producing either local or general symptoms, undergoing a period of incubation during which it undoubtedly multiplies itself, in this respect corresponding to the well known infectious diseases. It may be removed from the saliva by filtration through porcelain, proving that it is a solid body. The virus penetrates to the nervous system by following the nerve trunks from the site of injury
to the spinal cord, then the spinal cord to the medulla and brain. This has been proven by inoculating an animal in one of its legs with virulent material. After a suitable time, but before the symptoms of rabies appear, if the animal be killed, the virus will be found in the nerves of the limb, and even in the part of the spinal cord into which the nerves enter, while the upper part of the cord and brain will be free from it. This fact explains the reason why the earliest symptoms, both in man and animals, such as pain, itching, tingling, numbness and other nervous sensations, often appear in the part of the body which received the virus through the bite. In the case of a bite about the face and head the route along the nerves to the central nervous system is shorter still. While the nerves then form the main route by which the virus travels, the circulation may at times assist, especially in small animals. Inoculation into the large nerve of the leg is almost as certain to produce the disease, as inoculation dinectly into the subdural space, while injection beneath the skin of the leg is not so sure.

Resistance of Virus.-The action of the virus is destroyed by drying, and by the action of light. In dry air protected from the light and from putrefaction, the virulence of the spinal cord of rabbits is destroyed in fourteen to fifteen days. When spread in thin layers the virus is destroyed entirely by drying in four to five days. Sunlight destroys it in about forty hours. The loss of virulence by drying is gradual and quite regular, and this is taken advantage of in the preparation of the "vaccine," which is described later. The virus may be preserved unchanged in neutral glycerine at ordinary temperature for a long time. Roux found that after four weeks in glycerine at 30 de grees C., the virus has the same power as when perfectly fresh.

It is quite resistant to putrefaction. Galtier has found the virus active in the central nervous system of rabbits buried for twenty-three days, of sheep buried thirty-one days, and of dogs buried forty-four days. Other observers have found it still active in animals buried for twenty-four days.

It is destroyed completely by a temperature of 50 degrees C. (122 degrees F.) in one hour, or 60 degrees C. ( 140 degrees F.) in onehalf hour. It is uninjured by exposure to extreme cold, resisting the prolonged application of a temperature from 10 degrees to 20 degrees below zero, centigrade.

Its activity is destroyed in one hour by a 5 per cent solution of carbolic acid, or by a 1 to 1,000 solution of corrosive sublimate. Water saturated with iodine destroys it in ten minutes.

Danger From Bites.-The danger of infection as well as the time elapsing between the introduction of the poison and the development of the disease is dependent upon a number of factors. The disease appears more quickly in children than in older persons, and for obvious reasons they are more often attacked by dogs, and the bites are more apt to be on the face and head. Wounds about the head and face are particularly dangerous, next comes bites about the hands, and lastly, other parts of the body. The richer the nerve supply of a part the greater the danger. Punctured wounds are most dangerous, and lacerated wounds are dangerous in proportion to the extent of the surface afforded for the absorption of the virus. The danger of infection varies with the animal which inflicts the bite. First, comes the wolf; second, the cat; third, the dog, and fourth, other animals. In the western part of the United States the skunk is said to be very liable to the disease, and the bite from this animal is quite dangerous. Bites on naked or exposed parts of a person are more dangerous than through clothing, in the latter case the virus being wiped off and not gaining access in quantity to the tissues. The same thing is observed among the lower animals, as dogs with long hair, like the spaniel and the collie, are less liable to the disease than are short-haired dogs. Experi-
mentally, it has been shown that rabbits which are shaven and exposed to the bite of a mad dog are more often affected than are those bitten through the fur, even when the teeth penetrate deeply beneath the skin. The proportion of persons who contract hydrophobia after being bitten by mad dogs, and are not treated, is conservatively estimated at 16 per cent., but some series of cases give a much higher mortality. Thus, of 855 cases collected by Tordieu, Thamhayn and Bouley, 399 ended in death, or 46.6 per cent. In another series of cases given by Bouley, out of 266 persons bitten, 152 died of hydrophobia; but of these 120 were bitten on the face and hands, the greater danger from which has been mentioned.

The mortality following bites from wolves is placed at from 60 to 80 per cent, the increased danger from these animals being due partly to the greater activity of the virus as found in them, and partly to their mode of attack, wounds about the face and heads being common, and the wounds being very extensive.

Of animals bitten by rabid dogs, it is claimed that only from 20 to 30 per cent become infected. Roll calculated that during the years 1877-1887, the percentage in horses was about 40, among cattle and sheep, 50 , among pigs, 36 , and among goats, 20 . It will be seen from these figures how unnecessary it is to destroy all animals bitten by dogs believed to be or even known to be mad.

Period of Incubation.-By the period of incubation is meant the time which passes between the introduction of the virus or germ of a disease and the appearance of the symptoms. This is quite variable in rabies, depending on the site of the wound, which is almost always a bite, the amount of virus introduced, and the strength of the virus. In general it may be said for all animals that the period of incubation seldom exceeds sixty days though in man and in some of the larger animals, it sometimes, though very rarely, reaches one year. The average period is as follows:

In man, 40 days.
In dogs, 21 to 40 days.
In horses, 28 to 56 days.
In cows, 28 to 56 days.

In cats, 14 to 28 days.
In pigs, 14 to 21 days.
In goats and sheep, 21 to 28 days.
In birds, 14 to 40 days.

Influences of Seasons.-It has been for a long time believed, and apparently with a certain degree of truth, that rabies in dogs is more frequent during the hot months than at other periods of the year, and as a result of this we would expect to find more persons bitten during the periods of extreme heat than during the rest of the year. The old statistics in France, dating from the year 1850 to 1876, indicate that 30.4 per cent of all cases of rabies occurred during the months of June, July and August. The figures collected at the Pasteur Institute in Paris do not, however, agree with these, the maximum number of bithen persons applying for treatment there during the years 1886 to 1893 being in March, April and May, and the minimum number in September, October and November. The statistics collected by Bouley give for December, January and February, 755 cases; March, April and May, 857 cases; June, July and August, 788 cases, and September, October and November 696 cases, showing a fairly uniform distribution for the whole year. The maximum number, occurring during March, April and May, agrees with the figures of the Pasteur Institute.

It may be said that more cases of rabies occur from April to September, inclusive, than during the rest of the year. In giving a proper value to these figures it must be noted that during the warm months of the year, dogs are more apt to be running abroad, while during the winter months they are more apt to be housed. In this way opportunities for contagion are greater from April to September than from October to March, and there is no evidence of itself that season has anything to do with the greater or less frequency of rabies.

Erroneous Ideas Concerning Rabies.-There is a rather widespread belief that if a dog which has bitten a person ever goes mad the bitten person is also liable to go mad, and this superstition leads to the useless destruction of a considerable number of dogs. It probably has its origin in the fact that the virus is present in the saliva for several days before symptoms of madness are shown by the dog, and that certain persons have contracted hydrophobia following the bite of such an animal, which at the time, showed no symptoms of madness. It can be stated with the most absolute certainty that the bite of a healthy dog, or a dog suffering from fits, or when angered or excited, can produce no ill effects in the bitten person other than that dependent on the extent of the injury. Such wounds should be treated by modern antiseptic methods, cauterization being unnecessary.

Can Rabies or Hydrophobia arise Spontaneously?-It is supposed by some persons that rabies can be produced by fright, fatigue, anger, jealousy, high feeding, excessive heat and other influences-an error which was pointed out by Virchow in Germany many years ago.

After what has been said of the nature of the virus it is manifest that this is impossible. Each case of rabies is due to contagion from some other case just as truly as each case of measles or scarlet fever in children is due to the germ from some other case gaining entrance to the system. Rabies cannot arise of itself from any cause.

Rabies of the Dog.-The disease is seen in two types, a furious, and tranquil or paralytic type.

Furious Type.-In the furious type the first symptoms consist solely in changes in the disposition of the animal, which are manifested by distress or uneasiness, and restlessness. He is always easily excited. At this state, the animal does not usually show a disposition to bite; he is still docile and obeys orders, though not so quickly as in health; he soon seeks solitude and shows a disposition to hide in dark corners, or burrow in the straw of his kennel; periods of calmness alternating with marked excitement are observed; he still shows affection for his master and may respond to caresses even more affectionately than is his won't. He may, however, be irritated by strangers, or being surprised by touch or blow, may inflict a bite. The appetite is still good and may be even excessive. Soon the restlessness becomes more marked; the dog is constantly in motion; he is apt to tear carpets, rugs, etc., which may be in the room with him; he shows signs of delirium, looking off into space, apparently seeing some imaginary object; at times he will attack an imaginary enemy. He will still respond to his master's voice, but his attention cannot be held for any length of time. At this early stage, the voice becomes modified, and this may be regarded as one of the most typical symptoms. Instead of the clear and sharp bark which is natural, the latter part of the note becomes prolonged and of a higher pitch, going off into a plaintive cry, which has been likened to that of a dog fatigued in the chase, and in succeeding short barks which may follow, the jaws do not close completely as in ordinary barking.

While this symptom is a striking one and quite constant, it may be lacking at times and certain dogs remain quiet in spite of all attempts to excite barking. The appetite diminishes about this time; food is taken with more or less difficulty, and soon it is refused, swallowing having become painful and difficult. The animal may appear to have a bone stuck in its throat, a sysptom which often tempts the owner to make the dangerous examination for some obstruction. There is no fear of water, and the animal drinks water and other liquids quite greedily, until paralysis of the constrictor muscles of the pharynx makes swallowing impossible.

The excitation becomes marked and the animal is now furious. If a stick or other article is presented to him he seizes it with power: he attacks the bars of his cage or any object in the cage. If at liberty,
he attacks every object in his way, swallowing all sorts of articles, such as wood, paper, straw and stones tha presence of which in the stomach after death is one of the most striking features of the disease. At this time he begins to wander, running with his tail hung, the mouth open and the eyes with a wild look; he attacks every object or animal which comes in his path. As a rule, he runs straight ahead and does not turn out of his way to attack animals. The dog may travel tremendous distances, but is apt to return to his home, exhausted and covered with dust and blood, or else he may continue his course until he falls exhausted, as much as fifty miles being covered. Very soon paralysis sets in, commencing in the hind legs, and finally becomes general. The dog is no longer able to stand; the weakness becomes more marked and stupor sets in, from which the animal may be aroused, but which becomes deeper and deeper, and ends in death. The course of the disease is always rapid, covering from six to ten days, and averaging from four to five days. The symptoms are so characteristic that once seen can scarcely be mistaken for any other disease. The furious type just described is the most common.

Paralytic Form.-The paralytic type, ordinarily spoken of as "dumb rabies," constitutes from 15 to 20 per cent of all cases. In certain countries, as in Turkey, it is the prevailing type, which explains the relative rarity of rabies in man in this country where dogs abound. The commencement of the disease is the same as in the furious type, but the accesses of fury are lacking. For several days the dog appears restless, seeking seclusion and dark places. The paralysis may commence in various parts of the body, but, as a rule, affects first the muscles of the jaw, which soon drop, the dog being unable to close its mouth, and the tongue hanging out; the whole expression of the animal is pitiful in the extreme; an abundance of saliva runs from the mouth; the taking of water is impossible; the mouth becomes dry and covered with dust, and brownish. The animal is quiet; it does not respond to provocation, nor does he seem to wish to bite. The progress of the disease is more rapid than in the furious type. The paralysis extends and death occurs on the second or third day.

Other cases are observed in which the type of the disease is more or less intermediate between the two just described. There are some in which a very short period of fury is followed by a rapid paralysis while in others the paralysis is more slow in its progress and the animal shows a slight disposition to attack when irritated. In the "dumb" type of the disease it is common to suspect an obstruction in the throat, and in the attempt to locate it the saliva may infect wounds of the hand. The animal never wanders and, being unable to bite, the danger of transmission of the disease is slight.

Rabies of the Cat.-This animal shows first a period of restlessness, with a disposition to hide in dark corners. It soon becomes furious and leaves its place of retreat and is liable to attack any one who comes within its reach. The bites inflicted by it are, as a rule, very serious. It shows the same perversion of appetite as seen in the dog. After five or six days paralysis of the hind legs begins; swallowing becomes impossible and death soon follows. The paralytic form or "dumb" rabies also occurs causing death in from three to four days.

Rabies of the Horse.-In the horse, excitement is an early symptom, with a marked sensitiveness of the skin, and hallucinations. If it can reach the point of inoculation, it bites itself constantly, tearing the skin and often the deep tissues. The appetite ceases, or becomes capricious and irregular. Like the dog he eats earth, wood or anything within his reach. In the attempt to swallow water it may be thrown out through the nostrils. A slight annoyance renders the animal furious and he attacks with ferocity any animal or person. The attacks of fury become more and more frequent. The pulse may reach 100 to the minute, and respiration is difficult. Paralysis commences in the limbs and soon becomes general. Death occurs from asphyxiation in from three to six days.

Rabies of the Cow.-The symptoms in these animals are much the same as those just described. There is often an intense irritation at the site of the wound. Changes in the appetite occur and rumination stops. In about twenty-four hours after the appearance of the first symptoms, fury becomes manifest; there is bellowing, and hallucinations, which are evident from the aspect of the countenance as well as the actions. Swallowing becomes difficult, saliva flows in abundance from the mouth. Waving the hand or a stick at the animal is sufficient to make it attack. In the intervals of fury the animal is somnolent, dull. Death usually occurs by paralysis, starting often in the limb which was bitten. The animal soon becomes prostrated and dies on the fifth or sixth day. 'In these animals, as in others, the paralytic or "dumb" form is seen also.

The symptoms as seen in goats, deer and sheep do not differ materially from those already described.

A symptom more or less common to all animals is the irritation about the site of the inoculation wound, this being often the earliest symptom which attracts attention.

Prevention and Eradication of the Disease.-As regards both man and animals the only rational procedure is to attempt the eradication of the disease, and since it is kept alive by the canine race our measures must be directed to the control of dogs. Among the respective measures which have been advocated may be mentioned a high tax, muzzling and the leash. During outbreaks which excite terror in a community we see not unfrequently the enactment of the most extreme measures, such as the destruction of all dogs, which is totally unnecessary. The results obtained by strict enforcement of muzzlings seem to justify its recommendation. To this measure is ascribed the eradication of the disease from Berlin in the year 1854-1855, and the recent results obtained in Great Britain are most striking. The official reports of Great Britain show that in 1887 there were 217 cases of rabies; 1888, $160 ; 1889,312$. Owing to the alarm caused by this increase, muzzling was adopted, with the result that in 1890, 129 cases were seen; in 1891, 79 cases, and in 1892, 38 cases. There was much opposition to the enforcement of the muzzling ordinance and it was relaxed, with the result that in 1893 the number of cases rose to 93 ; in 1894, to 248 cases, and in 1895, 672 cases were seen. Owing to the alarm muzzling was again enforced, resulting in a great reduction in the number of cases, to 438 in 1896, 151 in 1897, 17 in 1898, and 9 in 1899. From November 1899, to January 1, 1901, not a single case of rabies has been reported in England or Scotland, according to official statistics just issued for the year 1900.
Precautions to be Taken by Person Bitten.-In the event of a bite by an animal supposed to be mad the wound should be cauterized as soon as possible with fuming nitric acid. This should be thoroughly applied to all parts of the wound, making sure that there are no pockets or recesses which escape the action of the acid. If such cauterization is carried out within twenty-four hours of the reception of the wound, the danger is very much lessened, and if done within a few hours the protection is absolute. In the absence of fuming nitric acid the hot iron or the thermo-cautery, or even strong antiseptics may be used, but experiments have shown that nitric acid is the most efficient. The invariable rule should be: Cauterize as soon as possible, and in the meantime do everything to get the virus out of the wound, by washing in an abundance of water, enlarging the wound and encouraging free bleeding by cupping or the application of ligatures around the limb above the site of injury. Osler advises that the wound be kedt open for five to six weeks.

The animal which inflicted the wound should in no case be killed but should be captured, if possible, and confined for observation. In this way it is often possible to determine positively within a day or two whether the animal was really rabid and much anxiety spared the bitten person. As soon as the animal dies the whole head should
be cut off close to the shoulders, packed in ice and sent to the laboratory tor examination. In the majority of cases a positive opinion can be given in twenty-four hours after the receipt of the head. Where the animal has been killed, either by intention or accident, a positive opinion cannot be given in many cases in less than from three to six weeks, as the result of inoculation must be waited for. The same is true where only a portion of the brain is sent, since the changes which indicate rabies that can be detected by the microscope are found only in the medulla oblongata, and in the ganglia found on some of the nerves. From these facts, the great importance of sending the whole head and neck will be seen.

Disposal of Bodies of Animals Which Have Died of Rabies.-The flesh of animals which have died of rabies, or have been killed on account of it, is unfit for food. If possible, the carcass should be destroyed by burning, or be sent to a knacker's, where it is cooked in the process of utilizing it commercially. If this is not possible, it should be deeply buried under a layer of quick lime. The law of France allows the removal of the skin, and its sale after disinfection, which is done by immersing it in a 2 per cent solution of sulphate of zinc, or in corrosive sublimate, two parts to 1,000 .

Disinfection.-All bedding used by an animal with rabies, and all remains of food, etc., should be destroyed by burning. Collars, chains, halters, blankets, feed-pans, and other such articles should be well washed with a 5 per cent solution of carbolic acid and exposed to the sun for two or three days after. Every part of the kennel, room or stall should be washed with the same, and after drying receive a thick coat of whitewash. In the case of horses, cows and such animals, particular attention must be paid to the feed and water troughs, as the chief source of contagion is the saliva, and these articles are especially apt to be contaminated. In all cases it is best to leave the kennel or stall vacant for two weeks, and in the meantime expose them to the sun and air as freely as possible.

## MICROSCOPIC EXAMINATION AND DIAGNOSIS

Since the year 1901 our knowledge of the pathological changes in rabies has advanced very rapidly. Prior to this time it was considered that the disease produced no changes in the body. In this year Van Gehucten and Nélis announced the finding of certain changes in the peripheral ganglia of the cerebro-spinal and sympathetic systems. They are especially marked in the plexiform ganglion of the pneumogastric nerve and the gasserian ganglion. Normally, these ganglia, are composed of a supporting tissue holding in its meshes the nerve cells, each one of which is enclosed in a capsule, made up of a single layer of endothelial cells. The action of the rabic virus seems to exercise its effect on these cells particularly, bringing about an abundant multiplication of the cells forming this capsule, leading finally to the complete destruction of the normal ganglion cells, and leaving in its place a collection of round cells. Ordinarily a considerable number of ganglion cells will be found which have undergone only a slight change, but under certain conditions the process is so widespread that all the ganglion cells are destroyed. The intensity of these changes varies in different animals; they are perhaps most pronounced in the dog, less marked in man and still less in the rabbit.

In 1903 Negri discovered certain bodies in the nerve cells of the brain, especially the large ones in the Horn of Ammon and parts of the cerebellum. These bodies are enclosed within the cells as a rule, although they are oftentimes found free. They stain in a characteristic manner and are now very widely believed to be the germ which causes the disease. They probably belong to the lowest order of animal life. Prolonged study by scientific men in practically every part of the world has shown that these bodies are always present in cases
of rabies and are not found in any other condition. They therefore have a very high diagnostic value.

When the head of an animal supposed to have died with rabies is sent to the laboratory a diagnosis can be made oftentimes within thirty minutes, by spreading small portions of the brain matter on glass slides, staining, and examining under the microscope. The finding of the changes in the peripheral ganglia is also very valuable for ciagnosis, and is still employed in a number of cases. However, the examination for these bodies of Negri is so much more quickly and easily done that for rapid diagnosis this method has practically superseded the other. In a large number of examinations in which both examinations were used in every animal the changes in the ganglia ran parallel with the finding of the Negri bodies. The great advantage oltained by the possibility of a rapid diagnosis is evident, and further it has taken away from those who have denied the existence of such a disease their last stronghold. At present we can assert that the changes due to hydrophobia are as constant and well marked as those of cancer, and there is no excuse for anyone who attempts to mislead the public by denying the existence of this disease.


CHAR' NO. 13.-SHOWING THE LOCATION BY COUNTIES OF CASES AND
DEATHS FROM INF"ANTILE PARALYSIS DURING THE
CALENDAR YEAR OF 1911.

## INFANT MORTALITY

Each day in the year an average of 142 babies are born in Wisconsin. The deaths among children under one year of age average 15 per day. This shows that $10.5 \%$ of the children born each year die before reaching the age of one year.

During the calendar year of 1908, a total of 52,994 births were recorded, 5,588 deaths under one year were also reported. For 1909, there were 51,212 births and 5,559 deaths under one year. For 1910, 52,261 births and 5,775 deaths under one year, while for 1911 there were 52,000 births and 5,260 deaths under one year of age.

This shows that $10.5 \%$ of the children born during 1908 died before they were one year old. For 1909 the rate was $10.8 \%$; for $1910,11.1 \%$ and for $1911,10.1 \%$.

A very large per cent of the deaths each year are among young children as the following statistics will show. During 1908 out of a total of 26,778 deaths, exclusive of stillbirths reported, $21 \%$ were under one year of age. For 1909 the rate was also $21 \%$; for $1910,20.4 \%$ and for $1911,19.3 \%$. It is evident from these figures based on the official reports that the deaths among children under one year of age constitute about one-fifth of all the deaths recorded. This is not as low as the rate of one-sixth in some states or as high as the maximum of about one-fourth in other states.

The average annual death rate does not exceed 12 per thousand gross population, while the death rate for children under one year of age is 105 for every thousand such children.

Appalling as these facts are they do not properly express the real conditions. Not all of the poorly nourished diseased children die during the first year of life but thousands of them succumb at an early age from conditions directly traceable to the first year of life.

It is evident, therefore, that if measures are adopted to reduce the high death rate among infants there will be an appreciable decline in the rate for other age groups and in the general death rate.

The cause of infantile mortality is a subject for serious consideration on account of the great loss entailed and also because at least $70 \%$ of the deaths are preventable. Infantile diarrhea, congenital debility, measles and whooping cough are responsible for at least $60 \%$ of the deaths of children under one year of age. About $50 \%$ of the deaths from these four causes is due to diarrhea, the result of insufficient, improper or bad milk feeding.

It is the purpose of this article to show the great loss of life from easily preventable causes peculiar to early infancy and to suggest preventive measures that have been tried and found effective.

## BREAST FEEDING.

Competent investigators state that the deaths among children under three months of age, either wholly or partly fed on artificial foods, are fifteen times as great as they are if fed on breast milk. Under normal conditions about twenty children out of every thousand under three months of age die of diarrheal diseases if fed upon breast milk alone, but if artificially fed instead of twenty dying as many as three hundred will die from this cause. Statistics show that the mortality rate in the first year of life is higher than in any year up to the ninetyfifth year. Therefore, if a baby can survive the dangerous first year of life the chances of attaining adult life are very favorable.

## MODIFIED COW'S MILK.

The mother's milk is a child's natural food and contains the proper proportions of fats, sugars, and proteids. The use of other food than mother's milk should not be undertaken except upon the advice of a physician. If the mother cannot nurse her baby modified cow's milk should be used. This is prepared by the addition of water to decrease the amount of proteids and the addition of sugar and cream to increase the fats and sugars. Moldified milk is not easily prepared and
should not be attempted without the approval of a physician. Where a baby is bottle fed, the mother should see that the milk is from healthy cows, milked in clean dairies by clean persons and delivered to her fresh and cool.

## THE CARE OF MILK.

Great care should be exercised to keep dust, dirt and flies from milk. These are the carriers through which germs get intol the milk. No matter how clean, fresh and pure the milk may be when delivered to the home, it will be dangerous to the child unless it is properly cared for after it reaches the home.
The baby's milk should be kept separate from that of the family and should be placed on ice as soon as it is received. The milk should be kept constantly covered. The nursing bottles should be so shaped as to be easily cleaned, and there should be enough of them so that a day's supply can be prepared at one time.

The nipples should be carefully washed after each nursing and placed in a solution of boric acid, one teaspoonful to a pint of water. Nursing tubes should never be used. Give the baby some water preferably warm at least four times a day. A baby needs water the same as an adult.

The breast fed, or bottle fed baby, frequently suffers a great injustice as a result of the attempted kindness of its parents, relations or friends. Only too frequently is a healthy baby made an invalid for months through the feeding of some food wholly unsuitable. A little candy now and then, particularly chocolate, is given baby with the best of intentions and yet very frequently a small piece of ordinary candy or one chocolate drop a week will keep a baby irritable from digestive disturbances and materially impair its health, if it does not make the baby seriously ill frequently with a fatal illness. Feeding a child pieces of meat, berries, pieces of apple, gravies, etc., can be relied upon to produce indigestion, and restlessness almost invariably.

These so-called kindnesses, or promiscuous feeding are undoubtedly the cause of as many deaths in babies as is impure milk, both of which are very serious in their effects upon the infant. A baby should have nothing except a proper substi-
tute for milk up to the tenth or twelfth month; no solid food should be administered. The age at which more general feeding is to be started with an infant depends very materially upon the development of such infant. At times a baby ten months old will be able to take certain forms of nourishment that other babies fourteen, sixteen and even eighteen months old cannot tolerate. Therefore, no set or fixed rule can be laid down as to the enlargement of the babies menu.

The coming of the teeth in a child is frequently an index to the development of the stomach and it is well known that babies differ very materially in age as to the time of the appearance of teeth. This development of the teeth will furnish an index frequently for the enlargement of the diet. The general rule should invariably be applied that if the baby is doing well upon the diet prescribed by the physician or selected by the mother, not to change that diet for a considerable period of time, not uatil several teeth have developed and there appears to be an urgent demand for a more varied line of feeding.

By following the simple rule of prohibiting all solid foods to the baby under nine to twelve months of age, and only practicing a more general feeding upon the advice of the physician or when the teeth are developed in the baby, much sickness and many lives of infants will be saved.

Feeding a baby knickknacks is not kindness in any manner or form. They simply act as a poison and the giver of such should feel the moral responsibility of being indirectly, at least, the cause of death in many little ones.

## CLOTHING.

The proper clothing for the child is a matter of the utmost importance. A baby is very sensitive to changes in the temperature, and hence should be protected against such changes. Often a slight cold, contracted by over-heating or a sudden chill, will produce stomach or intestinal complaints of a serious character. In such a case, it is wise to keep a flannel band around the baby's abdomen during the first year of its life. Otherwise the child's clothing should be modified with cvery change in the weather. It should not be encased in flannels and swathed in blankets when it shows evident signs of heat;
nor should it be placed in a strong draught without proper covering.

## BATHING.

The baby should be frequently bathed, in all cases at least once a day. In warm weather, the baths may be as frequent as twice or three times a day, for they give the baby a better chance against disease in hot weather. Care should be taken to have the water of moderate temperature, at about bloodheat or a little over. Too cold water will chill and water too hot will irritate the child.

## FRESH AIR.

But more important than the bath is the question of out-ofdoors fresh air. Some mothers make a great mistake in sending their children out into the parks, with their nurses, for the whole day. The nurse may leave the child for hours in the sun or may neglect its wants in other respects. The proper course is to keep the child in the coolest part of the house during the heat of the day, and to send it or carry it to the park during the early morning and late afternoon hours. In the winter, if the child is properly wrapped and protected, it may remain out for longer periods.
If the child shows signs of weakness or illness during the summer, it may be taken to some suitable place in the country, or, if it lives in the country, to a different climate. This, however, should never be done until the doctor is consulted and until the mother is sure the baby can secure proper milk in the place where she proposes to carry it. Hurried departures to little-known and inconvenient places frequently work more harm than good for the child and for the mother.

## SLEEP AND QUIET.

Keep the baby quiet. Let it sleep alone and let it sleep as much as possible. Lay it on a firm bed, not on feather pillo'ws. Keep the baby and bedclothes clean. Change the diaper and bedclothes as soon as soiled, and sponge the baby with a soft cloth and cool water. If this is done the baby will not be so
restless and will sleep better. Do not give "soothing syrup" to make the baby quiet, and do not let the baby hang on the nipple or suck a "baby comforter."

## BLINDNESS.

Opthalmia neonatorum, or inflammation of the eyes of new born babies is one of the commonest and at the same time, one of the most dangerous maladies of the eyes to which a young child is subject. It is due to the introduction in the child's eyes at, or shortly after birth, of germ infected secretions from the mother. If the smallest portion of this infected material is allowed to get inside the infant's eyelids, it may rapidly develop inflammation, which is generally followed by ulceration and complete loss of sight in one or both eyes.

Immediately after the birth of a child two drops of a one per cent fresh solution of nitrate of silver should be placed in each eye. This preparation costs about two cents and will prevent blindness.
If one or both eyes of an infant become inflamed and show an unnatural discharge at any time a reliable physician should be consulted at once.

## CONTAGIOUS DISEASE.

We have shown in this article that measles and whooping cough rank third in the list of diseases which are especially destructive of child life. It is not only necessary in preventing deaths from these diseases to restrict the spread of the disease as much as possible, but also to overcome a widespread idea among mothers that all children must have these diseases and that the sooner they have them the better. As a result of this belief many mothers not only fail to protect their children from infection, but in many instances they are deliberately exposed to it.

Measles and whooping-cough are looked upon by many people as such simple diseases that a physician is not called and the untrained mother does not detect the presence of bronchial pneumonia or other complications until too late.

## 9-B. H.

The state law now provides that all homes where cases of measles or whooping-cough exist must be placarded during the presence of the disease in the home. The placard is a warning notice (not a quarantine) to all parents with small children that they should not visit the infected home or permit their children to mingle with the children who have the disease.

## INFANTILE BLINDNESS.

## INSTRUCTIONS, RULES AND REGULATIONS ISSUED BY THE STATE BOARD OF HEALTH OF WISCONSIN.

## NATURE OF THE DISEASE.

Ophthalmia neonatorum, or inflammation of the eyes of new born babies is one of the commonest and at the same time, one of the most dangerous maladies of the eyes to which a young child is subject. It is due to the introduction in the child's eyes at, or shortly after birth, of germ infected secretions from the mother. If the smallest portion of this infected material is allowed to get under the infant's eyelids, it may rapidly develop inflammation, which is generally followed by ulceration and complete loss of sight in one or both eyes. About one-third of the cases of blindness, due to local causes, result from this easily preventable disease. Blindness rarely occurs if the disease is properly treated from the beginning. The possibility of any baby becoming infected at the time of confinement should be constantly borne in mind, and it is necessary that all physicians, midwives, or other persons accustomed to attend confinement cases carry out a routine preventive treatment in each case.

## ENFORCEMENT OF RULES.

Section 1409a-1. (Chapter 59, Laws of 1909.)
The state board of health and vital statistics is vested with power and authority to publish and distribute among the phy-
sicians, midwives, nurses or other persons requiring such information, instructions relating to inflammation in the eyes of new born babes, and proper methods of prevention. The poard is hereby empowered to make and enforce such rules and regulations as it may deem expedient to prevent the development of inflammation of the eyes of the new born babe, or so-called ophthalmia neonatorum.

## METHOD OF PREVENTION.

Section 1409a-2. It shall be the duty of the attending physician, midwife, nurse or other person in attendance on a confinement case, to use such prophylactic treatment for the prevention of blindness among new-born children, as the state board of health and vital statistics in its rules and regulations may deem necessary.

In compliance with chapter 59, laws of 1909, pertaining to the prevention of inflammation of the eyes and blindness of the new born babe by a disease called ophthalmia neonatorum and specifically in compliance with section 1409a-2.

The state board of health of Wisconsin hereby determines that in order to prevent the development of ophthalmia neonatorum, two drops of a one per cent fresh solution of nitrate of silver should be used in each eye of every new born babe, and we hereby, in compliance with this chapter, recommend its use.
Immediately after the birth of the head and before the delivery of the body, the eyelids should be carefully cleaned by means of absorbent cotton, or a soft, clean ironed linen cloth and warm water that has been boiled, or boric acid (saturated) solution. A separate wipe should be used for each eye, and the lids washed free from all mucus, blood or meconium, from the nose outward. All wipes should be burned after using. No opening of the lids should be attempted at this time; also the lips and nose should be in like manner wiped free of mucus, and the little finger wrapped with a piece of moist linen, should be passed into the child's mouth, and any accumulated mucus removed by an outward sweep of the finger. As soon after the birth as possible, the eyelids should acain be wiped clean of mucus, and the nitrate of silver applied. Do
not allow finger or dropper to touch the eye ball. One application only of the silver solution should be made and ordinarily no further attention should be given the eyes for several hours.

Each time that the child is bathed, the eyes should be first wiped clean with the boric acid solution, as above described. The hands of the person charged with the care of the child must be washed with soap and dried with a clean towel before the eyes of the child are touched. Everything that is brought near the eyes of the child must be, in every instance, absolutely clean. Infection has occurred at times after birth from sources other than the mother.

## INSTRUCTION FOR. THE USE OF SILVER NITRATE.

Two drops of a one per cent solution of silver nitrate may be ased every four hours, the eyes to be first freed from secretion. In applying the remedy, the child should be placed flat on the back, and the head so held that the solution will not quickly escape from the eyes. The solution should be freshly propared. The lids being separated with the thumb and finger, a few drops should be instilled with an eye-dropper. Careful instructions should be given, however, that the end of the dropper be not brought in contact with the cornea or the instillation made with too great force. It is best to instill a few drops of normal salt solution after using the silver nitrate. Frequent cleaning of the eyes, and the use of silver nitrate, if it can be commenced in time and thoroughly and systematically carried out by some one who thoroughly understands the treatment of ophthalmia neonatorum will, with rare exceptions, insure a perfect recovery.

## REPORT OF CASES.

Should one or both eyes of an infant become inflamed, swollen and red, and show an unnatural discharge at any time within two weeks after its birth, the nurse, parents, or other person having charge of such infant shall report in writing, within six hours thereafter, to the board of health of the city,
incorporated village, or town in which the parents of the infant reside, the fact that such inflammation, swelling, redness, or unnatural discharge exists. (The local health officers should supply physicians, midwives, nurses and other persons required to report cases of ophthalmia neonatorum with suitable blanks. All cases of this disease should be reported the same as scarlet fever, diphtheria or other dangerous contagious diseases.)

## DUTY OF THE HEALTH OFFICER.

On receipt of such report the health officer shall inform the attending physician of the conditions complained of, or if there is no physician in attendance, the health officer shall then employ, at the expense of the town, incorporated village or city, a competent physician to examine the case reported and the physician shall provide proper treatment or such as recommended in the rules and regulations adopted by the state board of health and vital statistics.

The health officer shall immediately upon the receipt of the written report herein provided for, if no physician was in charge, notify the parents or person having charge of said infant, of the dangers to the eye, or eyes of said infant, and he shall also inclose to the parents, or person having charge of the child, directions for the proper treatment thereof.

## MIDWIVES.

Section 1409a-3. Any woman accustomed to attend confinement cases shall be subject to the same penalty for violation as physicians or nurses.

## PEiNALTY FOR FAILURE TO REPORT AND USE PREVENTIVE TREATMENT.

Section 1409a-4. Any person who violates, neglects, or refuses to observe the provisions of this act shall be punished by a fine of not more than one hundred dollars for each offense.

At the regular semi-annual meeting of the state board of health, held on June 27, 1912, the following resolution was unanimously adopted:
"'The Secretary of the board is hereby requested to instruct all local boards of health to immediately prosecute all physicians, midwives, or other persons being in charge of new bora infants who fail or neglect to report any case of inflammation of the eyes, or ophthalmia neonatorum, in accordance with the law granting to the state board of health authority for enforcement as defined in Chapter 59, Laws of 1909."

## IMPORTANT INFORMATION FOR PARENTS.

When the lids become red and swollen, are gummed along their borders, when the child sleeps or cries, and mattery discharge is mixed with tears, an occulist or physician should be called immediately. While waiting, bathe the eyes of the child every half hour, with pledgets of cotton dipped in a saturated solution or boric acid. Open the lids wide and allow the solution, which should be warm, to flood the eyes and wash out any matter which may be gathered there.

The child should not be fondled and none of the appliances which have been used about his eyes or face should be used for any other purpose. All of those in the home should be informed of the danger of catching the disease by getting the matter into their own eyes. Do not listen to those who say it will amount to nothing, or claim to know it is "only a cold in the eyes,' ' or to those who say to bathe the eyes of the child with mother's milk. Such advise is pernicious and will cause the loss of precious time by delaying the employment of means which might save the sight of the child.

## REPORT OF TREATMENT USED.

The report of each birth which must be filled out and filed by the physician or midwife in attendance provides space for reporting whether or not a prophylactic was used to prevent ophthalmia neonatorum.

The new form of birth record will require the following information:

1. What preventative for ophthalmia neonatorum did you use?
2. If none, why?

These questions should be fully answered in every case.

REPORT<br>OF THE<br>\title{ Bureau of Vital Statistics }<br>OF THE<br>STATE OF WISCONSIN<br>FOR THE PERIOD

From January 1, 1910, to December 31, 1911.

## STATE BOARD OF HEALTH AND BUREAU OF VITAL STATISTICS.

WM. F. WHYTE, President Watertown
C. H. Sutherland, M. D. ..... Janesvilie.
C. H. STODDARD, M. D. .....  Milwaukee
E. S. HAYES, M. D. Eau Claire.
H. A. MEILIKE, M. D ..... Clintonville.
L. P. MAYER, M. D. .Hudson.
C. A. HARPER, M. D., Secretary and Registrar of Vital Statistics ..... Madison.
L. W. HUTCHCROFT Chief Statistician Madison.

## LETTER OF TRANSMITTAL.

## Office of the

State Board of Health and Bureau of Vital Statistics.

Madison, Wisconsin, January, 1912.
To His Excellency, Francis McGovern,
Governor of the State of Wisconsin.
Sir: In compliance with the requirements of law, I have the honor to submit to you a detailed abstract of the Births, Deaths, Marriages and Accidents that were registered in Wisconsin from January 1, 1911 to December 31, 1911. The report of Divorces covers the period from October 1, 1910 to September 30, 1911.

Very respectfully yours,
C. A. Harper,

State Registrar of Vital Statistics.

## GENERAL SUMMARY.

A SUMMARIZED STATEMENT OF BIRTHS, DEATHS, MARRIAGES AND ACCIDENTS.Reported by the local registrars of the various townships, incorporatedvillages and cities from January 1, 1911, to December 31, 1911, anddivorce statistics, reported by the clerks of the courts having jurisdic-tion in divorce actions for the period frcm October 1, 1910, to Septem-ber 30, 1911.
BIRTHS REPORTED DURING CALENDAR YEAR 1911.
Sex:
Males ..... 27,159
Females ..... 25,336
Sex not stated ..... 58
Total births reported including stillbirths ..... 52,653
Annual birth rate per one thousand estimated population ..... 22.3
Parentage:
Both parents native born ..... 31,713
Father native and mother foreign ..... 3,030
Father foreign and mother native ..... 6,209
Both parents foreign born ..... 11,087
Birthplace of one, or both parents unknown ..... 614
Total ..... 52,653
Stillbirths:
Males ..... 507
Females ..... 387
Sex not stated ..... 21
Total ..... 915
Twin Births:
Males ..... 594
Females ..... 569
Sex not stated ..... 5
Total ..... 1,168
Illegitimate Births:Males407
Females ..... 376
Sex not stated ..... 3
Total ..... 786
Triplets ..... 27
DEATHS REPORTED DURING CALENDAR YEAR OF ..... 1911.
(Exclusive of stillbirths)
Sex:
Males ..... 15,119
Females ..... 12,057
Sex not stated ..... 9
Total ..... 27,185
Male excess ..... 3,062
Annual death rate per thousand estimated population ..... 11.5
Total stillbirths reported as deaths ..... 1,583
Color:
White ..... 26,938
Black ..... 60
Indian ..... 119
Unknown ..... 68
Total ..... 27,185
Conjugal Condition:
Single ..... 11,545
Married ..... 9,748
Widowed ..... 5,337
Divorced ..... 200
Not stated or unknown ..... 355
Total ..... 27,185
Nativity of Deceased:
Wisconsin ..... 12,401
Other United States ..... 4,092
German ..... 4,891
Irish ..... 1,012
Great Britain ..... 730
Norwegian ..... 967
Swedish ..... 416
Polish ..... 288
Welsh ..... 41
Danish ..... 191
Italian ..... 51
French ..... 38
Canadian ..... 457
Bohemian ..... 244
Russian ..... 130
Austrian ..... 217
Other foreign countries ..... 551
dUnknown ..... 468
Total ..... 27,185
Nativity of Father:
Wisconsin ..... 4,544
Other United States ..... 3,634
Foreign born ..... 16,675
Birthplace unknown or not stated ..... 2,332
Total ..... 27,185
Report of the Bureau of Vital Statistics. ..... 143
Nativity of Mother:
Wisconsin ..... 5,576
Other United States ..... 3,521
Foreign born ..... 15,472
Birthplace unknown or not stated ..... 2,616
Total ..... 27,185
MARRIAGES REPORTED DURING CALENDAR YEAR OF ..... 1911.
Both parties native born ..... 13,681
Groom native, bride foreign ..... 873
Groom foreign, bride native ..... 1,961
Both parties foreign born ..... 2,139
Birthplace of one or both unknown ..... 126
Total marriages ..... 18,780
Annual marriage rate per one thousand estimated population ..... 15.9
Marriages by Age Groups:
Brides: ..... 7
6
Under 15 years
4,117
15 to 19 years
8,766
20 to 24 years
3,391
3,391
25 to 29 years
25 to 29 years
1,058
1,058
30 to 34 years
30 to 34 years
546
546
35 to 39 years
35 to 39 years ..... 320
45 to 49 years ..... 185
50 to 54 years ..... 138
55 to 59 years ..... 77
60 to 79 years ..... 65
80 years of age or over ..... 1
Age not stated ..... 110
Total ..... 18,780
Grooms:
Under 15 years ..... None
15 to 19 years ..... 337
20 to 24 years ..... 7,272
25 to 29 years ..... 6,302
30 to 34 years ..... 2,240
35 to 89 years ..... 1,080
40 to 44 years ..... 558
45 to 49 years ..... 354
50 to 54 years ..... 231
55 to 59 years ..... 131
60 to 79 years ..... 206
80 years of age or over ..... 2
Age not stated ..... 67
Total ..... 18,780
ACCIDENTS REPORTED.From Jan. 1, 1911. to Aug. 31, 1911.
Sex:
Males ..... 6,671
Females ..... '939
Total ..... 7,610
Conjugal Condition:
Single ..... 4,137
Married ..... 3,417
Not stated ..... 56
Total ..... 7,610
DIVORCES.
Total divorces from Oct. 1, 1910, to Sept. 30, 1911 ..... 1,288
Annual divorce rate per one thousand marriages ..... 68.5
Divorces granted to husband
297
297
Divorces granted to wife ..... 991
By Causes:
Drunkenness ..... 58
Adultery ..... 49
Cruelty ..... 653
Desertion ..... 382
Neglect to provide ..... 70
TABLE NO. 1.-DEATHS RECORDED FROM CERTAIN DISEASES AND CAUSES BY OALENDAR YEARS SINOE 1908.

| Name of Disease. | 1908 | 1909 | 1910 | 1911 |
| :---: | :---: | :---: | :---: | :---: |
| Typhoid fever | 322 | 337 | 558 | 319 |
| Smallpox | 9 | 16 | 3 | 2 |
| Measles .... | 96 | 170 | 158 | 248 |
| Scarlet fever | 133 | 372 | 304 | 225 |
| Whooping cough | 192 | 225 | 200 | 224 |
| Diphtheria | 417 | 416 | 429 | 332 |
| Influenza | 543 38 | 302 | 187 | 360 |
| Tuberculosis | 2,509 | 66 2,546 | 71 2,404 | 95 2405 |
| Oancer | 1,513 | 1,645 |  | 1,622 |
| Meningitis | 1,465 | 1,645 | 1,539 478 | 1,622 |
| Apoplexy | 1,182 | 1,232 | 1,351 | 1,428 |
| Heart disease | 2,200 | 2,337 | 1,916 | 1,778 |
| Bronchitis . | , 693 | -555 | 1,526 | ${ }^{187}$ |
| Pneumonia ........... | 1,622 | 1,615 | 2,253 | 2,227 |
| Diarrhoea (under 2 yrs .) | 1.509 | 1,487 | 1,503 | 1,233 |
| Bright's disease ..... | 1,198 | 1,302 | 1,337 | 1,429 |
| Puerperal septicemia | 112 | 101 | 110 | 155 |
| Congenital debility | 564 | 549 | 563 | 1,694 |
| Old age | 1,079 | 1,091 | 1,791 | 1,333 |
| Suicide Accidental deaths | 1,291 | , 304 | 318 | 281 |
| Accidental deaths Homicides ....... | 1,655 48 | 1,629 41 | 1,150 41 | 1,490 |
|  |  |  |  | 44 |

TABLE NO. 2.- SHOWING TOTAL BIRTHS, DEATHS, MARRIAGES, ACCIDENTS AND DIVORGJES REPORTED DURING THE CALENDAR YEAR OF 1911.

| Countr. | Esti-matedpopula-tion,1911. | Births. |  | Deaths. |  |  | Marriages. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \dot{A} \\ & \text { A } \\ & \text { B } \\ & \text { त } \\ & 0 \end{aligned}$ |  |  |  |  |  |  |  |  |
| Adanis | 8,604 | 168 | 19.5 | 91 | 10.5 | 5 | 38 | 8.8 | 7 | 1 |
| Ashland | 21,965 | 419 | 19.0 | 298 | 13.5 | 8 | 140 | 12.7 | 210 | 22 |
| Barron | 29,261 | 609 | 20.8 | 277 | 9.4 | 14 | 197 | 13.4 | - 62 | 2 |
| Bayfleld | 16,003 | 315 | 19.6 | 143 | 8.9 | 2 | 76 | 9.4 | 19 | 15 |
| Brown | 54.510 | 1,471 | 26.7 | 818 | 15.0 | 28 | 358 | 13.1 | 584 | 47 |
| Buffalo | 16,006 | 276 | 17.2 | 154 | 9.6 | 5 | 82 | 10.2 | 6 | 6 |
| Burnett | 9,026 | 170 | 18.8 | 87 | 9.6 | 2 | 45 | 9.9 | 34 |  |
| Calumet | 16,701 | 359 | 21.4 | 162 | 9.7 | 4 | 133 | 15.9 | 37 | 3 |
| Chippewa | 32,123 | 609 | 18.9 | 394 | 12.2 | 6 | 225 | 14.0 | 17 | 17 |
| Clark | 30,047 | 656 | 21.8 | 234 | 7.7 | 9 | 181 | 12.0 | 38 | , |
| Columbia | 31,129 | 509 | 16.3 | 356 | 11.4 | 7 | 209 | 13.4 | 17 |  |
| Crawford | 16,288 | 376 | 23.0 | 170 | 10.4 | 8 | 130 | 15.9 | 8 | 10 |
| Dane | 77,810 | 1,528 | 19.6 | 912 | 11.7 | 23 | 548 | 14.0 | 55 | 9 |
| Dodge | 47,768 | 977 | 20.4 | 532 | 11.1 | 18 | 340 | 14.2 | 145 | 22 |
| Door | 18,711 | 477 | 25.4 | 203 | 10.8 | 11 | 153 | 16.3 | 35 | 4 |
| Douglas | 48,206 | 859 | 17.8 | 514 | 10.6 | 15 | 398 | 16.5 | 36 | 46 |
| Dunn | 25,260 | 543 | 21.4 | 255 | 10.0 | 14 | 184 | 14.5 | 17 | 4 |
| Eau Claire | 32,721 | 599 | 18.3 | 380 | 11.6 | 17 | 255 | 15.5 | 76 | 26 |
| Florence | 3,381 | 62 | 18.3 | 26 | 7.6 |  | 23 | 13.6 |  | 1 |
| Fond du L | 51,767 | 1,121 | 21.6 | 652 | 12.5 | 20 | 406 | 15.6 | 616 | 31 |
| Forest | 6,945 | 188 | 27.0 | 76 | 10.9 | 5 | 43 | 12.3 | 27 | , |
| Grant | 39,007 | 787 | 20.1 | . 422 | 10.8 | 10 | 240 | 12.3 | 55 | 11 |
| Green . | 21,641 | 403 | 18:6 | 252 | 11.6 | 2 | 185 | 17.0 | 52 | 5 |
| Green Lak | 15,491 | 311 | 20.0 | 165 | 10.6 | 10 | 122 | 15.7 | 8 | 1 |
| Iowa | 22,497 | 408 | 18.1 | 208 | 9.2 | 8 | 132 | 11.7 | 57 | 3 |
| Iron | 8,655 | 215 | 24.8 | 83 | 9.5 | 8 | 68 | 15.7 | 63 | 7 |
| Jackson. | 17,057 | 317 | 18.5 | 162 | 9.4 | 2 | 88 | 10.3 | 28 | 5 |
| Jefferson | 34,309 | 600 | 17.4 | 383 | 11.1 | 5 | 242 | 14.1 | 38 | 21 |
| Juneau | 19.569 | 309 | -15.7 | 201 | 10.2 | 10 | 141 | 14.4 | 14 | 9 |
| Kenosha | 34,039 | 939 | 27.5 | 416 | 12.2 | 14 | 407 | 23.9 | 133 | 26 |
| Kewaunee | 16,784 | 378 | 22.5 | 219 | 13.0 | 5 | 133 | 15.8 | 30 |  |
| La Crosse | 44,225 | 852 | 19.2 | 578 | 13.0 | 9 | 401 | 18.1 | 73 | 36 |
| Lafayette | 20,075 | 358 | 17.8 | 204 | 10.1 | 9 | 125 | 12.4 | 102 | 7 |
| Langlade | 17,326 | 474 | 27.3 | 168 | 9.6 | 5 | 117 | 13.5 | 159 | 19 |
| Lincoln | 19,064 | 473 | 24.8 | 184 | 9.6 | 9 | 160 | 1.6 | 42 | 11 |
| Manitowoc | 45,014 | 1,136 | 25.2 | 462 | 10.2 | 30 | 350 | 15.5 | 264 | 18 |
| Marathon | 56,015 | 1,535 | 27.4 | 636 | 11.3 | 30 | 423 | 15.1 | 94 | 23 |
| Marinette | 33,828 | 690 | 20.3 | 326 | 9.6 | 9 | 169 | 9.9 | 161 |  |
| Marquette | 10,741 | 206 | 19.1 | 121 | 11.2 | 4 | 95 | 17.6 | 1 |  |
| Milwaukee | 447,080 | 12,263 | 27.4 | 5,967 | 13.3 | 254 | 4,568 | 20.4 | 2,707 | 367 |
| Monroe | 28,881 | 540 | 18.6 | 342 | 11.8 | 3 | ${ }^{2} 11$. | 14.6 | 7 | 8 |
| Oconto | 25,872 | 658 | 21.5 | 243 | 9.3 | 16 | 156 | 12.0 | 26 | 6 |
| Oneida | 11,472 | 237 | 20.6 | 115 | 10.0 | 5 | 65 | 11.3 | 1 | 4 |
| Outagamie | 49,119 | 1,240 | 24.4 | 542 | 11.0 | 22 | 404 | 16.4 | 69 | 33 |
| Ozaukee | 17.123 | 383 | 22.3 | 161 | 9.4 | 3 | 163 | 19.0 | 6 | 6 |
| Pepin | 7.579 | 156 | 20.5 | 84 | 11.0 | 2 | 60 | 15.8 | 3 | 2 |
| Pierce | 22,079 | 404 | 18.2 | 253 | 11.4 | 2 | 111 | 10.0 | 17 | 6 |
| Polk | 21,463 | 458 | 21.3 | 208 | 9.6 | 14 | 118 | 10.9 | 24 | 16 |
| Portage | 30,962 | 758 | 24.4 | 354 | 11.4 | 4 | 246 | 15.8 | 72 | 14 |
| Price | 14,083 | 294 | 20.8 | 113 | 8.0 | 3 | 80 | 11.3 | 21 | 6 |
| Racine | 58,863 | 1,349 | 22.9 | 687 | 11.6 | 9 | 500 | 16.9 | 353 | 19 |
| Richland | 18,809 | 465 | 24.7 | 201 | 10.6 | 3 | 158 | 16.8 | 21 | 10 |
| Rock | 55,917 | 1,053 | 18.8 | 689 | 12.3 | 10 | 406 | 14.5 | 193 | 55 |
| Rusk | 11,442 | 245 | 21.4 | 97 | 8.4 | 6 | 96 | 16.7 | 13 | 3 |
| St. Croix | 25,910 | 461 | 17.7 | 282 | 10.8 | 10 | 284 | 21.9 | 24 | 10 |
| Sauk. | 32,878 | 565 | 17.1 | 380 | 11.5 | 15 | 268 | 16.3 | 53 | 18 |
| Sawyer | 6,463 | 134 | 20.7 | 63 | 9.7 | 3 | 40 | 12.3 | 4 |  |

TABLE NO. 2-Continued. SHOWING TOTAL BIRTHS, DEATHS, MARRIAGES, ACICIDENTS AND DIVORCES REPORTED DURING THE CALENDAR YEAR OFY 1911.

| County. | $\begin{gathered} \text { Esti- } \\ \text { mated } \\ \text { popula- } \\ \text { tion, } \\ \text { 1911. } \end{gathered}$ | Births. |  | Deaths. |  |  | Marriages. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \dot{n} \\ & \stackrel{4}{y} \\ & 0 \\ & 0 \\ & \stackrel{y}{0} \\ & 0 \end{aligned}$ |  |  |  |  |  |  |  |  |
| Shawano | 32,053 | 774 | 24.1 | 295 | 9.2 | 18 | 263 | 16.4 | 64 |  |
| Sheboygan | 55,451 | 1,224 | 22.0 | 626 | 11.2 | 23 | 482 | 17.3 | 82 | 30 |
| 'Taylor | 13,873 | 364 | 26.2 | 102 | 7.3 | 3 | 76 | 10.9 | 21 | 5 |
| Trempealeau | 22,928 | 534 | 23.2 | 229 | 9.9 | 3 | 159 | 13.8 | 16 | 8 |
| Vernon | 28,116 | 569 | 20.2 | 291 | 10.3 | 9 | 207 | 14.7 | 11 | 13 |
| Vilas | 6,135 | 123 | 20.0 | 54 | 8.8 | 2 | 17 | 5.5 | 3 | 1 |
| Walworth | 29,614 | 413 | 13.9 | 371 | 12.5 | 14 | 201 | 13.5 | 14 | 19 |
| Washburn | 8,339 | 217 | 26.0 | 72 | 8.6 |  | 60 | 14.3 | 50 | 7 |
| Washington | 23,846 | 449 | 18.8 | 227 | 9.5 | 12 | 199 | 16.6 | 73 | 5 |
| Waukesha | 37,356 | 584 | 15.6 | 522 | 13.9 | 9 | 232 | 12.4 | 13 | 20 |
| Waupaca | 32,782 | 705 | 21.4 | 394 | 12.0 | 8 | 236 | 14.3 | 34 | 16 |
| Waushara | 19,134 | 433 | 22.6 | 153 | 7.9 | 7 | 120 | 12.5 | 16 | 10 |
| Winnebago | 62,479 | 1,198 | 19.1 | 856 | 13.7 | 19 | 576 | 18.4 | 158 | 84 |
| Wood | 30,623 | 761 | 24.8 | 288 | 9.4 | 7 | 256 | 16.7 | 50 | 15 |
| Total | 2,358,293 | 52,653 | 22.3 | 27,185 | 11.5 | 915 | 18,780 | 15.9 | 7,610 | 1,288 |

## BIRTHS.

For the calendar year ending December 31, 1911, 52,653 births, including stillbirths, were reported. This corresponds to an annual birth rate for the state of 22.3 per thousand gross estimated population. The birth rate varies from 27.5 in Kenosha county to 13.9 in Walworth county.

By a comparison with the birth rates in each county since 1908 , it is shown that there is a remarkable uniformity in the birth rate for the various counties during the period from - 1908 to and including 1911. In a few of the sparsely settled counties the increased accuracy of registration can easily be detected in the higher rates shown for 1911.

Any attempt to estimate the birth rate from the gross estimated population is open to serious criticism and, in most cases, does not represent the true situation. The age grouping of the population in any registration district, or in any county, and the sex are important items to be considered. A true birth rate should be based on the number of married females of child bearing age, but it is impossible to determine the number of persons in this class for the state as a whole, or for any other registration districts. The federal census report on population, which will soon be issued, will probably contain the information desired.

It will be necessary in the near future to have accurate birth registration in order to assist in the enforcement of the laws relating to child labor, school attendance, etc. The physicians and licensed midwives report the births which they attend very satisfactorily and the great problem now is to educate the parents with reference to the value of these records in safeguarding the civil and property rights of their children. When this has been accomplished, parents will insist that the attending physician or midwife report promptly and, in cases where neither a physician or midwife has been employed, the parents themselves will fill out and file the certificate as they are required to do under the law.

Of the total births reported during 1911, 27,159 were males; 25,336 females; and in 58 cases the sex of the child was unknown or not stated.

915 stillbirths were reported as births; 786 illegitimate births were recorded; and 1,168 twin births.

Arranging the total births reported according to nativity of the parents, it is shown that 31,713 were born of native parents; 3,030 had native fathers and foreign mothers; 6,209 had foreign fathers and native mothers; 11,087 were born of foreign parentage; and 614 were children where the nativity of one or both of the parents was unknown or not stated.

Table No. 4 shows the total number of births reported by counties, arranged according to the sex and nativity of the parents.

Table No. 5 shows stillbirths, twin births, and illegitimate births by counties, arranged according to sex.

The classification of stillbirths by sex shows that 507 were males, 387 females, and in 21 cases the sex was unknown or not stated.

Twin births, arranged according to sex, show that 594 were males, 569 females and in 5 cases the sex was not stated.

In the case of illegitimate births, there were 407 males, 376 females and in 3 cases the sex was not stated.

During the calendar year of 1911,27 triplets were registered.

TABLE NO. 3.-BIRTHS IN WISCONSIN BY CALENDAR YEARS.

|  | 1908 | 1904 | 1905 | 1906 | 1907 | 1908 | 1909 | 1910 | 1911 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Adams | 115 | 137 | 123 | 142 | 154 | 197 | 201 | 173 | 168 |
| Ashland | 180 | 407 | 453 | 474 | 589 | 553 | 499 | 488 | 419 |
| Barron | 449 | 474 | 471 | 521 | 635 | 656 | 673 298 | 725 325 | 605 315 |
| Bayfleld | 124 | 129 | 306 1,484 | $\begin{array}{r}283 \\ 1.658 \\ \hline\end{array}$ | 306 1,586 | $\begin{array}{r}\text { 1,508 } \\ \hline 154\end{array}$ | 1,367 | 1,492 | 1,471 |
| Brown | 1,114 | 1,180 | 1,484 | 1,658 | 1,586 415 | 1,319 | - 289 | 324 | 276 |
| Buffalo | 41 | 61 | 200 | 229 | 166 | 207 | 173 | 187 | 170 |
| Burnett | 103 | 98 | 129 | 148 382 | 1606 | 402 | 396 | 382 | 359 |
| Calumet | 336 | 357 | 458 <br> 553 | 382 <br> 540 | 515 | 583 | 555 | 585 | 609 |
| Chippewa | 398 | 402 | 553 440 | 540 493 | 515 | 850 | 725 | 653 | 656 |
| Clark | 415 | 461 486 | 440 530 | 493 | 699 | 598 | 573 | 610 | 509 |
| Columbia | 343 | 486 150 | 235 | 242 | 201 | 399 | 370 | 312 | 376 |
| Orawford | 157 744 | 150 790 | 225 1,313 | 1,095 | 1,384 | 1,384 | 1,436 | 1,550 | 1.528 |
| Dane | 744 | 790 | 1, 817 | 1,829 | -961 | -974 | 1,950 | 1,003 | 977 |
| Door | 416 | 467 | 480 | 453 | 385 | 519 | 459 | 517 | 477 |
| Douglas | 676 | 681 | 558 | 725 | 1,025 | 1,018 | 922 | 816 | 859 |
| Dunn .. | 319 | 363 | 452 | 410 | 493 | 500 | 498 | 490 | 543 |
| Fau Claire | 361 | 494 | 533 | 499 | 678 | 582 | 541 | 590 | 599 |
| Florence | 56 | 55 | 56 | 105 | 68 | $\stackrel{57}{1}$ | - 57 | 64 1.126 | 1,121 |
| Fond du Lac. | 556 | 907 | 1,000 | 897 | 1,254 | 1,216 | 1,063 | 1,126 | 1,188 |
| orest | 48 | 65 | 100 | 111 | ${ }_{903}^{168}$ | 906 | 835 | 846 | 787 |
| Grant | 535 | 550 | ${ }^{655}$ | 723 | 903 | 409 | 451 | 407 | 403 |
| Green |  | 312 | ${ }^{339}$ | 457 | 354 | 310 | 311 | 324 | 311 |
| Green Lake | 168 | 168 | 211. | 341 | 470 | 451 | 387 | 444 | 408 |
| Iowa | 164 | 245 |  | 267 | 220 | 208 | 181 | 188 | 215 |
| Iron.... | 109 | 193 | 340 | 291 | 349 | 330 | 326 | 292 | 317 |
| dackson | 480 | 543 | 551 | 519 | 715 | - 687 | 568 | 576 | 600 |
| Jeffer |  | 387 | 346 | 301 | 330 | 342 | 342 | 329 | 309 |
| Kenosha | 536 | 611 | 624 | 702 | 710 | 867 | 903 | 959 | 939 |
| Kowaunce | 380 | 404 | 431 | 387 | 446 | 449 | 462 | 413 | 859 |
| T, a Crosse | 624 | 333 | 690 | 796 | 945 | 880 | 889 | 944 | 852 <br> 358 |
| Lafayette | 188 | 410 | 299 | 488 | 413 | 454 | 432 | 451 | 474 |
| Langlade | 286. | 289 | 378 | 489 | 345 | 527 | 450 | 461 | 473 |
| Lincoln | 237 | +156 | + 430 | 495 1.117 | 1.384 | 1,160 | 1.101 | 1,074 | 1,136 |
| Manitowoc | 880 | 1,065 | 1.024 | 1.188 | 1,576 | 1.501 | 1,517 | 1.535 | 1535 |
| Marathon | 802 |  | 1.146 080 |  | -813 | 762 | 794 | 724 | 69 |
| Marinette |  | 997 | 980 | 146 | 238 | 189 | 190 | 2 4 | 206 |
| Marquette | 101 | 179 8,925 | 8,905 | 8,803 | 9,193 | 10,771 | 10,500 | 11,032 | 12,26:3 |
| Milwaukee | 9,329 348 | 8,925 | 8,905 $5 \cap 8$ | 8,898 | 551 | 626 | 580 | 587 | 540 |
| onros | 430 | 3.96 | 522 | 575 | 658 | 628 | 643 | 609 | 658 |
| Oneida | 152 | 167 | 137 | 213 | 250 | 214 | 194 | 208 | 237 |
| Outagamie | 1.172 | 1,152 | 1.342 | 1265 | 1,334 | 1.134 | 1,183 | 1.262 | 1.200 |
| Ozaukee | 276 | 202 | 276 | 315 | 364 | 383 | 339 | 328 | ${ }^{382}$ |
| Pepin | 86 | 78 | 127 | $12 \%$ | 172 | 170 | 340 | 152 | 156 |
| Pierce | 205 | 219 | 253 | 301 | 330 | 442 | 444 | 438 | 404 |
| Polk | 259 | 280 | 355 | 353 | 392 897 | 496 | 751 | 473 | 458 |
| Portage | 329 | 525 | 547 | 571 | $\begin{array}{r}837 \\ 174 \\ \hline\end{array}$ | 720 200 | 741 | 7969 | 294 |
| Price .. | 188 | 261 | $\begin{array}{r}180 \\ +1,013 \\ \hline\end{array}$ | 156 1.060 | 174 1,347 | 1,299 | 1,211 | 1,285 | 1,349 |
| Racine | 998 | $\begin{array}{r}1,123 \\ \hline 269\end{array}$ | 1,013 360 | 1.060 350 | 1,347 | 1,299 | 1,435 | 1,459 | 465 |
| Richland | 193 | 269 726 | 360 939 | 350 952 | 1.148 | 1,172 | 1,112 | 1,043 | 1.053 |
| Rock | 666 | 726 75 | $\stackrel{939}{159}$ | 952 | 1.148 229 | 1,124 | 208 | 226 | 245 |
| Rusk | 69 301 | 323 | 334 | 477 | 487 | 497 | 474 | 518 | 461 |
| St. Oroi | 301 | 510 | 469 | 499 | 611 | 601 | 665 | 608 | 565 |
| Sauk | 62 | 87 | 59 | 139 | 120 | 133 | 128 | 128 | 134 |
| Shawans | 410 | 601 | 324 | 432 | 679 | 830 | 854 | 802 | 774 |
| Sheboygan | 700 | 1,183 | 994 | 1,221 | 1,441 | 1,229 | 1,217 | 1,294 | 1.,224 |
| Taylor | 162 | 208 | 222 | 183 | 242 | 353 | 353 | 348 | 234 |
| Trempealeau | 390 | 377 | 340 | 408 | 516 | 507 | 510 | 59.5 | 534 |
| Vernon | 307 | 357 | 333 | 231 | 439 | 610 | ${ }_{98}$ | 115 | 123 |
| vilas | 85 | 87 | 81 | 72 | 76 | 102 | -98 | 419 | 413 |
| Walworth | 320 | 507 | 484 | ${ }^{356}$ | ${ }_{287}^{443}$ | 502 | 460 | 192 | 217 |
| Washburn | 98 | 129 | 192 | 85 526 | 287 610 | 2015 | 494 | 496 | 449 |
| W ashingt $\cap$ n | 283 | 446 | 490 | ${ }_{611} 62$ | 716 | 796 | 690 | 651 | 584 |
| Waukesha | 449 | 595 | 649 <br> 642 | 658 | 720 | 755 | 736 | 759 | 705 |
| Waupaca | 144 | 231 | 316 | 327 | 422 | 447 | 416 | 483 | 433 |
| Waushara | 1,036 | 1,163 | 1,115 | 1,471 | 1,275 | 1,208 | 1,323 | 1,212 | 1,108 |
| Wood .... | 398 | 428 | 520 | 677 | 712 | 780 | 732 | 809 | 761 |
| Total | 33,574 | 38,832 | 48,631 | 44,759 | 50,922 | 52,994 | 51,212 | 52,261 | 52,653 |

TABLE NO. 4.-SHOWING BIRTHS REPORTED FROM JAN. 1, 1911, TO DEC. 31, 1911, CLASSIFIED BY COUNTIES, SEX AND NATIONALITY
OF PARENTS.

County.


|  |
| ---: |
| 168 |
| 419 |
| 609 |
| 315 |
| 1,471 |
| 276 |
| 170 |
| 359 |
| 609 |
| 656 |
| 509 |
| 376 |
| 1,523 |
| 977 |
| 477 |
| 859 |
| 543 |
| 599 |
| 62 |
| 1,121 |
| 188 |
| 787 |
| 403 |
| 311 |
| 408 |
| 215 |
| 317 |
| 600 |


|  |  |
| :---: | :---: |

(

| Juneau | 309 | 167 | 142 |  | 10 | 16 |  | 6 | 203 | 19 | 30 | 52 | 5 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Kenosha | 939 | 492 | 445 | 2 | 14 | 25 | ........ | 3 | 356 | 60 | 84 | 433 | 6 |
| Kewaunea | 378 | 197 | 180 | 1 | 5 | 8 |  | 4 | 330 | 10 | 19 | 16 | 3 |
| La Crosse | \&52 | 430 | 422 | ........ | 9 | 22 |  | 15 | 603 | 48 | 110 | 81 | 10 |
| Lafayette | 358 | 187 | 170 | 1. | 7 | 8 |  | 6 | 285 | 12 | 35 | 28 | 2 |
| Langlade | 474 | 235 | 237 | 2 | 5 | 8 |  | 9 | 334 | 21 | 55 | 60. | 4 |
| Lincoln | 473 | 246 | 227 | ........ | 9 | 20 |  | 8 | 255 | 37 | 67 | 108 | 6 |
| Manitowoc | 1,136 | 585 | 548 | 3 | 30 | 32 | . . . . . | 5 | 909 | 44 | 110 | 68. | 5 |
| Marathon | 1,535 | 789 | 733 | 3 | 30 | 36 |  | 13 | 935 | 103 | 248 | 235 | 14 |
| Marinete | 690 | 381 | 308 | 1 | 9 | 19 |  | 3 | 335 | 50 | 118 | 184 | 3 |
| Marquette | 206 | 111 | 95 |  | 4 | 6 |  | 3 | 165 | 5 | 20 | 15 | 1 |
| Milwaukee | 12,263 | 6,324 | 5,984 | 5 | 254 | 276 | 3 | 335 | 5,160 | 752 | 1,530 | 4,584 | 237 |
| Monrce | 540 | 273 | 267 |  | 3 | 10 |  | 11 | 422 | 28 | 53 | 33 | 4 |
| Oconto | 658 | 338 | - 320 |  | 16 | 32 |  | . 4 | 395 | 48 | 90 | 122 | 3 |
| Oneida . | 237 | 128 | 109 | ... | 5 | 4 |  | 1 | 129 | 18 | 34 | 54 | 2 |
| Outagamie | 1,203 | 630 | 568 | 2 | 22 | 14 |  | 8 | 874 | 70 | 142 | 104 | 10 |
| Ozaukee .. | 383 | 191 | 192 |  | 3 | 10 |  | 2 | 311 | 12 | 21 | 38 | 1 |
| Pepin . | 156 | 77 | 78 | 1 | 2 | 4 |  | 2. | 113 | 3 | 17 | 15 | 8 |
| Pierce . | 404 | 212 | 191 | 1 | 2 | 8 | ....... | $7{ }^{\text {. }}$ | 290 | 19 | 55 | 32 | 8 |
| Polk | $4 ¢ 8$ | 244 | 213 | 1 | 14 | 12 |  | 1 | 252 | 29 | 77 | 100 | . |
| Portage | 758 | 374 | 382 | 2 | 4 | 20 | 3 | 8 | 519 | 92 | 54 | 92 | 1 |
| Price .. | 294 | - 150 | 144 | ........ | 3 | 2 | . | 4 | 127 | 15 | 40 | 110 | 2 |
| Racine | 1,349 | 704 | 645 |  | 9 | 16 |  | 2 | 590 | 67 | 161 | 520 | 9 |
| Richland | 465 | 228 | 236 | 1 | 3 | 14 |  | 6 | 424 | 20 | 9 | 10 | 2 |
| Rock | 1,053 | 534 | 519 |  | 10 | 18 | . | 27 | 725 | 65 | 111 | 150 | 2 |
| Rusk | 245 | 120 | 125 |  | 6 | 6 |  | 1 | 163 | 9 | 20 | 52 | 1 |
| St. Croix | 461 | 258 | 203 |  | 10 | 18 |  | 2 | 295 | 28 | 64 | 72 | 2 |
| Sauk | 565 | 304 | 261 |  | 15 | 20 | 3 | 3 | 443 | 24 | 60 | 37 | 1 |
| Sawyer | 134 | 73 | 61 |  | 3 | 2 |  | 1 | 80 | 7 | - 11 | 35 | 1 |
| Shawano | 774 | 389 | 385 |  | 18. | 12 |  | 4 | 491 | 48 | 146 | 89 |  |
| Sheboygan | 1,224 | 631 | 532 | 1 | 23 | 38 | 6 |  | 806 | 63 | 134 | 219 | 2 |
| Taylor ... | 364 | 196 | 168 |  | 3 | 6 | . | 1 | 154 | 28 | 63 | 118 | 1 |
| Trempealeau | 534 | 282 | 252 |  | 3 | 10 | . . | 4 | 355 | 45 | 82 | 52 | . |
| Vernon | 569 | 287 | 282 |  | 9 | 4 |  | 4 | 422 | 36 | 58 | 53 |  |
| Vilas | 123 | 65 | 58 |  | 2 | 4 | 3 | 1 | 57 | 4 | 14 | 47 | 1 |
| Walworth | 413 | 214 | 199 |  | 14 | 20 |  | 1 | 280 | 33 | 52 | 48 |  |
| W ashburn | 217 | 116 | 101 |  | 4 |  |  | 2 | 142 | 9 | 33 | 32 | 1 |
| W ashington | 449 | 234 | 215 |  | 12 | 6 |  |  | 379 | 22 | 23 | 25 |  |
| Waukesha . | 584 | 306 | 278 |  | 9 | 18 |  | 15 | 452 | 26 | 33 | 69 | 4 |
| Waupaca | 705 | 365 | 340 |  | 8 | 8 |  | 5 | 469 | 51 | 94 | 91 |  |
| Waushart | 433 | 222 | 211 |  | 7 | 6 |  | 1 | 296 | 19 | 48 | 70 | ......... |
| Winnebago | 1,198 | 613 | 585 |  | 19 | 8 |  | 11 | 699 | 93 | 144 | 250 | 12 |
| Wood . | 761 | 372 | 388 | 1 | 7 | 14 |  | 8 | 475 | 68 | 102 | 112 | 4 |
| Total | 52,653 | 27,159 | 25,336 | 58 | 915 | 1,168 | 27 | 786 | 31,713 | 3,030 | 6.209 | 11,087 | 614 |

TABLE NO. 5.-SHOWING STILLBIRTHS, TWIN BIRTHS, AND ILLEGITIMATE BIRTHS REPORTED FROM JAN. 1, 1911, TO DEC. 31, 1911, CLASSIFIED BY COUNTIES AND SEX.


| Lafayette | 7 | 3 | 3 | 1 | 8 | 2 | 6 |  | 6 | 3 | 3 |  |  |  |  | .... |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Langlade | 5 | 1 | 4 | . | 8 | 6 | 2 | . | 9 | - 3 | 6 |  |  |  |  | . ....... |
| Lincoln | 9 | 7 | 2 |  | - 20 | 12 | 8 | ........ | 8 | 3 | 5 | ….... |  | ....... |  | ........ |
| Man'towoc | 30 | 14 | 15 | 1 | 32 | 18 | 14 |  | 5 | 3 | 2 | ........ |  |  |  | ........ |
| Marathon | 30 | 14 | 14 | 2 | 36 | 16 | 20 |  | 13 | 7 | 6 | ........ | ........ |  |  |  |
| Marinette | 9 | 6 | 3 |  | 12 | 3 | 8 | 1 | 3 |  | 3 | - | .... |  | ......... |  |
| Marquette | 4 | 2 | 2 |  | 6 | 2 | 4 |  | 3 | 1 | 2 |  |  |  |  |  |
| Milwaukee | 254 | 134 | 116 | 4 | 276 | 129 | 147 |  | 335 | 185 | 149 | 1 | 3 |  | 3 | ........ |
| Monroe | 3 | 2 | 1 |  | 10 | 7 | 3 |  | 11 | 5 | 6 | . | ........ | ......... | ........ |  |
| Oconto | 16 | 12 | 4 |  | 32 | 16 | 16 |  | 4 | 4 | - | ........ | ......... |  | . . . . . . |  |
| Oneida | 5 | 2 | 1 | 2 | 4 | 3 |  | 1 | 1 | 1 | . $\cdot$ |  |  |  |  |  |
| Outagamie | 22 | 9 | 13 |  | 14 | 7 | 7 |  | 8 | 1 | 7 | ........ | ......... |  |  |  |
| Ozaukee .. | 3 |  | 3 |  | 10 | 4 | 6 |  | 2 | 1 | 1 | ........ |  |  | . . . . . . . |  |
| Pepin ... | 2 | 1 | 1 |  | 4 | 1 | 3 |  | 2 | 2 |  |  |  |  |  | . . . . . |
| Pierce . | 2 | 1 | 1 | ....... | 8 | 5 | 3 |  | 7 | 3 | 4 |  | . . . . . . | ..... .. | ........ | ........ |
| Polk .. | 14 | 8 | 6 | ........ | 12 | 5 | 7 |  | 1 | 1 |  |  |  |  |  |  |
| Portage | 4 | 4 |  |  | 20 | 10 | 10 |  | 8 | 5 | 2 | 1 | 3 | 1 | 2 |  |
| Price . | 3 | 1 | 2 |  | 2 | 1 | 1. | ....... | 4 | 1 | 3 | . | ........ | ........ | ........ |  |
| Racine | 9 | 5 | 4 |  | 16 | 5 | 11 |  | 2 | $\cdots$ | - 2 | ........ |  |  |  |  |
| Richland | 3 | 1 | 1 | 1 | 14 | 4 | 10 |  | 6 | 4 | 2 | ........ |  |  |  |  |
| Rock | 10 | 5 | 4 | 1 | 18 | 6 | 12 | ........ | 27 | 15 | 12 | ........ | .... ... | ......... |  |  |
| Rusk | 6 | 3 | 3 |  | 6 |  | 6 |  | 1 | $\cdots$ | 1 | ........ | . |  |  |  |
| St. Croix | 10 | 7 | 3 |  | 18 | 6 | 12 |  | 2 | 1 | 1 |  |  |  |  |  |
| Sauk .... | 15 | 7 | 5 | - 3 | 20 | 9 | 11 |  | 3 | 2 | 1 |  | 3 |  |  | 3 |
| Sawyer . | 3 | 2 | 1 |  | 2 | 1 | 1 |  | 1 | ......... | 1 | .......... | ........ |  |  | ........ |
| Shawano | 18 | 11 | 5 | 2 | 12 | 8 | 4 |  | 4 | 2 | 2 |  |  |  | 4 |  |
| Sheboygan | 23 | 14 | 9 |  | 38 | 18 | 20 | ....... |  |  |  |  | 6 | 2 | 4 |  |
| Taylor .... | 3 | 2 | 1 |  | 6 | 3 | 3 |  | 1 |  | 1 | ........ | ........ | ......... | ......... |  |
| Trempealeau | 3 | 2 | 1 |  | 10 | 6 | 4 |  | 4 | 1 | 3 |  |  |  |  |  |
| Vernon ..... | 9 | 7 | 2 |  | 4 |  | 4 |  | 4 | 2 | 2 | ......... |  |  |  |  |
| Vilas .. | 2 |  |  | 2 | 4 | 2 | 2 |  | 1 | 1 | 1 |  | 3 | ........ | 3 | . . . . . . |
| Walworth | 14 | 8 | 6 |  | 20 | 16 | 4 |  | 1 |  | 1 |  |  | ........ |  |  |
| W ashburn | 4 | 1 | 3 |  |  | , |  |  | 2 | 1 | 1 | ......... |  |  |  |  |
| Washington | 12 | 9 | 3 |  | 6 | 4 | 2 |  | ㅍ. | i1 | .... |  | ........ | . ........ |  |  |
| Waukesha . | 9 | 4 | 5 |  | 18 | 9 | 9 |  | 15 | 11 | 4 |  |  | . |  |  |
| Waupaca | 8 | 6 | 2 |  | 8 | 5 | 3 |  | 5 | 2 | 3 |  |  | . |  |  |
| Waushara | 7 | 3 | 4 |  | 6 | 1 | 5 |  | 1 | 1 | - |  |  | ........ |  |  |
| Winnebago | 19 | 11 | 8 |  | 8 | 5 | 3 |  | 11 | 6 | 5 |  |  |  |  |  |
| Wood ..... | 7 | 1 | 6 |  | 14 | 6 | 8 |  | 8 | 3 | 5 |  |  |  |  |  |
| Total | 915 | 507 | 387 | 21 | 1,168 | 594 | 569 | 5 | 786 | 407 | 36 | 3 | 27 | 7 | 17 | 3 |

## MARRIAGES.

During the calendar year of $1911,18,780$ marriages, or 37,560 persons married, were reported to the State Bureau of Vital Statistics. This represents an annual marriage rate of 15.9 persons married per one thousand gross estimated population. The marriage rate for each county is shown by Table No. 2.

In the classification of marriages for each county by calendar years since 1905 , as shown in Table No. 6, the number of marriages has increased from 16,315 in 1905 to 18,700 in 1911.

It is shown by Table No. 7, in the classification of marriages according to the nativity of the bride and groom, that there were 13,681 marriages where both parties were native born; 873 marriages where the groom was native and the bride foreign; 1,961 marriages where the groom was foreign and the bride native; 2,139 marriages where both parties were foreign born; and 126 marriages where the birthplace of one or both parties was unknown or not stated.

Table No. 8 shows the total marriages reported from each county by age groups for both brides and grooms.

TABLE NO. 6.--MARRIAGES IN WISCONSIN BY CALENDAR YEARS.

| Counties. | 1905. | 1903. | 1907. | 1908. | 1909. | 1910. | 1911. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Adams | 66 | 62 | 94 | 50 | 46 | 46 | 38 |
| Ashland | 202 | 176 | 199) | 139 | 156 | 137 | 140 |
| Barron | 202 | 1.4 | 296 | 205 | 206 | 194 | 197 |
| Bayfieid | 100 | 99 | 50 | 62 | 66 | 58 | 76 |
| Brown | 387 | 480 | 437 | 380 | 418 | 408 | 358 |
| Buffalo | 133 | 121 | 93 | 85 | 90 | 96 | 82 |
| Burnett | 54 | 54 | 60 | 54 | 45 | 51 | 45 |
| Calumet | 128 | 116 | 129 | 120 | 105 | 97 | 133 |
| Chippewa | 248 | 24. | 252 | $2 \cdot 4$ | 238 | 259 | 225 |
| Clark .... | 194 | 196 | 214 | 238 | 188 | 182 | 181 |
| Columbia | 220 | 203 | 226 | 229 | 246 | 224 | 209 |
| Crawford | 135 | 141 | 107 | 107 | 135 | 123 | 130 |
| Dane | 398 | 459 | 540 | 514 | 529 | 512 | 548 |
| Dodge | 239 | 352 | 344 | 307 | 299 | 352 | 340 |
| Door | 136 | 122 | 154 | 129 | 115 | 152 | 153 |
| Douglas | 277 | 251 | 371 | 341 | 285 | 302 | 398 |
| Dunn | 195 | 179 | 185 | 200 | 186 | 190 | 184 |
| Eau Claire | 228 | 280 | 263 | 251 | 302 | 293 | 255 |
| Florence | 20 | 18 | 34 | 26 | 20 | 27 | 23 |
| Fond du Lac | 399 | 393 | 444 | 406 | 371 | 380 | 406 |
| Forest | 29 | 30 | 44 | 34 | 37 | 39 | 43 |
| Grant | 246 | 259 | 284 | 263 | 250 | 254 | 240 |
| Green | 189 | 166 | 188 | 156 | 153 | 184 | 185 |
| Green Lake | 116 | 95 | 115 | 167 | 120 | 129 | 122 |
| Iowa | 154 | 150 | 150 | 138 | 158 | 163 | 132 |
| Iron | 67 | 16 | 128 | 76 | 65 | 59 | 68 |
| Jackson | 116 | 104 | 137 | 103 | 103 | 85 | 88 |
| Jefferson | 264 | 253 | 310 | 254 | 281 | 245 | 242 |
| Juneau | 157 | 171 | 138 | 130 | 148 | 132 | 141 |
| Kenosha | 306 | 335 | 330 | 316 | 347 | 328 | 407 |
| Kewaunce | 140 | 141 | 125 | 129 | 126 | 121 | 133 |
| La Cross | 348 | 385 | 358 | 347 | 400 | 365 | 401 |
| Lafayette | 130 | 128 | 119 | 112 | 130 | 113 | 120 |
| Langlade | 111 | 99 | 138 | 117 | 137 | 121 | 117 |
| Lincoln | 136 | 163 | 175 | 135 | 120 | 141 | 160 |
| Man.towoc | 352 | 351 | 338 | 329 | 373 | 374 | 350 |
| Marathon | 366 | 410 | 395 | 377 | 417 | 399 | 423 |
| Marinette | 153 | 171 | 200 | 168 | 170 | 152 | 169 |
| Marquette | 80 | 77 | 103 | 84 | 94 | 80 | 95 |
| Milwauke | 3,097 | 3,512 | 4,675 | 3,747 | 4,178 | 4,689 | 4,568 |
| Monroe | 203 | 218 | 249 | 203 | 201 | 216 | 211 |
| Oconto | 155 | 146 | 148 | 107 | 123 | 153 | 156 |
| Oneida | 88 | 90 | 87 | 85 | 81 | 88 | 65 |
| Outagamie | 400 | $3 \times 3$ | 361 | 319 | 335 | 359 | 404 |
| Ozaukee | 123 | 127 | 113 | 115 | 117 | 89 | 163 |
| Pepin | 45 | 70 | 60 | 54 | 46 | 60 | 60 |
| Pierce | 130 | 111 | 129 | 100 | 108 | 112 | 111 |
| Polk | 157 | 132 | 126 | 111 | 110 | 121 | 118 |
| Portage | 230 | 241 | 203 | 239 | 227 | 235 | 246 |
| Price . | 75 | 68 | 71 | 57 | 56 | 49 | 80 |
| Racine | 364 | 388 | 467 | 447 | 414 | 505 | 500 |
| R:chland | 122 | 185 | 152 | 150 | 154 | 168 | 158 |
| Rock | 262 | 333 | 371 | 391 | 363 | 383 | 406 |
| Rusk | 62 | 73 | 103 | 67 | 68 | - 80 | 96 |
| St. Croix | 228 | 277 | 301 | 259 | 266 | 274 | 284 |
| Sauk | 266 | 280 | 295 | 270 | 254 | 268 | 268 |
| Sawyer | 25 | 40 | 39 | 44 | 24 | 32 | 40 |
| Shawano | 17\% | 198 | 250 | 283 | 253 | 270 | 263 |
| Sheboygan | 405 | 413 | 459 | 430 | 428 | 472 | 482 |
| Taylor | 72 | 86 | 100 | 95 | 83 | 84 | 76 |
| Trempealeau | 150 | 170 | 141 | 186 | 172 | 157 | 159 |
| Vernon | 205 | 9.05 | 230 | 207 | 181 | 172 | 207 |
| Vilas | 22 | 20 | 23 | 26 | 21 | 17 | 17 |
| Walworth | 209 | 206 | 188 | 167 | 177 | 162 | 201 |
| Washburn | 56 | 62 | 74 | 60 | 43 | 53 | 60 |
| Washington | 166 | 161 | 170 | 142 | 162 | 176 | 199 |
| Waukesha | 255 | 284 | 264 | 243 | 255 | 295 | 232 |
| Waupaca | 271 | 253 | 306 | 266 | 260 | 261 | 236 |
| Waushara | 109 | 143 | 131 | 102 | 146 | 162 | 120 |
| Winnebago | 465 | 472 | 463 | 439 | 499 | 535 | 576 |
| Wood | 223 | 227 | 2555 | 229 | 236 | 265 | 256 |
| Total. | 16,315 | 17,319 | 19,281 | 17,122 | 17,716 | 18,528 | 18,780 |

TABLE NO. 7.-SHOWING MARRIAGES REPORTED TO THE STATE BUREAU OF VI'AL ST'ATISTICS FROM JAN. 1, 1911, TO DEO. 31, 1911, CLASSIF'ED BY COUNTIES AND PLACE OF BIRTH.


TABLE NO: 7-Continued. SHOWING MARRIAGES REPORTED TO THE STATE BUREAU OF VITAL STATISTICS FROM JAN. 1, 1911, TO DEC. 31, 1911, OLASSIFTED BY COUNTIES' AND PLACE OF BIRTH.

| County. |  | Grooms. |  | Brides. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \text { B } \\ & 0 \\ & 0 \\ & 0 \\ & 00 \\ & 0 \end{aligned}$ |  | $\begin{aligned} & \dot{0} \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ | $\begin{aligned} & \text { 『ं } \\ & \text { نٌ } \\ & 0 \\ & \text { O } \end{aligned}$ |  |  |  |
| Sauk | 268 | 17 | 6 | 18 | 4 | 230 | 8 | 23 |
| Sawyer | 40 | 3 | 1 | 6 |  | 26 | 1 | 6 |
| Shawano | 263 | 24 | 2 | 25 | 7 | 199 | 12 | 35 |
| Sheboygan | 482 | 27 | 5 | 16 | 5 | 342 | 23 | 35 |
| Taylor ...... | 76 | 3 | 3 | 3 | E | 46 | 1 | 15 |
| Tr mpealeau | 159 | 7 | 3 | 5 | 1 | 131 | 4 | 18 |
| Vernon | 207 | 10 | 3 | 5 | 12 | 173 | 5 | 20 |
| Vilas .... | 17 | 3 |  | 4 | 1 | 9 | 1 | 4 |
| Walworth | 201 | 8 | 10 | 7 | 4 | 157 | 9 | 31 |
| Washburn | 60 | 9 | 3 | 6 | 2 | 50 | 1 | 6 |
| Washington . | 199 | 7 | 2 | 7 | 3 | 167 | 5 | 20 |
| Waukesha .... | 232 | 16 | 7 | 15 | 5 | 187 | 11 | 23 |
| Wrupaca | 236 | 24 | 3 | 16 | 9 | 198 | 10 | 19 |
| Wanshara | 120 | 13 | 1 | 6 | 3 | 100 | 2 | 7 |
| Winnebago | 576 | 52 | 22 | 41 | 23 | 453 | 31 | 50 |
| Wood ..... | 256 | 16 | 6 | 9 | 4 | 199 | 11 | 33 |
| Total | 18,780 | 1,328 | 453 | 1,058 | 554 | 13,681 | 873 | 1,961 |

TABLE NO: 7-OOntinued. SHÓWING MARRIAGES REPORTED TO THE STATE BUREAU OF VITAL STATISTICS FROM JAN. 1, 1911, TO DEC. 31, 1911, OLASSIFIED BY 'OOUNTIES' AND' PLAC'E OF BIRTH.


TABLE NO. 7 -Continued. SHOWING MARRTAGES REPORTED TY THE STATE BUREAU OF VITAL STATISTICS FROM JAN. 1, 1911, TO DEC. 31, 1911, CLASSIFIED BY COUNTIES AND PLACIE OF BIRTH.


TABLE NO. 8.-SHOWING MARRIAGES REPORTED FROM JAN. 1, 1911, TO DEC. 31, 1911, ARRANGED ACCORDING TO AGE GROUPS.

| County. |  | Age Groups. |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\xrightarrow{0}$ | H1 | 9 I I | H | ¢ | 炭 |  | 茓 | D <br> in <br> in | \% | $\stackrel{+}{\infty}$ |  |
| Adams | 38 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Brides |  |  | 15 | 13 | 4 | 1 | 3 | 1 |  |  | 1 |  |  |  |
| Grooms |  |  | 1 | 13 | 15 | 1 | 3 |  |  |  | 2 |  |  | 1 |
| Ashland . | 140 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Brides . |  |  | 29 | 64 | 21 | 10 | 2 | 6 |  |  | 1 |  |  | 2 |
| Grooms |  |  | 2 | 45 | 45 | 22 | 6 | 9 | 2 |  | 1 |  | ... | 2 |
| Barron ... | 177 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Brides |  |  | 66 | 75 | 32 | 13 | 8 | 1 | 5 |  |  |  | 1 | .... |
| Grooms |  | . . ${ }^{\text {. }}$ | 5 | 77 | 70 | 21 | 13 | 3 | 5 | 3 |  |  |  |  |
| Bayfield .. | 76 |  |  | . |  |  |  |  |  |  |  |  |  |  |
| Brides |  |  | 25 | 33 | 6 | 2 | 2 | 2 | 3 | 2 |  | 1 |  |  |
| Grooms |  |  | 2 | 27 | 26 | 7 | 8 | 1 | 2 | 2 | $\ldots$ | 1 |  |  |
| Brown | 358 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Brides |  |  | 89 | 162 | 56 | 14 | 7 | 7 | 6 | 2 | 3 | 1 | . | 11 |
| Grooms |  |  | 9 | 139 | 128 | 31 | 13 | 12 | 6 | 4 | 4 | 3 | $\ldots$ | 9 |
| Buffalo | 82 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Brides |  |  | 19 | 42 | 10 | 6 |  | 1 |  | 1 | .. | 1 | . | 2 |
| Grooms |  |  | 1 | 36 | 24 | 11 | 5 | 1 | 1 |  |  | 1 | . | 2 |
| Burnett . . | 45 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Brides |  |  | 15 | 19 | 8 | 1 |  | 1 | 1 |  |  |  |  |  |
| Grooms |  |  |  | 14 | 24 | 3 |  | 1 |  | 1 | $\cdots$ | 1 | ... | . ${ }^{\text {. }}$ |
| Calumet .. | 133 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Brides |  |  | 20 | 70 | 36 | 4 |  | 2 |  |  |  |  |  |  |
| Grooms |  |  |  | 46 | 62 | 16 | 1 | 5 | 2 | 1 |  |  |  |  |
| Chippewa | 225 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Brides |  |  | 50 | 107 | 40 | 15 | 6 | 2 | 2 | 1 | 1 | 1 |  |  |
| Grooms |  |  | 3 | 85 | 74 | 28 | 17 | 9 | 3 | 2 | 1 | 3 |  |  |
| Clark ...... | 181 |  |  |  |  | 2 |  |  |  |  |  |  |  |  |
| Brides |  |  | 49 | 92 | 25 | 2 | 5 | 3 | 2 | 1 |  |  |  | 2 |
| Grooms |  | ... | 2 | 63 | 74 | 22 | 10 | 4 | 2 | 1 | 2 | 1 |  | .... |
| Columbia . | 209 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Brides |  |  | 45 | 101 | 35 | 13 | 4 | 5 | 3 | 2 | 1 |  |  |  |
| Grooms |  |  | 1 | 77 | 84 | 19 | 11 | 6 | 2 | 3 | 2 | 4 |  | .... |
| Crawford . | 130 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Brides . |  |  | 30 | 55 | 26 | 4 | 6 | 3 | 2 | 2 | 2 |  |  | .... |
| Grooms |  |  | 3 | 51 | 37 | 13 | 17 | 2 | 1 | 1 | 1 | 4 |  |  |
| Dane ..... | 548 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Brides |  |  | 87 | 261 | 116 | 36 | 16 | 7 | 2 | 2 | 3 | 1 |  | 17 |
| Grooms |  |  | 5 | 211 | 188 | 65 | 28 | 18 | 9 | 3 | 3 | 5 |  | 13 |
| Dodge | 340 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Brides |  |  | 63 | 184 | 57 | 20 | 5 | 5 | 2 |  | 1 | 1 |  |  |
| Grooms |  |  | 2 | 133 | 137 | 32 | 18 | 7 | 6 | 1 | 2 | 1 |  | 1 |
| Door | 153 |  |  |  |  |  |  |  |  | 1 |  |  |  |  |
| Brides |  |  | 35 | 68 | 29 | $\stackrel{8}{8}$ | 4 | 2 | 2 | 1 | 1 |  |  | 3 |
| Grooms |  |  | 3 | 64 | 53 | 15 | 9 | 3 |  |  | 3 | 2 | $\ldots$ | 1 |
| Douglas ... | 398 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Brides |  |  | 82 | 173 | 76 | 33 | 18 | 7 | 6 | 11 |  |  |  | 2 |
| Grooms |  |  | 2 | 120 | 143 | 62 | 35 | 15 | 8 | 11 | 1 |  |  | 1 |
| Dunn | 184 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Brides |  |  | 53 | 80 | 34 | 5 | 8 | 1 |  |  | 2 | 1 |  |  |
| Grooms |  |  | 3 | 74 | 67 | 18 | 10 | 4 | 5 | $1]$ | 1 | 1 |  |  |
| Eau Claire | 255 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Brides |  |  | 59 | 120 | 35 | 15 | 9 | 5 | 2 | 1 | 3 | 2 |  | 4 |
| Grooms |  |  | 6 | 91 | 94 | 26 | 11 | 7 | 8 | 6 | 4 | 2 |  | . $\cdot$. |
| Elorence .. | 23 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ibrides |  |  | 11 | 9 | i | 1 | 1 | . | 1 | .... |  |  |  |  |
| Grooms |  |  | 2 | 11 | 8 | 1 |  | 1 |  |  |  |  |  |  |
| 2 Fond du Lac | 405 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. Brides... |  | $\cdots$ | 77 | 194 | 75 | 21 | 18 | 7 | 1 | 5 | 3 | 2 |  | 3 |
| - Grooms |  |  | T | 153 | 137 | 43 | 31 | 11 | 8 | 6 | 3 | 3 | 1 | 11 |

TABLE NO．8．－SHOWING MARRIAGES REPORTED FROM JAN．1，1911，TO DEC． 31，1911，ARRANGED AOCORDING TO AGE GROUPS－Continued．

| County． |  |  | Age Groups． |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\underset{\sim}{9}$ | \＃ | 9 <br> $\stackrel{7}{4}$ <br>  | $\underset{\substack{\text { 范 } \\ \hline}}{ }$ | 㹂 | \＃ | $\begin{gathered} 9 \\ 4 \\ 48 \end{gathered}$ | $\begin{aligned} & \text { H } \\ & \text { 合 } \end{aligned}$ | $\begin{aligned} & 8 \\ & \text { in } \\ & \text { is } \end{aligned}$ | \％ | $\underset{\infty}{+}$ |  |
| Forest | 43 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Brides |  |  | 22 | 14 | 3 |  | 1 |  |  |  | 1 |  |  |  |
| Grooms |  |  | 3 | 21 | 12 |  | 3 | 1 | i |  | 1 |  |  | 1 |
| Grant | 240 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Brides |  |  | 58 | 127 | 33 | 5 | 8 |  | 1 |  |  | 2 |  |  |
| Grooms |  |  | 6 | 98 | 77. | 27 | 12 | 5 | 6 |  | 1. | 2 |  |  |
| Brides ${ }^{\text {a }}$ | 185 |  | 47 | 98 | 24 | 10 |  |  |  |  |  |  |  |  |
| Grooms |  |  | 7 | 83 | 61 | ${ }_{23}^{10}$ | 8 |  |  |  |  | 1 |  |  |
| Green Lake | 122 |  | 7 | 83 | 61 | 23 | 8 | 1 | 1 |  |  | 1 |  |  |
| Brides |  |  | 26 | 62 | 22 | 3 | 2 |  | 2 |  |  | 2 |  |  |
| Grooms |  |  | 2 | 43 | 48 | 12 | 8 |  | 2 | 3 | 1 | 2 |  |  |
| Iowa | 132 |  |  |  |  | 12 | 8 |  |  |  |  | 2 |  |  |
| Brides |  |  | 22 | 67 | 24 | 11 | 4 | 3 |  |  |  |  |  | 1 |
| Grooms |  |  | 4 | 54 | 37 | 21 | 5 | 4 | 2 | 3 | 2 |  |  |  |
| $\begin{gathered} \text { Iron } \\ \text { Brides } \end{gathered}$ | 68 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Grooms |  | ． | 15 | $\stackrel{33}{23}$ | 10 | 7 |  | 1 |  |  |  | 1 |  | 1 |
| Jackson ．． | 88 |  |  |  |  | 8 | 6 |  | 2 | 1 | 1 |  |  | 1 |
| Brides |  |  | 39 | 116 | 51 | 12 | 8 | 6 | 3 | 2 | 1 | 3 |  | 1 |
| Grooms <br> Jefferson |  |  | 2 | 34 | 26 | 16 | 7 | 1 |  | 1 |  | 1 |  |  |
| Brides | 242 |  | 39 |  |  |  |  |  |  |  |  |  |  |  |
| Grooms |  |  | ${ }_{4}$ | 92 | 81 | 28 | 14 | 8 | 3 | ${ }_{4}^{2}$ |  |  |  | 1 |
| Juneau ． | 141 |  |  | 92 |  | 28 | 14 | 8 | 4 | 4 |  | 4 |  |  |
| Brides |  |  | 31 | 58 | 22 | 10 | 5 | 4 | 2 | 4 | 3 |  |  |  |
| Grooms |  |  | 2 | 48 | 39 | 18 | 14 | 4 | 4 | 4 |  | 6 | ．．． | 2 |
| $\underset{\text { Brides }}{\text { Kenosha }}$ | $40 \%$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Grooms |  |  | 90 | 192 | 73 | 23 | 13 | 5 | 4 | 3 | 2 | 1 |  | 1 |
| Kewaunee | 132 |  | 2 | 149 | 150 | 44 | 23 | 18 | 8 | 7. | 1. | 4 |  | $\ldots$ |
| Brides |  |  | 32 | 69 | 29 | 8 | 2 |  |  |  |  |  |  |  |
| Grooms |  |  | 5 | 54 | 47 | 18 | 4 | 2 | 2 |  |  |  |  | 1 |
| La Crosse | 401 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Brides Grooms |  |  | 81 | 165 | 92 | 27 | 17 | 5 | E | 6 |  | 3 |  |  |
| Lafayette |  |  | 4 | 138 | 121 | 60 | 28 | 24 | 7 | 9 | 4 | 6 |  |  |
| Brides | 12 |  | 23 | 63 | 22 | 9 | 3 |  |  |  |  |  |  |  |
| Grooms |  |  | 3 | 54 | 40 | 14 | 7 | 4 | 1 | 1 | 1 |  |  | 1 |
| Langlade | $11 \frac{1}{7}$ |  |  |  |  |  | 7 | 4 |  | 1 | 1 |  |  | 1 |
| Brides |  |  | 32 | 60 | 12 | 9 |  | 1 |  |  |  | 1 |  |  |
| Grooms |  |  | 1 | 61 | 37 | 8 | 3 | 3 | 1 | 1 |  | 2 |  |  |
| Lincoln Brides | 160 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Brides |  |  | 47 | 72 | 22 | 8 | 4 | 3 | 3 | 1 |  |  |  |  |
| Manitowoc |  |  | 3 | 67 | 55 | 9 | 10 | 3 | 7 | 2 | 4 |  |  |  |
| Brides | 350 |  | 77 | 182 | 56 | 20 | 6 | 4 |  |  |  |  |  |  |
| Grooms |  |  | 6 | 142 | 131 | 42 | 14 | 7 | 2 | 5 |  | 1 |  | 1 |
| Marathon | 423 |  |  |  |  |  |  | 7 |  |  |  | 1. |  | 1 |
| Brides |  |  | 108 | 196 | 72 | 19 | 9 | 5 | 3 | 4 |  | 3 |  | 2 |
| Grooms |  |  | 4 | 170 | 151 | 38 | 27 | 14 | 5 | 3 | 3 | 7. |  | 1 |
| Marinette Brides | 169 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Brides Grooms |  |  | 36 | 96 | 29 | 5 | 2 | 2 | 2 | 2 |  |  |  | 1 |
| Marquette | 95 |  | 2 | 75 | 51 | 28 | 4 | 3 | 3 | 1 |  | 3. | $\ldots$ | 1 |
| Brides |  |  | 30 | 40 | 17 | 3 | 2 | 1 | 1 |  |  |  |  |  |
| Grooms |  |  |  | 40 | 29 | 16 |  | 2 |  |  |  |  |  |  |
| Milwaukee | 4，568 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Brides |  | 2 | ع60 2 | ，198 | 875 | 286 | 145 | 94 | 49 | 33 | 13 | 5. |  |  |
| Grooms |  | ．．． | 81，1 | 844 1 | ，434 | 569 | 274 | 144 | 102 | 50 | 32 | 35）． | $\ldots$ | 3 |

TABLE NO. 8.-SHOWING MARRIAGES REPORTED FROM JAN. 1, 1911, TO DEC. 31, 1911, ARRANGED AOCORDING TO AGE GROÜPS-Continued.

| County. |  |  | Age Groups. |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\frac{\square}{6}$ |  |  | $\begin{aligned} & \text { 艹 } \\ & \stackrel{\text { N}}{2} \end{aligned}$ |  | $\underset{\substack{\text { H } \\ \text { N }}}{ }$ | \% | H | is | 안) | + |  |
| Monroe | 211 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Brides |  |  | 45 | 93 | 42 | 9 | 10 | 5 |  | 4 | 1 | 1 |  | 1 |
| Grooms |  |  | 4 | 73 | 69 | 31 | 12 | 7 | 4 | 8 | 2 | 1 |  |  |
| $\begin{gathered} \text { Oconto } \\ \text { Brides } \end{gathered}$ | 156 |  | 52 |  |  |  |  |  |  |  |  |  |  |  |
| Grooms |  |  | 5 | 61 | 50 | 7 | 2 | 1 | 3 | 3 | 1 | 5 |  | 3 |
| Oneida | 65 |  |  | 61 | 5 | 18 | 3 | 4 | 2 | 2 | 5 | 4 |  | 2 |
| Brides |  |  | 18 | 26 | 9 | 4 | 2 | 2 | 2 |  | 1 |  |  |  |
| Grooms |  |  | 3 | 22 | 21 | 8 | 5 | 1 | 1 |  | 1 | 1 |  | 1 |
| Outagamie | 404 |  |  |  |  |  | 5 | 1 | 1 |  |  |  |  |  |
| Brides |  |  | 86 | 191 | 72 | 22 | 7 | 5 | 4 | 4 | 3 | 3 |  | 7 |
| Grooms |  |  | 10 | 160 | 123 | 50 | 17 | 11 | 10 | 3 | 3 | 5 |  | 6 |
| Ozaukee .. | 163 |  |  |  |  |  |  |  |  |  |  |  |  | 6 |
| Brides |  |  | 24 | 81 | 35 | 7 | 4 | 5 | 3 | 2 |  |  |  | 2 |
| Grooms |  |  |  | 50 | 63 | 26 | 11 | 3 | 3 | 4 | 1 | 1 |  | 1 |
| Brides | 60 |  | 19 | 24 | 8 | 3 | 3 |  | 1 |  |  |  |  |  |
| Grooms |  |  | 2 | 24 | 16 | 7 | 3 | 2 | 4 | 2 |  |  |  |  |
| Pierce ... | 111 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Brides |  |  | 15 | 54 | 28 | 7 | 2 | 3 |  |  |  |  |  | 1 |
| Grooms |  |  | 2 | 36 | 35 | 20 | 9 | 4 |  | 3 | 1 | 1 |  |  |
| Polk | 118 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Brides |  |  | 26 | 58 | 18 | 8 | 2 | 1 | 2 | 2 | 1 |  |  |  |
| Grooms |  |  | 2 | 34 | 52 | 16 | 3 | 4 | 4 |  | 2 | 1 |  |  |
| Portage Brides | 246 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | 71 | 120 | 26 | 6 | 6 | 9 | 1 |  | 2 | 1 |  |  |
| Grooms |  |  | 9 | 98 | 81 | 22 | 10 | 10 | 2 | 5 | 3 | 5 |  | 1 |
| Brides | 80 | 1 | 31 | 29 | 10 | 4 | 2 | 2 |  |  |  |  |  |  |
| Grooms |  |  | 1 | 27 | 26 | 17 | 5 | 1 |  |  | 2 |  |  | 1 |
| Racine | 500 |  |  |  |  |  |  |  |  |  | 2 |  |  | 1 |
| Brides |  |  | 105 | 222 | ¢6 | 48 | 18 | 4 | 2 |  |  | 2 |  | 3 |
| Richland .. | 158 |  | 8 | 191 | 169 | 67 | 39 | 13 | 8 |  | 1 | 2 |  | 2 |
| Brides |  |  | 48 | 68 | 23 | 6 | 3 | 4 | 3 |  |  |  |  |  |
| Grooms |  |  | 6 | 62 | 44 | 21 | 8 | 5 | 2 |  |  | 7 |  |  |
| Rock | 406 |  |  |  |  |  |  |  | 2 |  | 2 | 7 |  |  |
| Brides |  |  | 87 | 182 | 88 | 17 | 11 | 6 | 5 | 3 | 4 |  |  |  |
| Grooms |  |  | 9 | 182 | 123 | 41 | 20 | 9 | 7 |  | 1 |  |  | 1 |
| Rusk | 96 |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |
| Brides |  |  | 34 | 37 | 13 | 6 | 3 |  |  | 1 | 2 |  |  |  |
| Gromes |  |  | 1 | 34 | 34 | 13 | 8 | 1 | 1 | 1. |  | 3 |  |  |
| St. Croix | 284 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Grooms |  |  |  | 120 | 50 | 30 | 14 | 11 | 4 | 2 | 1 | 1 |  | 4 |
| Sauk .. | 268 |  |  | 70 | 88 | 41 | 32 | 22 | 14 | 5 |  | 7 |  |  |
| Brides |  |  | 74 | 118 | 42 | 10 | 9 | 3 | 2 |  | 2 | 2 |  | 3 |
| Grooms |  |  | 3 | 115 | 88 | 21 | 13 | 9 | 8 | 2 | 2 | 4 |  | 3 |
| Sawyer ... | 40 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Grooms |  |  | 13 | 13 | 7 | 1 | 3 | 1 |  |  |  |  |  | 2 |
| Shawano. | 263 | $\ldots$ |  | 19 | 8 | 6 | 3 | 1 | 1 |  | 1 |  |  | 1 |
| Brides |  |  | 72 | 113 | 37 | 15 | 11 |  |  |  | 1 |  |  | 1 |
| Grooms |  |  | 4 | 106 | 81 | 33 | 17 | 6 |  |  |  | 3 |  |  |
| Sheboygan | 482 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Brides |  |  | 102 | 245 | 96 | 21 | 7 | 2 |  |  | 1 | 3 |  | 1 |
| Grooms |  | ... | 9 | 201 | 189 | 52 | 14 | 7 |  |  | 1 | 5 |  |  |
| Brides | 76 |  | 19 | 38 | 9 | 4 | 3 | 2 |  |  |  | 1 |  |  |
| Grooms |  | . |  | 27 | 27 | 10 | 4 | ${ }_{4}$ | 2 |  | 2 | 1 |  |  |

$11-\mathrm{B} . \mathrm{H}$.

TABLE NO. 8.-SHOWING MARRIAGES REPORINED FNRMM JAN. 1, 1911, TO DEO. 31, 1911, ARRAN'GED' ACCORDING TO' AGE GROUPS—Continued.


## ACCIDENTS.

During the period from January 1, 1911, to August 31, 1911, 7,610 accidental injuries, which incapacitated the person injured for two weeks or more, were reported by the physician in attendance. 6,671 of the total accidents were to males and 939 were accidents to females.
Considering the total accidents by conjugal condition, it is shㄴwn by Table No. 9 that 4,137 were single, 3,417 married, and in 56 cases the conjugal relation was unknown or not stated.
The age grouping of the persons injured is shown as follows:
Under 10 years
558
558
From 10 to 19 years
From 10 to 19 years ..... 1,149
From 20 to 29 years
2,429
2,429
From 30 to 39 years
1,324
1,324
From 40 to 49 years
990
990
From 50 to 59 years ..... 614
From 60 to 69 years ..... 243
70 years of age and over ..... 172
Age not stated ..... 131

Arranging the accidents with reference to the nature of the accident, it is shown by Table No. 9 that 370 were fatal accidents, 5,812 were classed as severe by the physician in attendance and 1,206 were slight, but were of such a nature as to incapacitate the person from pursuing his usual vocation in whole or in part for at least two weeks.

The following is a tabulation of the results of injuries, arranged according to the cause of the temporary disablement:
Hand or fingers lacerated or bruised ..... 1,726
Foot lacerated or bruised
371
371
Other lacerations or bruises ..... 1,178
Fracture of arm
673
673
Fracture of leg .....
536 .....
536
Other fractures
Other fractures
855
855
Sprains or dislocations ..... 610
Burns and scalds
384
384
Others ..... 356
The causes of permanent disablement, with the number of cases, is as follows:
Loss of part of hand or fingers ..... 398
Loss of entire hand or arm ..... 35
Loss of part of foot
27
27
Loss of foot or leg ..... 26
Loss of one eye
27
27
Eyes badly injured
149
149
Internal injuries ..... 106
Other injuries ..... 153

The following is a summary of accidents reported according to the duration of injury:
Fatal soon after injury ..... 339 ..... 2,166 ..... 2,166
14 days
14 days
21 days ..... 1,789
1 month
1,197
1,197
2 months
2 months ..... 288
3 months
90
90
4 months ..... 86
Over 4 months ..... 235
Duration not statedArranging the accidents reported for the eight months of 1911 ac-cording to the cause of injury, the following results are shown:
Gearings, shafts, or belts, set screws ..... 83
Fmery wheels, reamers and riveters ..... 102 ..... 102
Press machines
Press machines ..... 92 ..... 92
Band and circular saws ..... 136
Planers, lathes, and other wood carving machines
93
93
Corn shredders and other farm machinery
Corn shredders and other farm machinery ..... 573
Other accidents due to the use of machinery
165
165
Other railroad employment ..... 111
Passengers ..... 18
Trespassers and other non-employees ..... 69
Railroad crossings ..... 130
Street cars ..... 527
Horse vehicles and horses ..... 134
Automobiles ..... 296
Hand tools ..... 235
Firearms and explosions ..... 203
Hot water, acids, and fire
88
88
Football and other athletic games
Football and other athletic games ..... 1,792
Falling objects, dropping or handling material
275
275
Fall on defective or slippery sidewalk
Fall on defective or slippery sidewalk
137
137
Fall on stairs
307
307
Fall from high places ..... 1,029
Other falls
34
34
Bites from horses and dogs ..... 660
Other causes

A complete tabulation of accidents for the calendar year of 1911 is not given in this report for the reason that beginning with September 30,1911 , all accident certificates received from the various local registrars are delivered to the Industrial Commission after the fees due local registrars and physicians have been entered on the certification sheets. These certificates are then used by the Industrial Commission in verifying accidents reported by the employers and it is probable that all future tabulations of accidental injuries, which have heretofore been included in the regular report of the State Board of Health and Bureau of Vital Statistics, will be published in the reports and bulletins issued by the Industrial Commission.

TABLE NO. 9. SHOWING ACCIDENTS REPORTED FROM JANUARY 1, 1911, TO SEPT. 1, 1911, ARRANGED BY COUNTIES ACCORDING TO SEX, CONJUGAL CONDITION, AGE, NATURE OF ACCIDENT, RESULT OF INJURY AND DURA. TION OF INJURY.

| County. |  | Sex. ${ }^{\prime}$ |  | Conjugal condition. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\stackrel{\dot{\oplus}}{\stackrel{\text { ® }}{\sim}}$ |  |  |  | 完 |
| Adams .... | 7 | 6 | 1 | 4 | 3 | ............ |
| Ashland .... | 210 | 204 | 6 | 154 | 44 | 12 |
| Barron | 62 | 59 | 3 | 33 | 29 |  |
| Bayfleld | 19 | 19 |  | 11 | 7 | 1 |
| Brown | 534 | 455 | 79 | 278 | 255 | 1 |
| Buffalo | 6 | 5 | 1 | 2 | 4 |  |
| Burnett . | 34 | 27 | 7 | 20 | 14 |  |
| Calumet | 37 | 29 | 8 | 13 | 24 |  |
| Chippewa | 17 | 10 | 7 | 9 | 8 |  |
| Clark ... | 38 | 34 | 4 | 21 | 17 | ............ |
| Columbia | 17 | 14 | 3 | 7 | 10 |  |
| Crawford | 8 | 7 | 1 | 5 | 3 | ............ |
| Dane ... | 55 | 33 | 22 | 24 | 30 | 1 |
| Dodge . | 145 | 127 | 18 | 72 | 72 | 1 |
| Door ... | 35 | 31 | 4 | 25 | 10 |  |
| Douglas | 56 | 53 | 3 | 30 | 26 | ............ |
| Dunn ... | 17 | 13 | 4 | 8 | 9 | ............ |
| Eau Claire | 76 | 63 | 13 | 34 | 42 | ........... |
| Florence ${ }_{\text {Fond }} \mathrm{lu}$ |  |  |  |  |  |  |
| Fond du Lac | 616 | 562 | 54 | 320 | 293 | 3 |
| Forest ... | 27 | 26 | 1 | 16 | 11 | . .......... |
| Grant | 55 | 38 | 17 | 22 | 33 | ............ |
| Green .. | 52 | 45 | 7 | 28 | 24 | ............ |
| Green Lake | 8 | 7 | 1 | 4 | 4 | $\ldots$ |
| Iowa .... | 57 | 50 | 7 | 28 | 28 | 1 |
| Iron ...... | 63 | 63 |  |  | 28 | .......... |
| Jackson | 28 | 22 | ${ }^{6}$ | 15 | 13 |  |
| Jefferson | 38 | 37 | 1 | 18 | 20 | ............ |
| Juneau .. | 14 | 11 | 3 | 7 | 7. | ............ |
| Kenosha | 133 | 121 | 12 | 69 | 62. | 2 |
| Kewaunee | 30 | 26 | 4 | 13 | 17 |  |
| La Orosse | 73 | 61 | 12 | 38 | 35 | ........... |
| Lafayette | 102 | 83 | 19 | 52 | 50 |  |
| Langlade . | 159 | 138 | 21 | 100 | 59 |  |
| Lincoln ... | 42 | 38 | 4 | 24 | 18 |  |
| Manitowoc | 264 | 223 | 41 | 146 | 117 | 1 |
| Marathon | 94 | 81 | 13 | 57 | 36 | 1 |
| Marinette |  | 150 | 11 | 74 | 83 | 2 |
| Marquette | 2 | 2 |  | 1 | 1 |  |
| Milwaukee | 2,707 | 2,415 | 292 | 1,520 | 1,164 | 23 |
| Monroe | 7 | 5 | 2 | 1 | 6 | ........... |
| Oconto . | 26 | 23 | 3 | 13 | 13 | ........... |
| Oneida | 1 | 1 |  | 1 |  |  |
| Outagamie | 69 | 54 | 15 | 41 | 28 | ............. |
| Ozaukee | 6 | 4 | 2 |  | 5 | 1 |
| Pepin ... | 3 | 2 | 1 | 3 |  |  |
| Pierce .. | 17 |  |  | 10 |  |  |
| Polk | 24 | 22 | 2 | 16 | 8 | ........... |
| Portage | 72 | 63 | 9 | 41 | 31 |  |
| Price ... | 21 | 20 | 1 | 12 | 9 | ............ |
| Racine. | 353 | 328 | 25 | 204 | 149 |  |
| Richland | 21 | 15 | 6 | 12 | 9 |  |
| Rock . | 193 | 149 | 44 | 85 | 103 | . 5 |
| Rusk | 13 | 13 |  | 9 | 4 | .......... |
| St. Oroiz | 24 | 19 | ${ }_{5}$ | 16 | 8 | $\ldots . . . . . . .$. |
| Sauk Sawyer | 53 | 43 | 10 | 23 | 30 | $\ldots . . . . . .$. |
| Sawyer ${ }_{\text {Shawano . }}$ | $\stackrel{4}{4}$ | 4 55 | $9$ | 1 31 | $\begin{array}{r}3 \\ 33 \\ \hline\end{array}$ |  |
| Sheboygan | $8 \%$ | 72 | 10 | 40 | 42 |  |
| T'aylor .... | 21 | 20 | 1 | 14 | 7 |  |
| Trempealeau | 16 | 14 | 2 | 11 | 5 |  |
| Vernon ..... | 11 | 8 | : | 6 | 5 |  |
| Vilas ........ | 3 | 3 |  | 1 | 2 | ............ |

TABLE NO. 9. SHOWING ACCIDENTS REPORTED FROM JANUARY 1, 1911, TO SEPT'. 1, 1911, ARRANGED BY COUNTIES AGCORDING TO SEX, CONJUGAL CONDITION, AGE, NATURE OF ACCIDENT, RESULT OF INJURY AND DURATION OF INJURY.-Cont.

| County. |  | Sex. |  | Conjugal conđition. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 家 | 第 |  |  |  |
| Walworth | 14 | 9 | 5 | 6 | 8 | ........ |
| Washburn | 50 | 43 | 7 | 27 | 23 | ......... |
| Washington | 73 | 56 | 17 | 30 | 43 | ....... |
| Waukesha | 13 | 11 | 2 | 6 | 7 | ......... |
| Waupaca | 34 | 21 | 13 | 16 | 18 | ......... |
| Waushara | 16 | 12 | 4 | 8 | 8 | ........ |
| Winnebago | 158 | 141 | 17 | 87 | 70 | 1 |
| Wood | 50 | 42 | 8 | 29 | 21 | .......... |
| Total | 7,610 | 6,671 | 939 | 4,137 | 3,417 | - 56 |

TABLE NO. 9. SHOWING ACOIDENTS REPORTED FROM JANUARY 1, 1911, TO SEPT. 1, 1911, ARRANGED BY COUNTIES ACCORDING TO SEX, CONJUGAT CONDITION, AGE, NATURE OF ACCIDENT, RESULT OF INJURY AND DURATION OF INJURY.-Cont.


TABLE NO. 9. SHOWING ACCIDENTS REPORTED FROM JANUARY 1, 1911, IO SEPT. 1, 1911, ARRANGED BY COUNTIES ACCORDING TO SEX, CONJUGAL CONDITION, AGE, NATURE OF ACCIDENT, RESULT OF INJURY AND DURATION OF INJURY.-Cont.

| County. | Age Grouping. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\stackrel{0}{1}$ | \% | ¢ | g +1 + | $\begin{aligned} & 0 \\ & 1 \\ & 1 \\ & 10 \end{aligned}$ | 8 1 8 | $\stackrel{+}{+}$ |  |
| Lafayette | 15 | 17 | 22 | 20 | 10 | 10 | 5 | 2 | 1 |
| Langlade . | 18 | 37 | 39 | 11 | 26 | 15 | 2 | 3 | 8 |
| Lincoln ... | 3 | 9 | 7 | 12 | 6 | 2 | 1 | 1 | 1 |
| Manitowoc | 15 | 65 | 61 | 42 | 38 | 20 | 9 | 9 | 5 |
| Marathon | 11 | 14 | 38 | 6 | 11 | 9 | 3 | 1 | 1 |
| Marinette | 13 | 30 | 43 | 31 | 14 | 18 | 2 | 3 | 7 |
| Marquette | 1 |  |  |  |  | 1 |  |  |  |
| Milwaukee | 121 | 349 | 1,015 | 503 | 378 | 205 | 59 | 38 | 39 |
| Monroe . |  | $\stackrel{\downarrow}{6}$ |  | ${ }_{3}$ |  | - ${ }^{\text {a }}$ | 2 <br> 2 | 1 2 | 1 1 |
| Oconto | 2 | 6 |  | 3 | 5 | 2 | 2 | 2 | 1 |
| Oneida ${ }^{\text {Outagamie }}$ | 9 | 13 | 1 22 | 8 | 2 | 7 | 5 | 1 | 2 |
| Ozaukee . |  |  | 2 |  | 1 | 2 |  | 1 | .... ... |
| Pepin .. | 1 | 1 | 1 |  |  |  |  |  | 1 |
| Pierce | 5 | 4 | 1 |  | 2 | 2 |  | 1 | 1 |
| Polk .. | ? | 7 | 7 | 3 |  | 2 | 1 | 1 |  |
| Portage | 4 | 9 | 30 | 7 | 8 | 6 | 4 | 4 |  |
| Price ... | 3 | 4 | 5 | 3 | 2 | 3 | 1 |  |  |
| Racine. | 21 | 55 | 147 | 60 | 32 | 23 | 9 | 2 | 4 |
| Richland | 4 | 6 | 4 |  | 3 | 3 |  | 1 |  |
| Rock . | 19 | 20 | 51 | 32 | 31 | 16 | 8 | 13 | 3 |
| Rusk ...... | 1 | 5 | 1 | 2 | $\ldots$ | 3 |  |  | 1 |
| St. Croix | 6 | 6 | 5 | 3 | 2 |  |  | 1 | 1 |
| Sauk .... | 6 | 11 | 9 | 9 | 8 | 5 | 3 | 2 | 1 |
| Sawyer |  | 1 | 1 | 2 |  |  |  |  |  |
| Shawano | 11 | 11 | 10 | 14 | 4 | 8 | 4 | 2 |  |
| Sheboygan | 8 | 16 | 20 | 12 | 11 | 8 | 3 | 2 | 2 |
| Taylor .... | 5 | 1 | 5 | 5 | 3 |  | 1 | 1 | ........ |
| Trempealeau | 6 |  | 5 |  | 2 |  | 1 | . 2 | ....... |
| Vernon | 3 | 2 | 2 | 1 |  | 2 | 1 |  |  |
| Vilas .. |  |  | 1 | 1 | 1 |  |  |  |  |
| Walworth | 3 | 2 | 1 | 2 |  | 4 | 1 | I | ... |
| Washburn | 8 | 7 | 13 | ¢ | 7 | 4 | 2 | 1 | 2 |
| Washington | s | 11 | 13 | 4 | 9 | 13 | 9 | 4 | 1 |
| Waukesha |  | 3 | 2 | 1 | 4 |  | 2 | 1 |  |
| Waupaca | 6 | 5 | 5 | ........ | 3 | 5 |  | 5 |  |
| Waushara | 2 | 4 | 4 | 2 | 1 | 2 | 1 |  |  |
| Winnebago | 5 | 42 | 41 | 22 | 18 | 19 | 5 | 3 | 3 |
| Wood ... | 4 | 13 | 8 | 5 | 9 | 6 | 3 | 1 | 1 |
| Total | 558 | 1,149 | 2,429 | 1,324 | 990 | 614 | 243 | 172 | 131 |

TABLE NO. 9. SHOWING ACOIDENTS REPORTED FROM JANUARY 1, 1911, TO SEPT. 1, 1911, ARRANGED BY COUNTIES ACCORDING TO SEX, OOONJUGAL CONJITION, AGE, NATURE OF ACCIDENT, RESULT OF INJURY AND DURATION OF INJURY.-Cont.


TABLE NO. 9. SHOWING ACICTDENT REPORTED FNOM JANUARY 1, 1911, 'IO SEPT. 1, 1911, ARRANGED BY COUNTTES ACOORDING TO SEX, CONJUGAL CONDITION, AGE, NATURE OF ACCIDENT, RESULT OF INJURY AND LURATION OF INJURY.-Cont.

| County. |
| :--- |

TABLE NO. 9. SHOWING ACICIDENT REPORTED FROM JANUARY 1, 1911, TO SEPT. 1, 1911, ARRANGED BY COUNTIES AOCORDING TO SEX, CONJUGAL CONDITION, AGE, NATURE OF ACCIDENT, RESULT OF INJURY AND DURA TION OF INJURY.-Cont.

| County. | Result of Injury. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Temporary disablement. |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Adams | 1 |  | 1 |  | 3 |  | 1 |  |  |
| Ashland . | 32 | 18 | 29 | 12 |  | 12 | 14 | $\cdots$ | 18 |
| Barron .. | 12 | 1 | 9 |  |  | 15 | 8 | 1 |  |
| Bayfleld . | 4 | 2 | ${ }_{5}^{5}$ | 2 |  | 3 | 3 |  | 1 |
| Brown . <br> Buffalo | 117 | 23 | 118 | 31 |  | 60 | 74 | 30 | 23 |
| Burfalo | 4 |  | 1 | 3 6 | 1 | 1 |  |  |  |
| Calumet | 3 | 2 | 2 | 6 | 3 5 | 4 | 4 | 3 | $\cdots \cdot$. |
| Chippewa | 1 | ........ | 1 |  |  | ${ }_{2}$ |  |  | 1 |
| Clark ... | - 4 | $\because$ | 3 |  |  | 8 | 1 | 1 | . |
| Columbia | 1 | 8 | 2 |  |  | 3 | 1 | 1 |  |
| Crawford | 2 | ....... | 1 | ........ | 1 | 2 | i |  |  |
| Dane | 5 | 1 | 5 | $\cdots$ | 7 | 11 | 5 | 1 | 3 |
| Dodge | 13 | 9 | 15 | 17 | 5 | 14 | 12 | 31 | 3 |
| Door .. | 6 | 2 | 1 | 6 | 3 | 4 | 3 | ........ | 5 |
| Douglas | 10 | 1 | 8 | 4 | 4 | 5 | $\stackrel{3}{2}$ | $\cdots$ | 8 |
| Eau Claire | 1 | 1 <br> 2 | 3 6 |  | 1 10 | 5 | 1 |  | 1 |
| F'orence | 6 | 2 | 6 | 11 | 10 | 18 | 10 | 1 | 6 |
| Fond du L | 161 |  |  |  |  | 45 |  |  |  |
| Forest |  | 1 | r 2 | ........ |  | 45 7 | $\begin{array}{r}87 \\ 3 \\ \hline\end{array}$ | $\begin{array}{r}43 \\ 1 \\ \hline\end{array}$ | 2 |
| Grant ... | ${ }^{7}$ | 7 | 11 | 5 | 11 | 6 | $\stackrel{3}{2}$ | 1 | 2 |
| Green .... |  | 7 | 4 | 1 | 5 | 5 | 7 | ${ }_{5}^{3}$ | 2 |

TABLE NO．9．SHOWING ACOIDENTS REPORTED FROM JANUARY 1，1911，TO SEPT．1．1911，ARRANGED BY COUNTIES ACCORDING TO SEX，CONJUGAT． CONDITION，AGE，NATURE OF ACCIDENT，RESULT OF INJURY AND DURA－ TION OF INJURY．－Cont．

| County． | Result of Injury． |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Temporary disablement． |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | $\begin{aligned} & \dot{(n ⿹ 勹 巳} \\ & \mathbf{9} \\ & \underset{\sim}{0} \end{aligned}$ |
| Green Lake | 1 |  | 1 |  | 2 | 2 |  |  |  |
| Iowa ．．．．．．．． | 9 | 2 | 11 | 4 | 6 | 5 | 11 | 1 | 4 |
| Iron ．．．． | 25 | 6 | 11 | 6 | 2 | ${ }_{6}^{6}$ | 3 | 1 | $\stackrel{4}{4}$ |
| Jackson | $\stackrel{2}{8}$ | $\ldots$ | 5 | 6 5 | 4 4 4 | 6 3 3 | 7 |  | 1 |
| Jefferson | 8 2 2 |  | $\stackrel{4}{2}$ | $\stackrel{5}{4}$ | 1 | $\stackrel{3}{2}$ | 2 |  |  |
| Kenosha | 36 | $\cdots$ | 15 | 10 | 3 | 15 | 12 | 6 | 9 |
| Kewaunee | 7 | ．．．．． | 5 | 4 | 4 | 4 | 1 | ．．．．．．． | 1 |
| La Crosse | 2 | 5 | 6 | 10 | 4 | 11 | 8 | 4 | 14 |
| Lafayette | 11 | 4 | 16 | 12 | 13 | 15 | 7 |  | 15 |
| Langlade ．．． | 29 | 11 | 22 | 15 | 7 | 31 | 7 | 6 | 14 |
| Lincoln ．．． | $\begin{array}{r}4 \\ 84 \\ \hline\end{array}$ | ${ }_{1}^{2}$ | 9 40 | $\begin{array}{r}4 \\ 20 \\ \hline\end{array}$ | $\begin{array}{r}4 \\ 11 \\ \hline 1\end{array}$ | $\begin{array}{r}9 \\ 24 \\ \hline\end{array}$ | － 18 |  | 10 |
| Manitowoc | 84 | 13 | 40 7 | 10 | 17 | 12 | 18 8 | 2 | 4 |
| Marithon ． | 18 39 |  | 7 34 | 10 | 17 4 | 12 | －12 | ${ }_{6}^{2}$ | 4 |
| Marinette ${ }_{\text {Marquette }}$ |  |  | 34 | 13 | 1 | 7 | 1 | 6 | ， |
| Marquette | 731 | 134 | 447 | 184 | 158 | 289 | 167 | 172 | 115 |
| Monroe ． |  |  |  | 3 |  | 1 | $\stackrel{2}{2}$ |  |  |
| Oconto | 4 |  | 4 | 2 | 2 | 6 | 2 | 1 |  |
| Oneida ．．． |  |  |  |  |  | 1 |  |  | 3 |
| Outagamie | 14 | 2 | 12 2 | 9 2 2 |  | 1 | 13 | 4 | 3 |
| Ozaukee |  |  | 2 | 1 | 1 |  |  |  | 1 |
| Pepin | 4 | 2 |  | $\stackrel{1}{6}$ | 1 | 1 | 1 |  | ． |
| Polk ．． | 2 | 3 | － 1 | 4 | 2 | 2 | 2 |  |  |
| Portage | 12 | 6 | 17 | 13 | 6 | 2 | 7 |  | 1 |
| Price | 4 | 1 |  | 2 | 4 | $\stackrel{2}{2}$ | 1 |  | $\frac{1}{8}$ |
| Racine | 155 | 18 | 51 | 25 | 9 | 28 | 10 | 26 | 8 |
| Richland | 1 | $\ldots$ | 5 | ${ }_{3}^{3}$ | 5 | 4 | 11 | $\cdots \cdots$ | 19 |
| Rock ．． | 19 | 7 | 28 | 33 | 22 | 32 | 15 | 6 | 9 |
| Rusk | 1 |  |  | 4 | 1 | 1 | 1 |  | 1 |
| St．Croix |  |  | 6 | 4 | 3 | 6 |  |  | ${ }_{3}^{1}$ |
| Sauk |  |  | 6 | $\square 1$ | 6 | 6 | 4 | 3 | 3 |
| Sawyer ．．． | 1 |  |  | 1 |  | 2 7 |  | 1 |  |
| Shawano ． | 7 |  |  | $\begin{array}{r}4 \\ 14 \\ \hline\end{array}$ |  | 6 | 6 | ${ }_{2}^{1}$ | 10 |
| Sheboygan <br> Taylor | \％ | 3 | 4 4 | $\begin{array}{r}14 \\ 3 \\ \hline\end{array}$ | 11 5 | 1 | 6 | 2 | 1 |
| Trempealeau | 2 |  | 1 | 5 | 2 | 2 |  |  | 1. |
| Vernon ．．．．． | 2 | 2 | ， | 2 |  | 2 | 1 |  | ． |
| Vilas |  |  |  |  | 1 |  |  |  |  |
| Walworth |  |  | 1 | 3 | 4 | $\frac{7}{18}$ | 1 | … ．．． | 1 |
| Wi shbura | 3 | 3 | ${ }_{6}^{6}$ | 8 | 4 | 12 | 5 | 1 | 1 |
| Washington | 5 | 5 | 3 | 16 | 12 | 9 | － 10 | 1 | 1 |
| Waukesha |  |  | 1 | 3 | 3 6 | 2 | －1 | $\cdots$ | 1 |
| Waupaca | 2 |  | 3 | 13 | 6 | ${ }_{3}^{6}$ | 1 |  | 1 |
| Waushara | 1 |  | 5 | 1 |  | $\stackrel{3}{25}$ | 5 | $\frac{1}{5}$ |  |
| Winnebago | 47 5 | 7 | 17 | $\underset{6}{12}$ | 10 8 | 25 8 | 5 <br> 2 | 5 | $\stackrel{5}{2}$ |
| Total | 1，726 | 371 | 1，178 | 673 | 536 | 855 | 610 | 384 | 356 |

I'ABLE NO. 9. SHOWING ACCIDENT REPORTED FROM JANUARY 1, 1911, TO SEPTV. 1, 1911, ARRANGED BY CIOUNTTES AOCORDING TO SEX, GONJUGAL CONDITION, AGE, NATURE OF ACCIDENT, RESULT OF INJURY AND DURATION OF INJURY.-Cont.


TABLE NO. 9. SHOWING ACOTDENTS REPORTED FROM JANUARY 1, 1911, TO SEPT. 1, 1911. ARRANGED BY COUNTIES ACCORDING TO SEX, CONJUGAL. CONDIIION, AGE, NATURE OF ACCIDENT, RESULT OF INJURY AND DURA. TION OF INJURY.-Cont.

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[b]{3}{*}{County.} \& \multicolumn{8}{|c|}{Result of Injury.} \& \multirow[b]{3}{*}{} \\
\hline \& \multicolumn{8}{|c|}{Permanent disablement.} \& \\
\hline \&  \&  \&  \&  \& \[
\begin{aligned}
\& \dot{0} \\
\& 0 \\
\& 0 \\
\& 0 \\
\& 0 \\
\& 0 \\
\& 0 \\
\& 0 \\
\& 0 \\
\& 0 \\
\& 0
\end{aligned}
\] \&  \&  \&  \& \\
\hline Sauk \& \multirow[t]{2}{*}{4} \& \multirow[t]{2}{*}{........} \& ....... \& \multirow[t]{2}{*}{......} \& \multirow[t]{2}{*}{} \& \multirow[t]{2}{*}{} \& \& \multirow[t]{2}{*}{1} \& \multirow[t]{2}{*}{2} \\
\hline Sawyer ... \& \& \& \multirow[b]{3}{*}{1
1} \& \& \& \& \& \& \\
\hline Shawano . \& \multirow[t]{3}{*}{6
15
2} \& ......... \& \& \multirow[t]{2}{*}{} \& \multirow[t]{2}{*}{\begin{tabular}{|c}
...... \\
2 \\
\(\ldots .\).
\end{tabular}} \& \multirow[t]{3}{*}{\[
\begin{array}{r}
3 \\
\cdots \quad i
\end{array}
\]} \& \multirow[t]{3}{*}{+......

$\ldots$
$\ldots .$.} \& \multirow[t]{4}{*}{3
3
4
1
3} \& \multirow[t]{2}{*}{$\cdots$} <br>
\hline Sheboygan \& \& \& \& \& \& \& \& \& <br>
\hline Traylor ${ }_{\text {Trealeau }}$ \& \& \& \& \& \& \& \& \& <br>
\hline Vernon ..... \& \multirow[t]{2}{*}{} \& \multirow[b]{4}{*}{} \& \& \& \& \& \& \& <br>
\hline Vilas ... \& \& \& \& \& \& \& \& 1 \& <br>
\hline Walworth \& 1 \& \& \& \& \& i \& \& 2 \& <br>

\hline Washburn . \& \multirow[t]{6}{*}{$$
\begin{array}{r}
7 \\
4 \\
4 \\
1 \\
1 \\
2 \\
23 \\
8
\end{array}
$$} \& \& \multirow[t]{2}{*}{. ${ }^{\text {a }}$} \& \multirow[t]{2}{*}{1} \& \multirow[t]{3}{*}{$\stackrel{7}{2}$} \& \multirow[t]{2}{*}{$\cdots$} \& \& 1 \& <br>

\hline Washington \& \& \multirow[t]{5}{*}{} \& \& \& \& \& \multirow[t]{2}{*}{1} \& \multirow[t]{3}{*}{$$
\begin{aligned}
& 1 \\
& 1
\end{aligned}
$$} \& 4 <br>

\hline Waukesha \& \& \& \& \& \& \& \& \& <br>
\hline Waupaca \& \& \& \& \& \& \& \& \& 1 <br>
\hline Waushara
Winnebago \& \& \& 1 \& \& \& \& 1 \& \& 1 <br>
\hline Winnebago Wood \& \& \& \& 1 \& 4 \& 1 \& 2 \& 2 \& ${ }_{2}^{6}$ <br>
\hline \multirow[t]{2}{*}{Total.....} \& \& \& \& \& \& \& \& \& <br>
\hline \& 398 \& 35 \& \& 26 \& 27 \& 149 \& 106 \& 153 \& 350 <br>
\hline
\end{tabular}

TABLE NO. 9.-SHOWING ACCIDENTS REPORTED FROM JANUARY 1, 1911, TO SEPT. 1, 1911, ARRANGED BY CIOUNTIES ACOORDING TO SEX, CONJUGAL CONDITION, AGE, NATURE OF' ACCIDENT, RESULT OF INJURY AND DURAIION OF INJURY.-Cont.

| County. | Duration of injury: |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | \% | $\begin{aligned} & \dot{8} \\ & \dot{a} \end{aligned}$ | $\underset{\sim}{\text { ® }}$ | $\dot{0}$ en en | $\dot{0}$ Og H |  |  |
| Adams |  |  |  | 1 | 3 | 1 | 1 |  | 1 |
| Ashland | 13 | 16 | 35 | 38 | 29 | 12 | 2 | 4 | 61 |
| Barron . | 1 | 1 | 18 | 26 | 11 | 2 | 2 |  | 1 |
| Bayfleld | 2 | 3 | 2 | 6 | 4 | 2 |  |  |  |
| Brown | 7 | 119 | 171 | 151 | 73 | 6 | 3 | 2 | 2 |
| Buffalo |  | 1 | ... 4. | 4 |  |  |  |  | 1 |
| Burnett | 3 |  |  | 18 | 7 | 6 |  |  |  |
| Calumet |  | 1 | 1 | 1 | 19 | 10 | 4 | 1 |  |
| Chippewa |  |  |  | 1 | 3 | 11 | 2 |  |  |
| Clark | 1 |  |  | 20 | 15 | 1 |  |  |  |
| Columbia | 1 |  | 1 | 7 | 5 | 1 |  | 1 | 1 |
| Crawford |  | 1 |  | 2 | 5 |  |  |  |  |
| Dane | 2 | 6 | 3 | 16 | 21 | 3 | 1 | 1 | 2 |

TABLE NO. 9. SHOWING ACOIDENTS REPORITED FROM JANUARY 1, 1911, TO SEPT. 1, 1911, ARRANGED BY COUNTIES ACOORDING TO SEX, CONJUGAL CONDITION, AGE, NATURE OF ACCIDENT, RESULT OF INJURY AND DURA. TION OF INJURY.-Oont.

| County. | Düration of Injury. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 亩 | $\begin{aligned} & \dot{0} \\ & \underset{\sim}{\text { and }} \end{aligned}$ | - | $\dot{0}$ O H | $\dot{0}$ 0 \# $\dot{0}$ 0 0 |  |
| Dodge | 5 | 61 |  |  |  |  |  |  |  |
| Door .. | 3 | 4 | 11 | 17 | 22 | 5 | 1 |  | 3 |
| Douglas | 2 | 4 | 11 | 6 26 | 7 | $\stackrel{2}{2}$ |  | 1 | 1 |
| Dunn .. | 1 | 7 |  | 10 | 7 | 2 | 1 | 2 | 4 |
| Eau Olaire | 8 | 4 | 10 | 26 | 19 | 4 |  |  | 1 |
| Florence ${ }_{\text {Fond du }}$ |  |  |  | 2 | 19 | 4 | 1 |  | 4 |
| Fond du Lac | 4 | 232 | 200 | 35 |  |  |  |  |  |
| Forest . |  | 1 | 3 | 10 | 75 9 |  | 12 | 2 | 8 |
| Grant. | 1 | 1 | 6 | 18 | 23 | 1 |  |  | 1 |
| Green Green Lake | 1 | 4 | 5 | 23 | 12 | 1. | 3 | 1 | 3 |
| Iowa .... |  | 1 | 1 | 3 | 2 | 1 |  |  | 3 |
| Iron | 1 | 14 | 8 | 12 | 18 | 1 |  |  | 3 |
| Jackson | 1 | 23 9 | 19 8 | 14 | 4 | ....... |  |  | 1 |
| Jefferson | 1 | 8 | 8 | 8 | 2 |  |  |  |  |
| Juneau ... | 1 | 8 | $\stackrel{3}{2}$ | 12 | 7 | 2 | 2 | 2 | 1 |
| Kenosha |  | 36 | 36 | $\stackrel{5}{4}$ | ${ }^{5}$ | 1 |  |  |  |
| Kewaunee | $1{ }^{\circ}$ | 5 | - | 43 14 | 12 9 | 4 |  |  | 2 |
| La Crosse | 4 | 16 | 12 | 14 24 | ${ }^{9}$ |  |  |  |  |
| Lafayette |  | 19 | 12 | 24 33 | 12 | 1 |  | 1 | 3 |
| Langlade | 3 | 17 | 35 | 61 | 18 | 1 | 2 | 4 | 13 |
| Lincoln .. |  | 8 | ${ }_{6}$ | 14 | $\begin{array}{r}82 \\ 8 \\ \hline\end{array}$ | 4 | 1 | 1 | 5 |
| Manitowoc | 3 | 76 | 50 | 75 |  |  | ........ | 1 | 3 |
| Marathon | 2 | 13 | 14 | 29 | 43 30 | 6 3 | 3 | 3 | 5 |
| Marinette | 8 | 73 | 28 | 26 | 13 | $\stackrel{3}{5}$ | $\stackrel{2}{2}$ |  | 1 |
| Marquette |  |  | 1 | 26 | 13 |  | 2 | 1 | 5 |
| Milwaukee | 205 | 1,007 | 455 | 510 | 340 | 81 | 22 | 39 |  |
| Oconroe .. |  | 1 |  | 4 | 2 |  |  | 39 | 48 |
| Oneida | 3 | 3 | 7 | 8 | 4 | ........ |  |  | 1 |
| Outagamie | 2 | 19 | 11 |  | 1 |  |  |  |  |
| Ozaukee |  | 19 | 11 | 21 1 | 9 | 5 |  |  | 2 |
| Pepin |  |  |  | 1 | 2 | 3 |  |  |  |
| Pierce |  |  |  | 2 | 1 |  |  |  |  |
| Polk | 5 | 1 | 1 | $\stackrel{12}{8}_{12}^{8}$ | 4 | 3 | 1 |  |  |
| Portage | 2 | 13 | 13 | 18 | 4 |  |  |  | 1 |
| Price . . | 3 | 1 | $\stackrel{1}{5}$ | 18 8 | 18 | 7 | 1 |  |  |
| Racine | 1 | 213 | 58 | 47 | ${ }_{2}^{2}$ |  |  |  | 2 |
| Richland | 1 | - 3 |  | 47 3 | 24 |  | $\stackrel{2}{2}$ | 1 | 3 |
| Rock . |  | 30 | 31 |  |  |  |  |  |  |
| Rusk . | 1 | 3 | 31 | ${ }_{6} 6$ | 43 | 7 | 7 |  | 14 |
| St. Oroix | 1 | 7 | 3 | 4 |  | 2 | , | 1 |  |
| Sauk .. | 2 | 8 | $\stackrel{3}{2}$ | - ${ }_{2}^{4}$ | ${ }_{14}^{4}$ | 1 | 2 | 1 | 2 |
| Sawyer ... |  | 1 | 2 | 23 2 | 14 | 1 |  | 1 | 2 |
| Shawano | 3 | 16 | 10 |  |  |  |  |  |  |
| Sheboygan | 5 | $\stackrel{3}{3}$ | 11 | 37 | 9 20 | 1 | 1 |  | 5 |
| Taylor ..... | , | 7 | 10 | 37 | 20 | 2 |  | 2 | 2 |
| Trempealeau | 3 |  |  |  |  |  |  |  |  |
| Vernon ...... |  |  | 1 |  | 6 |  |  |  | 1 |
| vilas .... | 1 | 1 | 1 | 5 | 1 | 1 |  | 1 | 1 |
| Walworth | 2 |  |  |  |  |  | 1 |  |  |
| Washburn | 1 | 15 | 5 | 21 | 2 | 1 | 1 | 1 |  |
| Washington | 1 | 5 |  | 27 | 15 | 1 |  |  |  |
| Waukesha . | 2 |  | 1 | $\stackrel{5}{5}$ | 15 | 2 | 2 | 3 | 2 |
| Waupaca | 1 |  | 7 | 11 | ${ }_{7}$ |  |  |  |  |
| Waushara | 1 | 1 | 3 | 4 | 7 |  |  | 1 | 1 |
| Winnebago |  | 16 | 28 | 74 | $\stackrel{4}{4}$ | ${ }_{4}^{2}$ | 1 |  |  |
| Wood | 3 | 5 | 3 | 13 | 18 | 5 |  | 2 | $6$ |
| Tota | 339 | 2166 | 1420 | 1789 | 1197 | 288 | 90 | 86 | 235 |

TABLE NO. 10.-SHOWING ACCIDENTS REPORTED FROM JANUARY 1, 1911, TO SEPTEMBER 1, 1911, ARRANGED BY COUNTIES ACOORDING TO C'AUSE OF INJURY.


TABLE NO. 10.-SHOWING ACCIDENTS REPORTED FROM JANUARY 1, 1911, 'ГO SEPTEMBER 1, 1911, ARRANGED BY COUNTIES ACOORDING TO OAUSE OF INJURY-Continued.

| County . | Injured by Machinery. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Gearings, shafts or belts, setscrews. | Emery wheels, reamers and riveters. | Press machines. | Band and circular saws. | Planers, lathes, and other wood carving machinery. | Corn shredders and other farm machinery. | Other accidents due to the use of machinery. |
| Sauk .... |  |  |  | 2 | 1 | .......... | 7 |
| Sawyer ..... |  |  |  |  |  |  |  |
| Shawano | 1 |  |  | ${ }_{8}^{5}$ | $1{ }^{*}$ | 1 | 13 |
| Taylor |  | 1 |  | 1 |  | 2 | 1. |
| Trempealeau | ........ |  |  | 1 |  | 2 | .......... |
| Vernon |  |  |  | 1 | ..... |  |  |
| Vilas |  |  |  | 1 | ......... |  |  |
| Walworth |  |  |  |  |  |  | 1 |
| Washburn |  |  |  | 1 | 5 | 2 3 | 1 |
| Washington |  |  |  | 1 |  | 3 | 2 |
| Waukesha |  |  |  | 1 | 1 |  | 2 |
| Waupaca .. Waushara |  |  |  | 1 | 1 | 2 | $\stackrel{2}{2}$ |
| Winnebago | 1 | 1 |  | 32 | 20 | 3 | 18 |
| Wood .... | 1 |  |  | 4 | 1 |  | 6 |
| Total. | 83 | 102 | 92 | 307 | 136 | 93 | 573 |

TABLE NO. 10.-SHOWING ACCIDENTS REPORTED FROM JANUARY 1, 1911, TO SEPTEMBER 1, 1911, ARRANGED BY COUNTIES ACCORDING TO CAUSE OF INJURY-Continued.

| County. | Steam Railroads. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Transportation service. | Other railroad employment. | Passengers. | Trespassers and other non-employes. | Railroad crossings. |
| Adams ... |  |  |  |  |  |
| Ashland .. | 5 | 7 | 1 | 3 | 1 |
| Barron ... |  |  |  | 1 | ........... |
| Bayffeld .... |  |  |  |  |  |
| Brown . | 32 | 34 | 1 | 2 | ............ |
| Buffalo |  |  |  |  |  |
| Burnett . |  |  |  |  |  |
| Calumet .. <br> Chippewa . | 1 | 1 |  |  |  |
| Chirp | 1 |  |  |  |  |
| Columbia . |  |  |  |  |  |
| Crawford |  |  |  |  |  |
| Dane ..... | 1 | 1 | 1 | ${ }_{3}^{2}$ | i |
| Dodge | 1 |  |  |  | 1 |
| Door ... |  |  |  |  |  |
| Dounglas ... |  | 1 |  |  |  |
| Eau Claire |  | 4 | ...... | ............ |  |
| FJorence .. |  |  |  |  |  |

TABLE NO. 10--SHOWING ACCIDENTS REPORTED FROM JANUARY 1, 1911, TO SEPTEMBER 1, 1911, ARRANGED BY COUNTIES ACCORDING TO CAUSE OF INJURY-Continued.

| County. | Steam Railroads. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Transportation service. | Other railroad employment. | Passengers. | Trespassers and other non-employes. | Railroad crossings. |
| Fond du Lac .... | 43 | 21 |  | 5 |  |
| Forest . |  |  |  |  | ............. |
| Grant |  |  |  |  | ............ |
| Green <br> Green |  |  |  |  |  |
| Iowa ...... |  |  |  |  |  |
| Iron ... |  |  | 3 |  |  |
| Jackson |  |  |  |  |  |
| Jėfferson | $\stackrel{1}{2}$ | 1 | 1 | 1 |  |
| Juneau Kenosh | 1 | 1 | 1 | 1 |  |
| Kewaune |  |  |  |  |  |
| La Crosse | 8 | 1 | 1 | 1 | ..... |
| Lafayette | 1 |  |  |  |  |
| Langlade | 1 |  |  |  |  |
| Manitowoc | 1 |  | 1 |  |  |
| Marathon | 1 |  |  | 3 1 | .... |
| Marinette | 4 |  |  | 1 | - |
| Milwaukee | 28 |  |  |  |  |
| Monroe . |  | 20 1 | 5 | 25 1 | 8 |
| Oneida |  |  |  |  |  |
| Outagamie |  |  |  |  |  |
| Ozaukee .. |  |  |  |  |  |
| Pepin ... |  |  |  |  |  |
| Pierce |  |  |  |  |  |
| Polk ... |  |  |  |  |  |
| Prictage | 12 | 3 | 1 | $\underline{2}$ |  |
| Racine |  |  |  | 2 | 1 |
| Richland | 5 |  |  | 6 |  |
| Rock | 9 | 7 | 2 | 3 | 1 |
| Rusk ... | 1 |  | 2 | 3 | 1 |
| Sauk .... |  |  |  | 1 |  |
| Sawyer |  | 1 |  | 1 | ............ |
| Shawano |  | 1 |  |  |  |
| Sheboygan |  |  |  |  |  |
| Taylor ...... |  |  | 1 | 1 | 1 |
| Trempealeau |  |  |  | 1 |  |
| Vernon |  |  |  |  |  |
| Vilas ..... |  |  |  | i |  |
| Washburn |  | 1 |  |  |  |
| Washington | 1 | 1 |  |  | 1 |
| Waukesha |  |  |  |  |  |
| Waupaca |  |  |  |  |  |
| Waushara |  |  |  |  |  |
| Winnebago | 1 |  |  |  |  |
| Wood |  | 1 |  | 1 |  |
| Total. | 165 | 111 | 18 | 69 | 14 |

TABLE NO. 10.-SHOWING ACCIDENTS REPORTED FROM JANUARY 1, 1911, TO SEPTEMBER 1, 1911, ARRANGED BY COUNTIES ACCORDING TO ÓAUSE OF INJURY-Continued.

| Counties. | Street cars. | Horse vehicles horses. | Automobiles. | Hand tools. | Firearms and explosives. | Hot water, acids and fire. | Football and other athletic games. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Adams |  | 1 |  |  |  |  |  |
| Ashland | 1 | 11 | 2 | 18 | 20 | 3 | 2 |
| Barron |  | 11 | 1 | 2 | 1 | 1 |  |
| Bayffeld | $\cdots$ | 2 30 | ..... | ${ }_{2}^{2}$ | 1 |  |  |
| Buffalo |  |  |  | 20 | 11 | 17 | 7 |
| Burnett |  | 7 |  | 2 | 8 | 1 |  |
| Calumet |  | 5 |  | 2 | 1 |  | $\cdots \cdots \cdots$ |
| Chippewa |  | 3 |  |  | 1 |  | 2 |
| Clark ${ }^{\text {. }}$ |  | 9 |  | 3 | 2 | 1 | 3 |
| Orlumbia | 3 |  |  |  |  |  |  |
| Dane |  | 12 |  |  |  |  |  |
| Dodge |  | 12 | 2 | 8 | 2 4 | 17 | 2 |
| Door |  | 3 | 2 | 1 | 2 |  | 1 |
| Douglas |  | 1 |  | $\stackrel{1}{2}$ | 1 | 1 |  |
| Dunn Eau |  | 3 |  | 1 |  |  |  |
| Eau Olaire <br> Florence |  | 9 | 1 | 3 | 5 |  | 2 |
| Fond du Lac | 2 | 16 | 5 | 32 | $\ddot{9}$ | 29 | 7 |
| Forest . |  | 1 |  | 3 | 1 | 1 |  |
| Grant |  | 15 |  | 2 | 6 |  |  |
| Green ...... |  | 7 | 1 |  |  | 5 | 3 |
| Iowa |  | 11 |  | 2 |  | 1 | 3 |
| Iron |  | 1 |  | 4 | 1 | 1 |  |
| Jackson |  | 7. |  | 2 | 1 |  |  |
| Jefferson |  | 2 | 1 |  | 1 |  |  |
| Juneau |  |  |  | 1 |  |  | 2 |
| Kenosha |  | 4 | 3 | 4 | 2 | 2 |  |
| Kewaunee |  | 6 | 1 |  | 1 |  | 2 |
| La Orosse | 2 | 6 | 2 | 2 | 5 | 1 | 1 |
| Lafayette |  | 18 | 1 | 6 | 3 |  | I |
| Langlade |  | 11 |  | 13 | 6 | 5 | 3 |
| Lincoln ... |  | ${ }^{6}$ |  | 1 | 3 |  |  |
| Manitowoc | 1 | 12 6 | $?$ | 7 | 6 | 4 | 3 |
| Marinette | 1 | S | 6 | 7 | 6 | 3 | 1 |
| Marquette . |  |  |  |  |  |  |  |
| Milwaukee | 101 | 128 | 77 | 80 | 65 | 91 | 21 |
| Monroe . |  |  |  |  |  |  |  |
| Oconto . |  |  |  | 1 | 4 | 1 | 1 |
| Oneida | ... . ${ }^{\text {c }}$ |  |  |  |  |  |  |
| Outagainie <br> Ozaukee | 1 | 10 | 1 | 5 | 1 | 2 |  |
| Pepin |  | 2 |  |  |  |  |  |
| Plerce |  | 3 | 1 |  |  |  |  |
| Polk ... |  | 4 | 1 | $\stackrel{1}{2}$ | 2 |  | 1 |
| Portage |  | 5 |  | 1 |  |  | 1 |
| Price |  | 3 |  | 1 | $\bigcirc$ |  |  |
| Racine | 1 | 11 | 11 | 30 | 8 | 9 | 1 |
| Richland |  | 10 | .......... |  | 1 |  | 1 |
| Rock | 2 | 19 | 1 | 1 | 9 | 4 | 1 |
| Rusk .... | 1 |  |  |  | 1 | ......... | 1 |
| St. Oroix |  | 5 | ......... |  | 1 |  | 1 |
| Sauk ${ }_{\text {Sawyer }}$ |  | 7 |  | 3 | 2 |  |  |
| Shawyer .... |  |  |  |  | 1 |  |  |
| Shawano ... |  |  |  |  | 4 |  |  |
| Taylor ... |  | 7 2 |  |  | 1 |  | 2 |
| Trempealeau |  | 6 |  |  | 1 |  |  |
| Vernon | .......... | 4 |  | 1 | 1 |  |  |

$12-\mathrm{B} . \mathrm{H}$.

TABLE NO. 10.-SHOWING ACCIDENTS REPORTED FROM JANUARY 1, 1911, TO SEPTEMBER 1, 1911, ARRANGED BY COUNTIES ACCORDING TO CAUSE OF INJURY-Continued.

| Counties. | Street cars. | Horse <br> vehicles <br> and <br> horses. | Automobiles. | Hand tools. | Fire- <br> arms <br> and <br> ex- <br> plosives. | Hot water', acids, and fire. | Football and other athletic games. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Vilas |  |  |  |  |  |  |  |
| Walworth |  | 3 |  |  | 1 |  |  |
| Washburn |  | 5 |  | 8 | 3 |  | 1 |
| W ashington |  | 11 | 2 | 3 | 3 | 1 | 2 |
| Waukesha |  | 1 | .......... |  | 1 | . . . . . . . . |  |
| Waupaca ... |  | 3 |  |  |  |  | 2 |
| Waushara . |  | 4 |  |  | 1 | 1 | . ......... |
| Winnebago |  | 6 | 2 | 4 | 4 | 1 | 4 |
| Wood ... |  | 7 |  | 2 | 2 |  |  |
| Total. | 130 | 527 | 134 | 296 | 235 | 203 | 88 |

TABLE NO. 10.-SHOWING ACCIDENTS REPORTED FROM JANUARY 1, 1911, TO SEPTEMBER 1, 1911, ARRANGED BY ICOUNTIES AOCORDING TO CAUSE OF INJURY—Continued.

| Counties. | Falls. |  |  |  |  | Bites from horses and dogs. | Other causes. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Falling obiects, dropping or handling materials. | Fall on defective or slippery sidewalk. | $\begin{gathered} \text { Fall } \\ \text { on } \\ \text { stairs. } \end{gathered}$ | Fall from places. | Other falls. |  |  |
| Adams | 1 |  |  | 2 |  |  |  |
| Ashland | 55 | 3 | 3 | 14 | 7 | 2 | 22 |
| Barron | 11 |  |  | 9 | 4 | . 9. | 7 |
| Bayfield | 8 |  |  | 2 | 2 | ........ | . |
| Brown . | 75 | 28 | 13 | 25 | 68 | 11 | $\therefore 73$ |
| Buffalo | 1 |  |  | 1 | 4 |  |  |
| Burnett | 2 | 1 |  | 1 | 4 | . $\cdot$ | 4 |
| Calumet |  | 3 | 2 | 5 | 5 | .......... | 2 |
| Chippewa | - 1 |  |  |  | 4 | .... |  |
| Clark | .... 9 | 1 |  | 3 | 6 |  | 1 |
| Columbia | 2 | 1 | 1 | 1 | 6 | ........ | 1 |
| Crawford | 1 |  |  | 1 | 2 | ........ |  |
| Dane . | 9 | 5 | 1 | 7 | 9 | .......... | 1 |
| Dodge | 13 | 1 | 4 | 6 | 29 | ......... | 6 |
| Door ... | 6 | 1 | 4 | 1 | 6 | ......... | 2 |
| Donglas | 33 |  |  | 2 | 6 | .......... | 8 |
| Dunn .. | 1 | 1 | 1 | 2 | 2 | .......... | 2 |
| Eau Olaire | 7 | 4 | 5 | 4 | 17 |  | 9 |
| Florence ... |  |  |  |  |  |  |  |
| Fond du Lac | 176 | 18 | 11 | 16 | 76 | 5 | 89 |
| Forest | 14 |  |  |  | 5 |  |  |
| Grant | 7 | 4 | 1 | 5 | 5 | ......... |  |
| Green | 10 | 2 | 1 | 3 | 7 | .......... | 8 |
| Green Lake . | 1 |  |  |  | 1 | ......... |  |
| Iowa | 9 | 6 |  | 4 | 9 | ........ | 4 |
| Iron ......... | 38 |  | ......... | 3 | 8 | ..... | 4 |

TABLE NO. 10--SHOWING ACAOTDENTS REPORTED FROM JANUARY 1, 1911, TO SEPTEMBER 1, 1911, ARRANGED BY COUNTIES AOCORDING TO CAUUSE OF INJURY-Continued.

| Counties. | Falls. |  |  |  |  | Bites from horses and dogs. | Other causes. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Falling objects. dropping or handling materials. | Fall on defective or slippery sidewalts. | $\begin{gathered} \text { Fall } \\ \text { on } \\ \text { ontairs. } \end{gathered}$ | Fall from $\underset{\text { places. }}{\text { high }}$ | Other falls. |  |  |
| Jackson | 2 | 1 | 1 | - 1 | 6 | ..... | 1 |
| Jefferson | 7 | 2 | 1 |  | 6 | ......... | 2 |
| Juneau . |  |  |  | 2 | 5 |  |  |
| Kenosha | 19 | 13 |  | 12 | 13 | ......... | 9 |
| Kewaunee | 5 | 1 | .......... | 1 | 3 | ......... | 2 |
| La Orosse | 9 | 2 |  | 7 | 9 |  | 7 |
| Lafayette | 21 | 2 | 2 | 3 | 24 |  | 9 |
| Langlade | 35 | 6 | 3 | 5 | 21 | . | 23 |
| Lincoln ... | 10 | 1 | 1 | 2 | 6 | 1 | 1 |
| Manitowoc | 46 | 11 | 5 | 5 | 44 | 3 | 26 |
| Marathon | 19 | 4 |  | 6 | 23 | $\ldots$ | 5 |
| Marinette | 43 | 3 | 1 | 3 | 21 | 1 | 9 |
| Marquette |  |  |  |  | 1 |  |  |
| Milwaukee | 834 | 94 | 53 | 79 | 287 | 10 | 242 |
| Monroe . |  |  |  | 1 | 3 |  |  |
| Oconto | 7 | 1 |  |  | 4 | . $\cdot$. | ......... |
| Oneida |  |  |  |  |  |  |  |
| Outagamie | 8 | 5 | 1 | 1 | 15 | 1 | 2 |
| Ozaukee .. |  | 1 |  | 2 | 2 | ......... |  |
| Pepin ... |  |  |  | 1 |  |  |  |
| Pierce | 3 |  |  | 2 | 4 | ...... |  |
| Polk . |  |  |  | 1 | 4 |  | 2 |
| Portage | 15 | 6 | 1 |  | 14 | .......... | 1 |
| Price .... | 5 |  |  | 2 | 2 | ......... | 1 |
| Racine .. | 106 | 7 | 3 | 3 | 36 | ......... | 19 |
| Richland |  |  |  | 1 | 4 | ........ | 1 |
| Rock | 24 | 11 | 6 | 14 | 39 | ......... | 10 |
| Rusk | 3 |  |  |  | 3 | ......... | , |
| St. Croix |  |  |  | 1 | 7 |  | $\stackrel{9}{2}$ |
| Sauk | 7 | 4 | 2 | 7 | 7 | ........ | 3 |
| Sawyer ....... | 2 |  |  |  |  |  |  |
| Shawano .... | 10 | 3 | 1 | 3 | 16 | ........ | 10 |
| Sheboygan | 15 | 2 |  | 4 | 15 | ........ | 5 |
| Taylor ..... | 6 |  |  | 1 | 5 | ......... |  |
| Trempealeau | 1 |  | 1 | 1 | ${ }_{3}^{2}$ | ......... | 1 |
| Vernon ..... | 1 |  |  |  | 3 | ....... |  |
| Vilas ...... | 1 | 3 |  |  | 3 |  | 1 |
| W ashburn | 2 | 1 | 3 | 2 | 10 |  | 2 |
| Washington | 5 | 4 | 1 | 6 | 22 | ...... | 6 |
| Waukesha . | 2 | 1 |  |  | 6 |  | 1 |
| Waupaca . | 3 | 2 | 1 | 1 | 15 | ........ | 3 |
| Waushara | 1 | 1 |  | 1 | 1 |  | 1 |
| Winnebago | 29 | 3 | 3 | 5 | 16 |  | 5 |
| Wood .... | 9 | 1 |  | 1 | 10 |  | 5 |
| Total | 1,792 | 275 | 137 | 307 | 1,029 | 34 | 660 |

## DIVORCES.

The clerks of the various courts, having jurisdiction in divorce actions, reported to the State Bureau of Vital Statistics, for the year ending September $30,1911,1,288$ divorce actions where a divorce was granted. Suits pending, which were started in this period, and actions where a divorce was refused, are not included in this report. For the year ending September 30, 1911, there were thirty-three actions for divorce still pending and three cases where a decree was denied.
During the twelve months covered by this report the divorce rate per thousand marriages solemnized during the year is 68.5 ; for the year ending September 30, 1909 the divorce rate was 82.5 per thousand marriages, while for the year ending September 30, 1910, the rate was 64.1. This slight fluctuation from year to year is, in our opinion, not significant. The uniform divorce law and the provision requiring the employment in behalf of the state of counsel, when the divorce action is not contested, has a strong tendency to reduce the rate.

The tabulation of divorces by causes is unsatisfactory for the reason thait cruel and inhuman treatment is accepted as cause for the action in many cases where this is not the real cause. It seems probable that the blanks on which to report divorces will have to be revised so as to provide space for stating the nature of the cruelty or the kind of inhuman treatment practiced upon the plaintiff, when this cause is alleged. Some of the causes for which divorces were granted are adultery, 49; cruel and inhuman treatment, 653; desertion, 382; drunkenness, 58; and nonsupport, 70.

The divorce was granted to the husband in 297 caises and to the wife in 991 cases.

Considering the divorces due to drunkenness, the wife was the libellant in 53 cases and the husband in 5 cases. In the divorces granted for adultery, the wife was the libellant in 13 cases and the husband in 36 cases. In the divorces where cruelty was the alleged cause, the wife was the libellant in 558 cases and the husband in 95 cases. Where desertion was the alleged cause, the wife was the libellant in 248 cases and the husband in 134 cases. For nonsupport, the wife was the libellant in 69 cases and the husband in one case.

Four divorces were granted before the parties had been married six months; in thirty cases the divorced parties had been married over six months, but less than one year; 342 divorces were granted after from one to four years of marriage; 362 after from five to nine years; 305 after from ten to nineteen years of marriage; 141 after trom twenty to twenty-nine years of marriage; 52 after thirty years or more of married life; in 52 cases the duration of the marriage was not stated;

33 cases were reported as still pending; and in 3 additional cases, the decree was denied.

Classifying the divorces by counties, according to the causes alleged, the following results are shown: For adultery, where this was the sole alleged cause, 38 divorces were granted; for adultery and cruelty, 4; for adultery, cruelty and nonsupport, 2; for adultery and desertion, 5; for bigamy, 6. Where cruel and inhuman treatment was the sole cause alleged, there were 430 divorces; for cruelty and desertion, 35 ; for cruelty, desertion and drunkenness, 91 ; for cruelty, desertion and nonsupport, 97 . Where desertion only was the sole caus'e alleged in the action, there were 283 divorces; for desertion and drunkenness, 10 ; for desertion and nonsupport, 89. Where drunkenness was the only cause alleged, there were 26 actions for divorce, and for drunkenness and nonsupport, 32. Other causes alleged, with the number of divorces from each cause, are as follows: Fraud in marriage, 4; insanity, 1; imprisonment, 7; impotency, 1; nonsupport, 70; refusal to cohabit, none; voluntary separation, 29 ; and other causes or causes not stated, 28.

Considering the total divorces according to the nativity of the plaintiff in the action, it is shown that 764 were native born; 233 foreign born and in 291 cases, the nativity of the plaintiff was unknown or not stated.

In 713 cases the defendant in the divorce action was native born, in 238 cases foreign born and in 337 cases the nativity of the defendant was unknown or not stated.

895 of the total marriages for which divorces were granted during the period covered by this report were solemnized in Wisconsin; 291 were solemnized in other parts of the United States; 73 in formign countries and in 29 cases the place of marriage was unknown or not stated.

In 556 cases the plaintiff was reported as having a gainful occupation. Since the husband was the libellant in only 297 cases, the wife must have had a gainful occupation in at least 259 cases, where the wife was the libellant and was reported as having a gainful employment.

Only 140 of the total actions for divorce were contested and in many of the cases a cross bill for divorce was filed.

There were 530 actions where alimony was asked and in 498 cases alimony in some form was granted.

In 584 cases of divorce recorded during this period, there were no children by the marriage; in 279 cases there was but one child by the marriage; in 187 cases there were two children; in 67 cases three children; in 47 cases four children; in 36 cases five children; in 20 cases six children; in 19 cases seven children; in 3 cases eight children; in 7 cases nine children; and in 10 cases there were ten or more children in the family.

TABLE NO. 11.-SHOWING DIVOROES FROM CERTAIN CAUSES ARRANGED BY COUNTIES AND SEX OF PLAINTIF"F FROM OOTOBER 1, 1910, TO SEPTEMBER 30, 1911.


TABLE NO．11．－SHOWING DIVORCES FROM CERTAIN CAUSES ARRANGED BY OOUNTIES AND SEX OF PLAINTIFF FROM OCTOBER 1，1910，TO SEPTEM－ BER 30，1911．－Continued．

| County． | $\begin{gathered} \text { All. } \\ \text { causes. } \end{gathered}$ |  | Adulterv |  | Cruelty |  | Deser－ tion． |  | Drunkenness， |  | Non－ support． |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Walworth | 2 | 17 |  |  |  | 12 | 2 | 3 |  |  |  | 1 |  |  |
| W ashburn |  | 3 |  |  | 2 | 1 | 2 | 1 |  |  |  |  | 3 | $\cdots$ |
| Wash＇ngton | 1 | 2 |  |  | 1 | 1 |  | 1 |  |  |  |  |  |  |
| Waukesha | 7 | 13 | 1 |  |  | ， |  | 3 |  |  |  |  |  |  |
| Waupaca | 8 | 8 |  |  | 2 | 2 | 5 | 3 |  | 1 |  | 1 |  |  |
| Waushara |  | 10 |  |  |  | 7 |  | 2 |  | 1 |  |  |  |  |
| Winnebago | 24 | 60 | 1 |  | 9 | 45 | 12 | 11 |  | 1 |  | 3 |  |  |
| Wood ．．．． | 1 | 14 | 1 |  |  | 9 |  | 4 |  | 1 |  |  |  |  |
| Total | 297 | 991 | 36 | 13 | 95 | 558 | 134 | 248 | 5 | 53 | 1 | 69 | 33 | 3 |

TABLE NO．12．－SHOWING DIVOROES IN WISCONSIN FROM OOT．1，1910，TO SEPT． 30 ，1911，ARRANGED ACCORDING TO CAUSE，SEX，NATIVITY，PLAOE OF MARRIAGE，NUMBER OF CHILDREN AND DURA＇TION OF MARRIAGE．

| Causes． |  |  | Nativity of plaintiff． |  |  | Nativity of defendant． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | E 0 E ह D | 号运 |  | 号 |
| Adultery | Total．．．．． | 38 | 22 | 8 | 8 | 21 | 7 | 10 |
|  | Male．．．．．． | 30 | 16 | 7 | 7 | 6 | 1 | 1 |
|  | Female．．．． | 8 | 6 | 1. | 1 | 15 | 6 | 9 |
| Adultery and cruelty | Total．．．．． | 4 | 2 | 1 | 1 | 2 | 1 | 1 |
|  | Male．．．．．． | 2 2 | 1 | 1 | 1 | 1 | 1 | 1 |
| Adultery，cruelty and non－support ．．．．．．． |  |  |  |  |  |  |  |  |
|  | Total．．．． | 1 | $\stackrel{2}{2}$ |  |  | 1 | 1 | ．．．．．．． |
|  | Male．．．．． | 2 | 2 |  |  | 1 | 1 | ．．．．．．．．．． |
| Adultery and deser－tion $\ldots \ldots . . . . . . . . . .$. | Total．．．． | 2 5 | 3 | 1 | 1 | 1 3 | 1 | ［．．．．．． 1 |
|  | Male．．．．．． | 5 | 3 | 1 | 1 |  |  |  |
|  | Female．．．． |  |  |  |  | 3 | 1 | 1 |
| Bigamy | Total．．．． | 6 | 1 | $\stackrel{2}{1}$ | 3 | 2 | 1 | 3 |
|  | Male．．．．．． | $\begin{aligned} & 4 \\ & 2 \end{aligned}$ | 1 | 1 1 | 3 | 2 | 1 | 3 |
| Oruel and inhuman treatment ．．．．．．．．．． |  |  |  |  |  |  |  |  |
|  | Total．．．．． | 430 | － 221 | 72 | 137 | 198 | 84 | 148 |
|  | Male．．． | 69 | 38 | 11 | 20 | 160 | 74 | 127 |
|  | Female．．．． | 361 | 183 | 61 | 117 | 38 | 10 | 21. |
| Oruelty and desertion． | Total． | 35 | 22 | 7 | 6 | 20 | 8 | 7 |
|  | Male．．．．．． | 16 | 10 | $?$ | 4 | 11 | 6 | 2 |
|  | Female．．．． | 19 | 12 | 5 | 2 | 9 | 2 | 5 |

TABLE $\operatorname{NO}$. 12-Continued. SHOWING DIVORCES IN WISCONSIN FROM OCTOBER 1, 1910, TO SEPT. 30, 1911, ARRANGED AIOCORDING TO CIAUSE, SEX, NATIVITY, PIAACE' OF MARRIAGE, NUMBER' OF"'CHILDREN AND DURA, TION OF MARRIAGE.


TABLE NO．12．－SHOWING DIVORCES IN WISCONSIN FROM OCT．1，1910，TO SEPT．30，1911，ARRANGED AOCORDING TO CAUSE，SEX，NATIVITY，PLACE OF MARRIAGE，NUMBER OF OHILDREN AND DURATION OF MARRIAGE．－ Continued．

| Causes． | Place of marriage． |  |  |  |  |  | Alimony． |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 葡 | $\begin{aligned} & \text { घं } \\ & \text { B } \\ & \text { 號 } \end{aligned}$ |  |  | 盛家 |  |
| Adultery | 21 | 12 | 4 | 1 | 29 | 5 | 5 | 9 |
| Adultery and cruelty．．．．． | ， | 1 |  |  | 2 |  | 1 | 2 |
| Adultery，cruelty and non－support | 2 |  |  |  |  |  | 2 | 2 |
| Adultery and desertion．． | $\stackrel{4}{2}$ | 1 | 1 |  | 4 |  |  |  |
| Bigamy ．．．．．．．．．．．．．．．．． | 2 | 4 |  |  | 3 | ．$\cdot$ ．．．． |  | ．． |
| Cruel and inhuman treat ment $\qquad$ | 327 | 71 | 22 | 10 | 136 | 72 | 248 | 219 |
| Cruelty and desertion．．．． | 28 | 3 | 4 |  | 21 |  | 10 | 12 |
| Cruelty，desertion and drunkenness | 65 | 18 | 6 | 2 | 23 | 15 | 57 | 48 |
| Cruelty，desertion and non－support | 63 | 28 | 4 | 4 | 41 | 15 | 52 | 41 |
| Desertion ．．．．．．．．．．．．．．． | 180 | 80 | 20 | 3 | 162 | 7 | 47 | 53 |
| Desertion and drunken－ ness ．．．．．．．．．．．．．．．．．．．．． | 6 | 3 |  | 1 | 3 |  | 4 | 3 |
| Desertion and nonsup－ port ．．．．．．．．．．．．．．．．．．．．．． | 57 | 28 | 3 | 1 | 48 | 5 | 32 | 35 |
| Drunkenness ．．．．．．．．．．．．． | 20 | 5 | 1 |  | 6 | 1 | 13 | 16 |
| Drunkenness and non－ support ．．．．．．．．．．．．．．．．． | 27 | 3 |  | 2 | 13 | 3 | 20 | 20 |
| Fraud in marriage．．．．．．．． | 2 | 1 |  |  |  | 1 |  |  |
| Insanity |  |  | 1 |  |  |  | 1 | 1 |
| Imprisonment ．．．．．．．．．．．． | 5 |  | 2 |  | 1 |  | 1 | $\stackrel{1}{2}$ |
| Impotency ．．．．．．．．．．．．．． | 1 |  |  |  |  |  | 1 | 18 |
| Nonsupport．．．．．．．．．．．．．． | 49 | 18 | 2 | 1 | 31 | 4 | 27 | 28 |
| Voluntary separation．．．． | 17 | 9 | 2 | 1 | 19 | 3 | 2 | 4 |
| Other causes or cause not stated | 17 | 8 |  | 3 | 14 | 5 | 7 | 2 |
| Total | 895 | 291 | 73 | 29 | 556 | 140 | 530 | 498 |

TABLE NO．12．－SHOWING DIVOROES IN WISOONSIN FROM OCT．1，1910，TO SEP＇S．30，1911，ARRANGED ACCORDING TO CAUSE，SEX，NATIVITY，PLACE OF MARRIAGE，NUMBER OF OHILDREN AND DURATION OF MARRIAGE．－ Continued．

| Causes． | Number of children in family． |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\cdots$ | $\bigcirc$ | $\infty$ | ＋ | 18 | $\bullet$ | $\star$ | $\infty$ | $\sigma$ | 응 | 家 |
| Adultery | 18 | 6 | 10 | 2 |  |  |  |  |  |  |  | 2 |
| Adultery and cruelty．．．．．．．．．． | 2 | 1 | 1 |  |  |  |  |  |  |  |  |  |
| Adultery，cruelty and non－ support |  |  | 1 |  |  |  | 1 |  |  |  |  |  |
| Adultery and desertion．．．．．．． | 3 |  | 2 |  |  |  |  |  |  |  |  |  |
| Bigamy ．．．．．．．．．．．．．．．．．．．．． | 6 |  |  |  |  |  |  |  |  |  |  |  |
| Cruel and inhuman treatment | 175 |  |  |  |  |  | 8 |  |  | 2 | 6 | 6 |
| Cruelty and desertion． Cruelty，desertion and drunk－ | 19 | 5 | 7 | 2 |  |  |  |  |  | 1 |  |  |
| enness |  |  |  |  |  |  | 2 |  |  | 1 | 1 |  |

TABLE NO. 12.-SHOWING DIVORCES IN WISCONSIN FROM OCI. 1, 1910, TO SEPT. 30, 1911, ARRANGED ACCORDING TO CAUSE, SEX, NATIVITY, PLACE OF MARRIAGE, NUMBER OF OHILDREN AND DURATION OF MARRIAGE.Continued.

| Causes. | Number of children in family. |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\cdots$ | C8 | $\infty$ |  |  |  | - | $\infty$ | む. | + |  |
| Cruelty, desertion and nonsupport | 47 | 19 | 10 | 5 | 6 | 2 | 3 |  | 2 |  |  | 8 |
| Desertion ..................... | 148 | 69 | 32 | 8 | 5 | 7 |  | 3 |  | 2 |  | 9 |
| Desertion and drunkenness.... | , 3 |  | 3 | 2 | 1 |  |  |  |  |  |  |  |
| Desertion and non-support... | 40 | 24 | 13 | 4 | 1 | 3 | 2 | 1 |  |  | 1 | . $\cdot$. |
| Drunkenness .................. | 8 | . 3 | 7 | 4 | 1 |  | 2 |  |  |  | 1 | .... |
| Drunkenness and non-support | $\cdot 10$ | 8 | 5 | 2 | 3 | 2 | 1 | 1 |  |  |  |  |
| Fraud in marriage............. | 1 | 1 | .... |  |  |  |  |  |  |  |  | i |
| Insanity ... |  |  |  |  |  |  |  | 1 |  |  |  |  |
| Imprisonment .................. | 3 | 2 | 1 |  |  |  |  |  |  |  |  | 1 |
| Impotency . . . . . . . . . . . . . . . . | 1 |  |  |  |  |  |  |  |  |  |  |  |
| Nonsupport. | 37 | 19 | 7 | 3 | 1 |  |  |  |  | 1 | 1 | 1 |
| Refusal to cohabit............. |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Voluntary separation ........ | 14 | 8 |  | 1 | 1 | 3 |  | 1 |  |  |  | 1 |
| Other causes or cause not stated | 11 | 4 | 4 | 2 |  | 2 |  |  |  |  |  | 5 |
| Total .................... | 584 | 279 | 187 | 67 | 47 | 36 | 20 | 19 | 3 | 7 | 10 | 29 |

TABLE NO. 12.-SHOWING DTVORCES IN WISCONSIN FROM OCT. 1, 1910, TO SEPT. 30, 1911, ARRANGED ACCORDING.TO CAUSE, SEX, NATTVITY, PLAOE OF MARRIAGE, NUMBER OF CHILDREN AND DUIRATION OF MARRIAGE.Oontinued.

| Causes. | Duration of marriage. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
| Adultery |  | 2 | 13 | 11 | 10 | 1 |  | 1 |
| Adultery and cruelty.. |  |  |  | 1 | 3 |  |  |  |
| Adultery, cruelty and non-support. |  |  |  | 1 |  |  | 1 |  |
| Adultery and desertion.. |  |  | 1 | 2 | 2 | ..... |  |  |
| Bigamy ... |  |  | 3 | 3 |  |  |  |  |
| Cruel and inhuman treatment. | 2 | 14 | 114 | 105 | 98 | 56 | 17 | 24 |
| Cruelty and desertion.................. | 1 |  | 13 | 5 | 12 | 3 | 1 |  |
| Oruelty, desertion and drunkenness..... |  | 3 | 14 | 25 | 25 | 13 | 8 | - |
| Oruelty, desertion and nonsupport. |  | 4 | 32 | 32 | 15 | 10 | 2 | 2 |
| Desertion . $\ldots$........................ |  | 2 | 81 | 93 | 62 | 20 | 14 | 11 |
| Desertion and drunkenness. |  |  | 2 | 4 | 3 | 1 |  |  |
| Desertion and nonsupport. |  |  | 22 | 31 | 21 | 10 | 4 | 1 |
| Drunkenness ... |  |  | 4 | 5 | 10 | 3 | 3 | 1 |
| Drunkenness and rionsupport |  |  | 5 | 8 | 12 | 7 |  |  |
| Fraud in marriage |  | 1 | 3 |  |  |  |  | .... |
| Insanity ....... |  |  |  |  |  | 1 |  | , |
| Imprisonment |  |  |  | 5 | 2 |  |  |  |
| Impotency |  | 1 |  |  |  |  |  |  |
| Nonsupport |  | 1 | 30 | 22 | 13 | 3 |  | 1 |
| Refusal to cohabit. |  |  |  |  |  |  |  | . |
| Voluntary separation |  |  |  | 4 | 11 | 10 | 1 | 3 |
| Other causes or cause not stated. | 1 | 2 | 5 | 5 | 6 | 3 | 1 | 5 |
| Total | 4 | 30 | 342 | 362 | 305 | 141 | 52 | 52 |

TABLE NO. 13.-SHOWING DIVOROES IN WISCONSIN BY OOUNTIES FROM OCTOBER 1, 1910, TO SEPTEMBER 30, 1911, ARRANGED ACCOORDING TO SEX, NATIVITY, PLÁCE OF MARRIAGE, AND NUMBER OF CHILDREN.


TABLE NO. 13.-Continued.

| County. |  |  | Nativity of plaintiff. |  |  | Nativity of defendant |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | a 0 है है |  |  |  |
| Dunn | Total.. | 4 | 2 | 1 | 1 | ${ }_{2}^{2}$ | 1 | 1 |
|  | Female. | 4 | 2 | 1 | ${ }^{1}$ |  |  |  |
| Eau Claire | Total. | ${ }_{5}^{26}$ | 15 2 | ....... | 11 | 12 | 1. | 13 10 |
|  | Male... | 21 | ${ }_{13}^{2}$ | .. | 3 8 | 11 1 | 1 | 10 3 |
| Florence | Total. | 1 | 1 |  |  | 1 |  |  |
|  | Male... | 1 | 1 |  |  | 1 | ....... |  |
| Fond du Lac | Total.. | 31 | 13 |  | 18 | 9 |  | 22 |
|  | Male... | 6 | 3 |  | 3 | 7 | $\ldots$ | 18 |
|  | Female | 25 | 10 |  | 15 | 2 | .... |  |
| Forest | Total. | 1 | 1 |  |  | 1 | . |  |
|  | Male... | 1 | 1 |  | .... | 1 | . |  |
| Grant | Total. | 11 | 11 |  |  | 11 | $\ldots$ |  |
|  | Male... | 3 | 1 3 8 |  | .... | 8 | $\cdots$ | ..... |
|  | Female | 8 | 8 |  |  | 3 | . | ..... |
| Green | Total. | 5 | 4 | 1 |  | 4 | . | 1 |
|  | Male... | 1 | 1 | i |  | 3 | . | 1 |
|  | Female | 4 | 3 | 1 |  | 1 |  |  |
| Green Lake | Total. | 1 | 1 |  |  | 1 | $\ldots$ |  |
|  | Male... | 1 | 1 |  |  |  |  |  |
| Iowa | Total. | 3 | 1 |  | 2 | 1 | $\cdots$ | $\stackrel{2}{2}$ |
|  | Male... | 1 2 | 1 |  | 2 | 1 |  | 2 |
| Iron | Total. |  | 2 | 3 | 2 | 1 | 3 | 3 |
|  | Male... | 1 | 1 |  |  | 1 | 3 | 2 |
| Jackson | Total. |  |  | 1 |  | 4 | 1 |  |
|  | Male... | 1 | 1 | 1 |  | 3 | 1 | ..... |
|  | Female | 4 | 3 | 1 |  | 1 | ........ |  |
| Jefferson | Total. | 21 | 16 | 4 | 1 | 16 | 4 | 1 |
|  | Male... | 6 15 | 6 10 | 4 | 1 | 10 | 4 | 1 |
| Juneau | Total. | 9 | 9 |  |  | 7 | 2 | ... |
|  | Male... |  |  |  |  | 7 | 2 | .... |
|  | Female | 9 | 9 |  |  |  |  |  |
| Kenosha | Total. | 26 | 11 | 4 | 10 | 10 | 3 | 13 |
|  | Male. | 5 21 | 11 | 1 3 | 3 7 | 9 1 | $\stackrel{2}{1}$ | 10 3 |
| Kewaunee | Total. |  |  |  |  |  |  |  |
|  | Male. |  |  |  |  |  |  |  |
|  | Female |  |  |  |  |  |  |  |
| La Crosse | Total. | 26 | 28 | 5 | 3 | 30 | 3 | 3 |
|  | Male. Femal | $\stackrel{11}{85}$ | 9 19 | 2 3 3 | $\cdots$ | 19 11 | 3 | 3 |

TABLE NO. 13.-Continued.


TABLE NO. 13.-Continued.


TABLE NO. 13.-Continued.

| County. |  |  | Nativity of plaintiff. |  |  | Nativity of defendant. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{aligned} & \text { E. } \\ & \text { dig } \\ & \text { 品品 } \end{aligned}$ | $\dot{8}$ 0 0 है है |  |  | d B E E ¢ |
| Washburn | Total..... |  |  | 1 | 2 | 3 | 1 |  |
|  | Male...... | 4 | 3 | i. | 1 | 1 | 1 | 1 |
|  | Female.... | 3 | 1 | 1 | 1 | 2 |  | 2 |
| W ashington | Total..... | 3 |  |  | 3 |  |  | 3 |
|  | Male...... | 2 |  |  | 2 |  |  | 1 |
|  | Female... | 1 |  |  | 1 | $\cdots \cdots$ |  | 2 |
| Waukesha | Total..... | 20 |  | 8 |  |  |  |  |
|  | Male...... | 7 | 4 | 3 |  | 8 | 5 | ......... |
|  | Female.... | 13 | 8 | 5 |  | 5 | 2 | ........ |
| Waupaca | Total..... |  |  |  |  |  | 2 | .... |
|  | Male...... | 8 | 7 | 1 |  | 8 | ...... | ..... |
|  | Female... | 8 | 8 |  |  | 6 | 2 | .......... |
| Waushara | Total..... | 10 | 1 | 1 | 8 | 1 | 1 | 8 |
|  | Male..... |  |  |  |  | 1 | 1 | 8 |
|  | Female.... | 10 | 1 | 1 | 8 | ....... |  |  |
| Winnebago |  |  |  |  |  |  |  |  |
|  | Male. | 24 |  |  | 24 |  |  | 80 |
|  | Female ... | 60 |  |  | 60 |  |  | 24 |
| Wood | Total.... | 15 | 1 |  | 14 |  | 1 |  |
|  | Male. | $\begin{array}{r} 1 \\ 14 \end{array}$ |  |  | 13 |  | 1 | 13 |

TABLE NO. 13-Continued.

| Counts. | Place of marriage. |  |  |  |  |  | Alimony, |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{aligned} & \dot{B} \\ & \text { B } \\ & \text { B } \\ & \text { B } \end{aligned}$ |  |  |  |  |
| Adams | 1 |  |  |  |  |  | 1 | 1 |
| Ashland | 14 | 6 | 1 | 1 | 3 | . | 2 | 2 |
| Barron | 3 |  | 1 |  |  |  |  | 1 |
| Bayfield | 9 | 3 | 1. | 2 | 2 | 1 | 4 | 3 |
| Brown | 33 | 10 | 1 |  | 32 | 1 | 14 | 18 |
| Buffalo | 5 |  |  | 1 | 5 | 3 | 6 | 2 |
| Burnett |  |  |  |  |  |  |  |  |
| Calumet | 3 |  |  |  | 1 | 2 | 2 | 2 |
| Ohippewa | 14 | 2 |  | 1 | 11 |  | 4 | 4 |
| Clark ... | 4 |  |  |  | 1 | 1 | 3 | 2 |
| Columbia |  |  |  |  |  |  |  |  |
| Crawford. | 10 |  |  |  | 5 | 1 | 4 | 5 |
| Dane . | 8 | 1 |  |  | 3 | 1 | 7 | 7 |
| Dodge | 17 | 4 | 1 |  | 5 | 8 | 12 | 12 |
| Door ... | 3 | 1 |  |  | 2 |  | 1 | 1 |
| Douglas | 14 | 2 F | 7 |  | 35 | 9 | 18 | 15 |
| Dunn | 3 |  |  | 1 |  |  | 2 | 1 |
| Eau Claire.. | 20 | 5 | ....... | 1 | 8 | 3 | 11 | 10 |

TABLE NO. 13-Oontinued.

| County. | Place of marriage. |  |  |  |  |  | Alimony. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | - |  | $\begin{aligned} & \text { d } \\ & \text { B } \\ & \text { ह } \\ & \text { g } \end{aligned}$ |  |  |  |  |
| Florence ........ | 1 |  |  |  | 1 |  |  |  |
| Fond du Lac... | 25 | 4 |  | 2 | 10 | 5 | 21 | 14 |
| Forest ......... | 1 |  |  |  |  |  |  |  |
| Grant ........... | 10 | 1 |  |  | 3 |  | 4 | 3 |
| Green | 3 | 1 |  | 1 | 1 |  | 1 | 1 |
| Green Lake ..... | 1 |  |  |  |  |  | 1 | 1 |
| Iowa ............ | 2 |  | 1 |  | 1 |  | 3 | 3 |
| Iron ..... | 4 |  | 2 | 1 | 3 |  | 3 | 2 |
| Jackson . | 4 | 1 |  |  | 5 |  |  |  |
| Jefferson | 16 | 4 |  | 1 | 11 | 3 | 6 | 7 |
| Juneau | 9 |  |  |  | 5 |  | ${ }^{6}$ | 4 |
| Kenosha | 11 | 11 | 3 | 1 | 15 | 1 | 7 | 9 |
| Ka Crosse | 22 | 14 |  |  | 22 | 5 | 13 | 20 |
| Lafayette | 4 | 3 |  |  | 6 | 2 | 5 | 5 |
| Langlade | 14 | 4 | 1 |  | 9 |  | 4 | 6 |
| Lincoln | 11 |  |  |  | 2 |  | 5 | 6 |
| Manitowoc | 16 | 2 |  |  | 9 |  | 5 | 7 |
| Marathon | 22 |  |  | 1 | 5 |  | 13 | 15 |
| Marinette .. |  |  |  |  |  |  |  |  |
| Marquette |  |  |  |  |  |  |  |  |
| Milwaukee | 235 | 96 | 32 | 2 | 211 |  | 70 | 182 |
| Monroe | $\delta$ |  |  |  | 1 |  | 2 | 2 |
| Oconto | 6 |  |  |  | 2 | 1 | 2 | 2 |
| Oneida | 3 | 1 |  |  | 2 |  | 2 | 3 |
| Outagamie | 26 | 6 |  | 1 | 14 | 3 | 12 | 12 |
| Ozaukee | 6 |  |  |  | 1 |  | 2 | 2 |
| Pepin | 2 |  |  |  | 1 |  |  |  |
| Pierce | 3 | 1 | 2 |  | 1 |  | 4 | 3 |
| Polk . | 10 | 2 | 4 |  | 10 |  | 5 | 4 |
| Portage | 10 | 2 | 1 | 1 | 5 | 1 | 9 | 9 |
| Price . | 2 | 3 | . |  | 3 | ..... | 1 |  |
| Racine . | 11 | 6 | 2 |  | 8 | 2 | 5 | 2 |
| Richland | 6 | 1 | ....... | 3 | 3 | . | 1 | 3 |
| Rock | 92 | 20 | 1 | 2 | 18 | 3 | 19 | 4 |
| Rusk | 1 | 1 | 1 |  | 1 | 1 | 1 |  |
| St. Croix | 10 |  |  |  | 5 | 1 | 2 | 2 |
| Sauk | 12 | 5 |  | 1 | 12 | 1 | 9 | 6 |
| Sawyer |  |  |  |  |  |  |  |  |
| Shawano |  |  |  |  |  |  |  |  |
| Sheboygan | 24 | 5 |  | 1 | 1 | 9 | 15 | 3 |
| Taylor .... | 3 | 1 |  | 1 | - 2 | - | 1 | 1 |
| Trempealeau | 6 | 1 | 1 |  | 1 | 1 | 5 | 2 |
| Vernon | 12 | 1 |  |  | 3 | 2 | 2 | 2 |
| Vilas ..... | 1 |  |  |  | 1 | .... | 1 | 1 |
| Walworth | 11 | 6 |  | 2 | 5 |  | 4 | 4 |
| W ashburn | 2 | 5 |  |  | 4 | 1 | 3 | 1 |
| Washington | 3 |  |  |  | 1 | 1 | 2 | 1 |
| Waukesha | 16 | 3 | 1 |  | 10 | 5 | 5 | 5 |
| Waupaca | 14 | 2 |  |  | 10 |  | 2 | 2 |
| Waushara | 10 |  |  |  |  | - $\quad 2$ | 9 | 7 |
| Winnebago | 60 | 18 | 6 |  | 10 |  | 29 | 14 |
| Wood ....... | 13 | 2 | .... |  | 1 |  | 10 | 9 |

TABLE NO. 13-Continued.

| County. | Number of children in family. |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | - | $\sim$ | $\cdots$ | H | 15 | $\bigcirc$ | $\cdots$ | $\infty$ | $\sigma$ | $\pm$ | \% |
| Adams | 1 |  |  |  |  |  |  |  |  |  |  |  |
| Ashland | 14 | 3 | 3 | 1 |  |  |  |  |  |  |  |  |
| Barron |  | 3 | 1 |  |  |  |  |  |  |  |  |  |
| Bayfield | 4 | 1 | 4 | 1 |  | 1 |  |  |  |  |  | 3 |
| Brown | 22 | 7 | 9 | 1 | 2 | 1 |  | 1 |  |  | 3 | 1 |
| Buffalo | 2 | 1 | 2 | 1 |  |  |  |  |  |  |  |  |
| Burnett Calumet |  |  |  |  |  |  |  |  |  |  |  |  |
| Calumet <br> Chippewa |  | 2 3 |  |  |  |  | 1 |  |  |  |  |  |
| Chippewa. <br> Clark | 11 1 | 3 | 1 1 | 1 |  | 2 |  | 1 |  |  |  |  |
| Columbia |  |  |  |  |  | 2 |  |  |  |  |  |  |
| Crawford. | 2 | 5 | 1 |  | 1 | 1 |  |  |  |  |  |  |
| Dane .. | 4 |  | 3 |  | 1 | 1 |  |  |  |  |  |  |
| Dodge | 8 | 9 | 1 | 1 | 1 |  |  |  |  |  |  |  |
| Door | 1 | 1 |  |  | 1 | 1 |  |  |  |  |  |  |
| Douglas | 20 | 14 | 5 | 1 | 3 | 1 |  | 1 |  |  | 1 |  |
| Dunn ..... | 2 |  |  |  |  | 1 |  |  |  |  |  | 1 |
| Florence... |  | 5 1 | 6 |  |  |  |  | 1 |  |  |  | 2 |
| Fond du Lac. | 16 | 4 | 8 |  | 2 |  |  |  |  | 1 |  |  |
| Forest |  |  |  |  |  |  | 1 |  |  | 1 |  |  |
| Grant | 4 |  | 4 | 2 |  |  | 1 |  |  |  |  | $\ldots$ |
| Green ..... |  | 1 | 2 | 2 |  |  |  |  |  |  |  | $\cdots$ |
| Green Lake | 1 |  |  |  |  |  |  |  |  |  |  | .... |
| Iowa | 1 |  | 2 |  |  |  |  |  |  |  |  |  |
| Iron ... | 2 | 3 | 1 |  |  |  | 1 |  |  |  |  |  |
| Jackson | 3 |  | 1 |  |  | 1 |  | . |  |  |  |  |
| Jefferson | 7 5 | 4 | 3 | 4 |  | 1 | 1 | $\cdots$ | ... |  | 1 |  |
| Kenosha |  | 5 |  |  |  |  |  |  |  |  |  |  |
| Kewaunee |  |  | 6 |  |  |  |  | 3 |  |  |  | .... |
| La Crosse | 18 | 7 |  | 1 | 2 |  | 1 |  |  | 1 |  | $\cdots$ |
| Lafayette | 4 | 1 | 1 | 1 |  |  | 1 |  |  |  |  | $\ldots$ |
| Langlade | 6 | 4 | 3 | 2 |  |  | 1 | 1 | 1 |  | 1 | .. |
| Lincoln ... | 5 | 4 | 1 |  |  |  | 1 |  |  |  |  |  |
| Manitowoc | 7 | 6 | 3 |  |  |  | 1 | 1 |  |  |  |  |
| Marathon | 7 | 6 | 5 | 2 | 1 | 2 |  |  |  |  |  |  |
| Marquette |  |  |  |  |  |  |  |  |  |  |  |  |
| Milwaukee | 181 |  |  |  | 10 |  |  |  | 2 |  |  |  |
| Monroe | 181 3 | 84 2 | 16 1 | 18 |  | 8 |  | 3 | 2 |  | 1 | 7 |
| Oconto | 3 | 2 |  | 1 |  |  |  |  |  |  |  |  |
| Oneida | 3 |  |  | 1 |  |  |  |  |  |  |  |  |
| Outagamie | 17 | 8 | 2 | 2 | 2 | 1 | 1 |  |  | . |  | $\cdots$ |
| Ozaukee | 3 |  | 1 |  |  |  |  | 1 |  |  |  | $\cdots$ |
| Pepin | 1 | 1 |  |  |  |  |  | 1 |  | $\cdots$ |  |  |
| Pierce | 1 |  | 3 | 1 |  |  |  |  |  | 1 | . | $\cdots$ |
| Polk | 7 | 5 | 1 | 1 | 1 |  |  |  |  |  |  | ... |
| Portage | 4 | 3 | 3 |  | 2 | 1 |  | 1 |  |  |  |  |
| Price .. | 2 | 1 | 1 |  | 1 |  |  |  |  |  |  | 1 |
| Racine . | 10 | 3 | 1 | 2 |  |  |  |  |  |  | 1 | 2 |
| Rock ... | 5 | 9 |  | 2 |  | 1 |  |  |  |  |  |  |
| Rusk | 31 | 9 | 8 | 1 | 3 | 1 | $\cdots$ | 2 |  |  |  |  |
| t. Croix |  | 4 |  |  |  | 1 | . | 1 |  |  |  |  |
| Sauk | 8 | ${ }_{5}^{15}$ | $\stackrel{2}{2}$ |  | 1 |  |  |  | . |  |  |  |
| awyer |  |  | 2 | 1 | 2 |  |  |  | . |  |  |  |
| Shawano |  |  |  |  |  |  | . |  |  |  |  |  |
| Sheboygan | 10 | 5 |  | 3 |  |  |  | . |  |  |  |  |
| Taylor .... | 3 |  |  | 3 |  | 1 |  | ... | 1 |  |  | 1 |
| Trempealeau | 3 | 2 | 2 |  |  | 1 |  |  |  |  |  | $\ldots$ |

TABLE NO. 13-Continued.

| County. | Number of children in family. |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\cdots$ | $\sim$ | $\infty$ | H | 10 | 0 | $\cdots$ | $\infty$ |  | $\pm$ |  |
| Vernon | 5 | 2 | 3 | .... | . . | 2 |  |  |  |  |  |  |
| Vilas |  | 1 | ... | .... |  |  |  |  |  |  | … |  |
| Walworth | 8 | 1 | 2 | 3 |  | 1 |  |  |  |  |  |  |
| W ashburn | 2 | 3 | 1 | . . . . |  |  |  |  |  |  | . . . |  |
| W ashington |  | 2 | 1 | ...... |  |  |  |  |  |  |  |  |
| Waukesha | 9 | 4 | 2 | 2 |  |  | 1 |  |  |  | . | $\cdots$ |
| Waupaca .... | 9 | 1 | 3 | ...... | 1 |  |  |  |  |  |  |  |
| Waushara .... | 3 | 3 | 1 | 2 3 |  |  |  |  |  |  |  |  |
| Winnebago | 46 | 16 | 8 | 3 |  |  | 1 |  |  |  |  |  |
| Wood .... | 2 | 7 | 1 | 2 |  |  |  |  |  |  |  |  |

TABLE NO. 14.-SHOWING DIVORCES FROM CERTAIN OAUSES TABULATED BY COUNTIES FROM OCTOBER 1, 1910, TO OCTOBER 1, 1911.

| County. | Adultery. |  |  |  |  | Cruelty. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |
| Adams |  |  |  |  |  | 1 |  |  |  |
| Ashland |  |  |  |  | 1 | 4 |  |  |  |
| Barron |  |  |  |  |  | 1 |  | . 1 |  |
| Bayffeld |  |  |  |  |  | 5 |  |  | 1 |
| Brown . | 2 |  | ..... |  |  | 20 | 2 | 4 | 4 |
| Buffalo .. |  |  |  |  |  | 1 |  | - 4 | $\ldots$ |
| Burnett . |  |  |  |  |  |  |  |  |  |
| Oalumet |  |  |  |  |  | 3 |  |  |  |
| Chippewa | 2 |  | ..... | 1 |  | 3 |  |  | 2 |
| Clark ... |  | 1 | ..... |  |  | 2 |  |  |  |
| Columbia |  |  |  |  |  |  |  |  |  |
| Orawford |  |  |  |  |  | 1 |  |  | 1 |
| Dane . |  |  |  |  |  | 2 <br> 6 |  | 3 6 | 1 |
| Dodge |  |  |  |  |  | 6 | 1 | 6 |  |
| Door ... |  |  |  |  |  | 1 | 1 |  | 1 |
| Douglas |  |  |  |  |  | 7 |  | 5 | ${ }^{5}$ |
| Dunn ...... |  |  |  | 1 |  | 7 | 2 | 1 | - ${ }^{-1}$ |
| Florence . |  |  |  |  |  |  |  |  |  |
| Fond du Lac. |  |  |  |  |  | 11 |  | 6 | 1 |
| Forest |  |  |  |  |  |  |  |  |  |
| Grant |  |  | 1 | 1 |  | 4 | $\ldots$ | . $\cdot .$. |  |
| Green |  |  |  |  |  | 1 |  | . 1 |  |
| Green Lake |  |  |  |  |  | 1 |  | . ...... |  |
| Iowa |  |  |  |  |  | 2 |  | . |  |
| Irnn ... |  |  |  |  |  | 1 |  |  | 1 |

TABLE NO. 14 Continued. SHOWING DIVOROES FROM CERTAIN CAUSES TAB. ULATED BY COUNTIES FROM OCTOBER 1, 1910, TO OCTOBER 1, 1911.


TABLE NO. 14-Continued.


TABLE NO. 14-Continued.

| County . | Desertion. |  |  | Drunkenness, |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \dot{1} \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Shawano |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sheboygan | 5 |  |  | 1 |  |  |  |  |  |  |  | 1 | 2 | 15 |  |
| Taylor . ........ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Trempealeau .. | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Vernon ........ | 9 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Vilas . |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| Walworth | 4 |  | 1 |  |  |  |  |  |  | 1 |  |  | 1 |  |  |
| Washburn ..... | 3 |  |  |  |  |  |  |  |  |  |  | 1 |  | 3 |  |
| Washington ... | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Waukesha ..... | 8 |  | 2 |  |  |  |  |  |  |  |  |  |  |  |  |
| Waupaca ...... | 7 |  | 1 |  |  | . |  |  |  | 1 |  |  | 2 |  |  |
| Waushara ..... | 2 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |
| Winnebago .... | 23 |  |  | 1 |  | 1 |  |  |  | 3 |  |  |  |  |  |
| Wood | 4 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |
| Total ... | 283 |  |  | 26 | 32 | 4 | 1 | 7 | 1 | 70 |  | 29 | 28 | 33 | 3 |

## DEATHS.

During the calendar year of 1911, 27,185 deaths, exclusive of stillbirths, were recorded in the office of the State Bureau of Vital Statistics. This represents an annual death rate of 11.5 per thousand estimated population.

Table No. 15 shows the total deaths reported in Wisconsin by counties since 1903. The great increase in the number of deaths recorded since 1907 is due to increased accuracy of registration and not to ravages of disease which were not present in former years. There has been no time in the history of the state when deaths were reported more acurately or more satisfactorily than under the present uniform registration law, which was passed by the Wisconsin Legislature in 1907.

The undertaker, or person acting as undertaker, is now charged with the duty of filing the death certificate and obtaining a burial permit before interment takes place. In order to make it as easy as possible for the undertaker to comply with the provisions in the law, chapter 636, laws of 1911, provides that every local registrar in the state, i. e., every town clerk, village clerk, and health officer in cities,
shall act as sub-registrar of deaths, for the purpose of receiving death certificates and issuing burial permits, The undertaker, therefore, can file the death certificate with any local registrar in the state and obtain a burial permit from such registrar for the legal interment of the body. The sub-registrar, who receives the death certificate, is then required to endorse the certificate immediately beneath the place for the signature of the local registrar, and forward the certificate to the local registrar of the district where death occurred, for which a sub-registrar fee of ten cents is paid. This makes it a simple matter for undertakers in any part of the state to comply with the law, with regard to the filing of death certificates and any violation will be promptly prosecuted.

Table No. 16, which gives the tabulation of deaths by counties, according to color, sex, conjugal condition and age grouping, shows that 26,938 were white, 60 were black, 199 were Indians, and in 68 cases the color was unknown or not stated.

Classifying the deaths according to scx, 15,119 were males, 12,057 females; and 9 deaths where the sex was unknown or not stated.

The conjugal condition of the decedents in each case is as follows: single 11,145; married 9,748 ; widowed 5,337 ; divorced 200 ; conjugal condition unknown or not stated 355 .
The tabulation of deaths by age groups for 1911 is as follows:-
Under two months ..... 3,159
Over two months and under one year ..... 2,156
From 1 to 4 years ..... 1,550
From 5 to 9 years ..... 647
From 10 to 19 years ..... 1,144
From 20 to 29 years ..... 1,900
From 30 to 39 years ..... 1,849
From 40 to 49 years ..... 1,999
From 50 to 59 years ..... 2,502
From 60 to 69 years ..... 3,173
From 70 to 79 years ..... 3,816
From 80 to 89 years ..... 2,742
From 90 to '99 years ..... 428
100 years of age or over ..... 20
Age unknown or not stated ..... 100

Table No. 17 shows the total deaths reported from each disease by months for the calendar for the year 1911.

Table No. 18 is the tabulation of deaths from each disease by age groups.

Table No. 19 shows the total deaths in each county for the calendar year of 1911, arranged according to the causes of death.

Table No. 20 shows the total deaths from each disease, according to the color, sex, conjugal condition and nativity.

Table No. 21 shows the total deaths from the various diseases by occupations.

Table No. 22 is a tabulation of deaths in cities by certain age groups and diseases.

The total deaths by months, exclusive of still-births, is shown in the following tabulation:-
January 2,645
February ..... 2,542
March ..... 2,719
April ..... 2,671
May ..... 2,430
June ..... 1,929
July ..... 2,115
August ..... 2,089
September ..... 2,147
October ..... 1,945
November ..... 1,966
December ..... 1,973
Unknown or not stated ..... 14

## Deaths by Occupations.

The total deaths from each disease by occupation, which is given in Table No. 21, is unsatisfactory, for the reason that it does not show the relative prevalence of any disease by occupations. Instead of tabulating the actual number of deaths reported from each disease by occupation, the rate per thousand, or per ten thousand persons, in each occupation should be given.

It is impossible to prepare statistics showing the relative prevalence of any disease for each occupation, or to determine the mortality rate for the various occupations, for the reason that we have no reliable statistics showing the number of persons engaged in the various occupations. Our state census makes no provision for collecting data on this subject, and the most reliable information which we have will be the federal census for 1910, which has not yet been published.

TABLE NO. 15.-DEATHS IN WISCONSIN BY CALENDAR YEARS.

|  | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | 1909 | 1910 | 1911 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Adams | 70 | 77 | 60 | 72 | 89 | 91 | $\pi$ | 90 | 91 |
| Ashland | 318 | 312 | 318 | 332 | 373 | 313 | 376 | 355 | 298 |
| Barron | 250 | 204 | 247 | 227 | 252 | 310 | 288 | 316 | 277 |
| Bayfield | 18 | 49 | 107 | 108 | 99 | 108 | 135 | 169 | 143 |
| Brown. | 737 | 576 | 640 | 741 | 712 | 833 | 801 | 789 | 818 |
| Buffalo | 69 | 72 | 79 | 99 | 159 | 178 | 150 | 158 | 154 |
| Burnett | 75 | 72 | 72 | 71 | 95 | 107 | 94 | 89 | 87 |
| Calumet | 162 | 140 | 177 | 153 | 208 | 166 | 178 | 162 | 162 |
| Chippewa | 263 | 226 | 370 | 367 | 363 | 413 | 436 | 436 | 394 |
| Clark .. | 170 | 168 | 198 | 207 | 245 | 296 | 273 | 261 | 234 |
| Columbia | 325 | 288 | 334 | 362 | 389 | 324 | 367 | 395 | 356 |
| Crawford | 81 | 92 | 152 | 110 | 111 | 211 | 201 | 190 | $1^{\circ} 0$ |
| Dane | 882 | 744 | 773 | 782 | 858 | 909 | 868 | 1935 | 912 |
| Dodge | 515 | 444 | 503 | 505 | 471 | 504 | 466 | 522 | 532 |
| Door | 183 | 173 | 204 | 204 | 189 | 182 | $1 \varepsilon 6$ | 186 | 203 |
| Douglas | 389 | 440 | 433 | 474 | 469 | 441 | 461 | 518 | 514 |
| Dunn | 225 | 188 | 254 | 255 | 235 | 315 | 264 | 249 | 255 |
| Eau Claire | 345 | 342 | 432 | 255 | 364 | 367 | 371 | 400 | 380 |
| Florence | 34 | 29 | 24 | 21 | 33 | 21 | 24 | 26 | 26 |
| Fond du Lac | 716 | 510 | 567 | 544 | 617 | 629 | 635 | 615 | 652 |

TABLE NO. 15.-DEATHS JN WISCONSIN BY CALENDAR YEARS.-Con.

|  | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | 1909 | 1910 | 1911 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Forest | 18 | 22 | 30 | 43 | 49 | 58 | 55 | 63 | 76 |
| Grant | 339 | 320 | 357 | 350 | 410 | 434 | 435 | 436 | 422 |
| Green | 233 | 233 | 256 | 231 | 226 | 253 | 224 | 214 | 252 |
| Green Lake | 126 | 105 | 139 | 142 | 169 | 200 | 198 | 172 | 165 |
| lowa. | 179 | 163 | 223 | 240 | 279 | 246 | 243 | 233 | 208 |
| Iron | 88 | 97 | 102 | 97 | 106 | 103 | 113 | 80 | 83 |
| Jackson | 197 | 185 | 172 | 142 | 185 | 227 | 200 | 167 | 162 |
| Jefferson | 413 | 413 | 397 | 388 | 343 | 392 | 377 | 400 | 383 |
| Juneau | 234 | 234 | 164 | 208 | 218 | 265 | 236 | 239 | 201 |
| Kenosha | 288 | 277 | 340 | 381 | 407 | 384 | 348 | 381 | 416 |
| Kewaunee | 196 | 224 | 197 | 193 | 194 | 219 | 211 | 189 | 219 |
| La Crosse | 542 | 523 | 522 | 535 | 560 | 570 | 509 | 594 | 578 |
| Lafayette | 214 | 176 | 135 | 191 | 205 | 201 | 226 | 198 | 204 |
| Langlade | 99 | 113 | 180 | 110 | 138 | 156 | 136 | 161 | 168 |
| Lincoln | 155 | 131 | 167 | 229 | 242 | 211 | 230 | 217 | 184 |
| Manitowoc | 600 | 600 | 600 | 574 | 548 | 541 | 507 | 479 | 462 |
| Marathon | . | 418 | 438 | 464 | 567 | 624 | 567 | 686 | 636 |
| Marinette | 322 | 268 | 404 | 451 | 323 | 373 | 391 | 356 | 326 |
| Marquette | 129 | 71 | 114 | 107 | 134 | 122 | 123 | 135 | 121 |
| Milwaukee | 5,638 | 4,740 | 5,284 | 5,659 | 6,641 | 6,002 | 6,134 | 6,570 | 5,967 |
| Monroe | 252 | 232 | 304 | 269 | 292 | 323 | 298 | 366 | 342 |
| Oconto | 218 | 181 | 208 | 233 | 210 | 285 | 263 | 254 | 243 |
| Oneida | 101 | 109 | 109 | 109 | 115 | 145 | 127 | 112 | 115 |
| Outagamie | 508 | 454 | 583 | 566 | 674 | 564 | 534 | 601 | 542 |
| Ozaukee | 171 | 150 | 172 | 169 | 205 | 205 | 197 | 151 | 161 |
| Pepin | 83 | 73 | 61 | 81 | 71 | 64 | 67 | 73 | 84 |
| Pierce | 134 | 121 | 141 | 146 | 178 | 243 | 234 | 250 | 253 |
| Polk | 144 | 114 | 181 | 200 | 222 | 234 | 196 | 185 | 208 |
| Portage | 361 | 304 | 361 | 383 | 407 | 481 | 372 | 375 | 354 |
| Price . . | 54 | 56 | 78 | 68 | 72 | 121 | 79 | 99 | 113 |
| Racine | 756 | 641 | 687 | 688 | 744 | 625 | 658 | 756 | 687 |
| Richland | 177 | 163 | 179 | 203 | 230 | 238 | 222 | 182 | 201 |
| Rock | 449 | 437 | 674 | 530 | 611 | 684 | 684 | 672 | 689 |
| Rusk | 32 | 31 | 41 | 35 | 92 | 88 | 96 | 98 | . 97 |
| St. Croix | 142 | 140 | 170 | 216 | 284 | 278 | 269 | 278 | 282 |
| Sauk | 375 | 353 | 325 | 325 | 378 | 356 | 391 | 371 | 380 |
| Sawyer | 19 | 18 | 36 | 68 | 62 | 63 | 66 | 70 | 63 |
| Shawano | 242 | 212 | 155 | 239 | 293 | 361 | 321 | 310 | 295 |
| Sheboygan | 623 | 432 | 507 | 626 | 708 | 654 | 616 | 650 | 626 |
| Taylor ... | 87 | 91 | 79 | 68 | 88 | 168 | 121 | 113 | 102 |
| Trempeleau | 191 | 172 | 204 | 198 | 252 | 281 | 242 | 229 | 229 |
| Vernon .. | 149 | 134 | 160 | 140 | 208 | 332 | 278 | 310 | 291 |
| Vilas | 30 | 35 | 26 | 14 | 15 | 43 | 29 | 37 | 54 |
| Walworth | 402 | 322 | 361 | 329 | 427 | 393 | 381 | 362 | 371 |
| Washburn | 50 | 36 | 66 | 42 | 78 | 79 | 80 | 84 | 72 |
| W ashington | 247 | 220 | 249 | 276 | 271 | 274 | 249 | 243 | 227 |
| Waukesha . | 430 | 328 | 454 | 490 | 457 | 453 | 484 | 507 | 522 |
| Waupaca | 362 | 244 | 425 | 388 | 385 | 414 | 405 | 407 | 394 |
| Waushara | 113 | 100 | 127 | 132 | 119 | 214 | 215 | 178 | 153 |
| Winnebago | 711 | 548 | 715 | 721 | 731 | 861 | 769 | 782 | 856 |
| Wood ... | 221 | 232 | 182 | 263 | 262 | 348 | 323 | 277 | 288 |
| Total | 23,673 | 21,142 | 24,178 | 24,734 | 27,514 | 28,222 | 27,380 | 28,213 | 27,185 |

TABLE NO. 16.-SHOWING DEATHS BY COUNTIES DURING CALENDAR YEAR 1911, ARRANGED AOCORDING TO COLOR, SEX, CONJUGAL CONDITION AND AGE GROUPS.

| Counties. | Total. | Color. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | White. | Black. | Indian. | Unknown. |
| Adams | 91 | 91 | .......... |  |  |
| Ashland | 298 | 283 | 1 | 11 | 3 |
| Barron. | 277 | 276 |  |  | 1 |
| Bayfield | 143 | 139 | 1 | 3 | , |
| Brown | 818 | 797 | 3 | 16 | 2 |
| Buffalo | 154 87 | 153 82 88 |  | 4 | 1 |
| Calumet. | 162 | 156 |  | 5 | 1 |
| Chippewa | 394 | 389 |  |  | 5 |
| Clark. | 234 | 233 |  |  | 1 |
| Columbia | 356 | 351 | 1 | .......... | 4 |
| Crawford | 170 | 169 |  |  | 1 |
| Dane | 912 | 903 | 5 | ........ | 4 |
| Dodge | 532 | 529 | 1 |  | 2 |
| Door | 203 | 203 |  |  |  |
| Douglas | 514 | 511 | 2 |  | 1 |
| Dunn .. | 255 | 253 |  |  | 7 |
| Eau Claire | 380 | 371 |  | 2 | 7 |
| Florence.. | 26 | 26 |  |  |  |
| Fond du Lac | 652 | 640 | 2 |  | 1.0 |
| Forest . | 76 | 68 | 1 | 6 | 1 |
| Grant | 422 | 418 | 1 |  | 3 |
| Green | 252 | 247 | 1 |  | 4 |
| Green Lake | 165 | 164 |  | 1 |  |
| Iowa . | 208 | 204 | 2 | 1 | 1 |
| Iron ... | 83 | 83 |  |  |  |
| Jackson | 162 | 160 | - 1 |  | 1 |
| Jefferson | 383 | 380 199 |  |  | 3 |
| Juneau | ${ }_{416} 01$ | 199 |  | 1 | 1 |
| Kewaunee | 219 | 219 |  |  |  |
| La Crosse | 578 | 575 | 3 |  |  |
| Lafayette | 204 | 202 |  |  | 2 |
| Langlade | 168 | 166 |  | 1 | 1 |
| Lincoln | 184 | 184 | ........... |  |  |
| Manitowoc | 462 | 462 | ......... |  |  |
| Marathon | ${ }_{6} 636$ | 635 |  |  | 1 |
| Marinette | 326 | 324 |  | 1 | 1 |
| Marquette | 121 5,967 | 121 5,946 |  |  |  |
| Milwaukee | $\begin{array}{r}5,967 \\ \hline 242 \\ \hline 24\end{array}$ | 5,946 342 | 20 |  | 1 |
| Monroe - | 842 843 243 | 342 242 |  | 1 |  |
| Oneida | 115 | 114 |  | 1 | .......... |
| Outagamie | 542 | 523 |  | 19 |  |
| Ozaukee | 161 | 161 |  | .......... | ........... |
| Pepin ... | 84 | 83 |  |  | 1 |
| Pierce | 253 | 252 | 1 | …….... |  |
| Polk P ( ${ }^{\text {Prtage }}$ | 208 <br> 354 <br> 1 | 206 354 | 1 | 1 | ............ |
| Portage | 354 113 | 354 113 |  |  |  |
| Racine | 687 | 686 | 1 |  |  |
| Richıand | 201 | 201 |  |  |  |
| Rock | 689 | 684 | 5 |  |  |
| Rusk | 97 | 96 |  | 1 | ............ |
| St. Oroix | 282 | 282 | ......... |  |  |
| Sauk | 380 | 379 | ........ | 1 | ............ |
| Sawyer | 63 | 38 | ........ | 25 | ............ |
| Shawano .... | 995 | 278 |  | 17 | ........... |
| Taylor ${ }_{\text {Trempealeau }}$ | 102 229 | 100 |  |  |  |
| Vernon | 291 | 290 | 1 |  |  |
| Vilas | 54 | 53 |  | 1 |  |
| Walworth ....... | 371 | 371 |  |  |  |

TABLE NO. 16.-SHOWING DEATHS BY COUNTIES DURING CALENDAR YEAR 1911, ARRANGED ACCORDING TO COLOR, SEX, CONJUGAL CONDITION AND AGE GROUPS.-Con.

| Counties. | Total. | . Color. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Whito. | Black. | Indian. | Cnknown. |
| W ashburn | 72 | 72 | .......... |  |  |
| Washington | 227 | 227 | ............ |  | ........... |
| Waukesha | 522 | 521 | 1 | .......... | ........... |
| Waupaca | 394 | 394 |  |  |  |
| Waushara | 153 | 153 |  |  |  |
| Winnebago | 856 | 853 | 3 |  |  |
| Wood ..... | 288 | 288 |  |  |  |
| Total | 27,185 | 26,938 | 60 | 119 | 68 |

TABLE NO. 16.-SHOWING DEATHS BY COUNTIES DURING CALENDAR YEAR 1911, ARRANGED ACCORDING 'I'O COLOR, SEX, CONJUGAL CONDITION AND AGE GROUPS.-Con.

| Counties. | Sex. |  |  | Conjugal Condition. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{aligned} & \text { an } \\ & \text { 品 } \\ & \text { है } \end{aligned}$ | $\begin{aligned} & \dot{9} \\ & \stackrel{\rightharpoonup}{80} \\ & \stackrel{a}{a} \end{aligned}$ |  | ت | '80 | 硡 |
| Adams.. | 36 | 55 |  | 36 | 36 | 19 |  |  |
| Ashland | 185 | 112 | 1 | 163 | 88 | 25 | 2 | 20 |
| Barron | 150 | 127 |  | 115 | 115 | 41 |  | 6 |
| Bayfield | 73 | 70 |  | 89 | 28 | 17 |  | 9 |
| Brown | 469 | 349 |  | 423 | 248 | 141 |  | 6 |
| Buff alo | 92 | 62 |  | 53 | 52 | 48 |  | 1 |
| Burnett. | 49 | 38 |  | 35 | 32 | 18 | 1 | 1 |
| Calumet | 95 | 67 |  | 58 | 70 | 32 | 1 | 1 |
| Chippewa | 227 | 166 | 1 | 189 | 129 | 61 | 2 | 13 |
| Clark ... | 132 | 102 |  | 115 | 84 | 31 | 4 |  |
| Columbia | 193 | 163 |  | 133 | 131 | 83 | 2 | 7 |
| Orawford | 88 | 82 |  | 59 | 66 | 41 | 3 | 1 |
| Dane . | 491 | 418 | 3 | 340 | 338 | 211 | 8 | 15 |
| Dodge | 294 | 238 |  | 195 | 197 | 129 | 8 | 3 |
| Door | 108 | 95 |  | 88 | 78 | 33 | 2 | 2 |
| Douglas | 314 | 200 |  | 288 | 163 | 50 |  | 13 |
| Dunn | 145 | 110 |  | 94 | 99 | 60 |  | 2 |
| Eau Claire | 204 | 175 | 1 | 119 | 167 | 85 | 5 | 4 |
| Florence | 14 | 12 |  | 11 | 8 | 5 | 1 | 1 |
| Fond du Lac | 361 | 291 |  | 253 | 241 | 133 | 6 | 19 |
| Forest | 48 | 28 |  | 47 | 14 | 9 | 2 | , |
| Grant | 213 | 208 | 1 | 155 | 159 | 103 | 4 | 1 |
| Green | 142 | 110 |  | 76 | 103 | 66 | 2 | 5 |
| Green Lake | 86 | 79 |  | 56 | 73 | 36 |  |  |
| Iowa | 111 | 97 |  | 74 | 76 | 54 | 1 | 3 |
| Iron | 36 | 47 |  | 49 | 22 | 7 |  | 5 |
| Jackson | 93 | 69 |  | 45 | 63 | 50 |  | 4 |
| Tefferson | 195 | 188 |  | 134 | 140 | 99 | 2 | 8 |
| Jıneau | 135 | 66 |  | 74 | 74 | - 42 | 4 | 7 |
| Kenosha | 232 | 184 |  | 209 | 146 | - 57 | 3 | 1. |
| Kewamnee | 111 | 108 |  | 102 | 71 | 42 |  | 4 |
| La Orosse | 316 | 262 |  | 206 | 242 | 125 | 1 | 4 |
| Lafayette | 106 | 98 |  | 71 | 84 | 45 | 1 | 3 |
| Langlade | 105 | 63 |  | 83 | 57 | 24 |  | 4 |

TABLE NO. 16.-SHOWING DEATHS BY COUNTIES. DURING CALENDAR YEAR 1911, ARRANGED AOCORDING TO COLOR, SEX, CONJUGAL CONDITION AND AGE GROUPS.-Con.

| Counties. | Sex. |  |  | Coujugal Condition. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{aligned} & \text { E } \\ & \text { B } \\ & \text { E } \\ & \text { है } \end{aligned}$ | $\stackrel{\text { ¢ }}{\stackrel{0}{80}}$ |  | \% | -0ं |  |
| Lincoln | 102 | 82 |  | 93 | 59 | 29 | /2 | 1 |
| Manitooc | 241 | 221 |  | 161 | 180 | 112 | 3 | 6 |
| Marathon | 367 | 269 |  | 330 | 233 | 62 | 5 | 6 |
| Marinette | 182 | 144 |  | 177 | 89 | 51 | 3 | 6 |
| Marquette | 61 | 60 |  | 42 | 40 | 35 | 3 | 1 |
| Milwauke | 3,429 | 2,536 | 2 | 2,856 | 1,934 | 1,070 | 58 | 49 |
| Monroe . | 195 | 147 |  | 138 | 127 | 1,77 | 2 | 3 |
| Oconto | 129 | 114 |  | 124 | 76 | 36 | 3 | 4 |
| Oneida | 76 | 39 |  | 64 | 36 | 11 |  | 4 |
| Outagamie | 290 | 252 |  | 204 | 234 | 92 | 2 | 10 |
| Ozaukee | 96 | 65 |  | 59 | 70 | 30 | 1 | 1 |
| Pepin . | 48 | 36 |  | 26 | 38 | 20 |  |  |
| Pierce | 146 | 137 |  | 73 | 116 | 58 | 2 | 4 |
| Polk | 113 | 95 |  | 70 | 91 | 45 | 2 |  |
| Portage | 189 | 165 |  | 178 | 111 | 65 |  |  |
| Price . | 62 | 51 |  | - 66 | 33 | 10 |  | 4 |
| Racine | 400 | 287 |  | 305 | 241 | 129 | 7 | 5 |
| Richland | 97 | 104 |  | 85 | 67 | 43 | 3 | 3 |
| Rock | 331 | 358 |  | 253 | 251 | 168 | 8 | 9 |
| Rusk | 53 | 44 |  | 47 | 36 | 10 |  | 4 |
| St. Oroix | 164 | 118 |  | 110 | 117 | 50 |  | 5 |
| Sauk . | 210 | 170 | ..... | 121 | 143 | 109 | 1 | 6 |
| Sawyer . | 35 | 28 |  | 29 | 24 | 8 | 1 | 1 |
| Shawano | 15.4 | 141 |  | 147 | 88 | 54 | 3 | $\cdot 3$ |
| Sheboygan | 350 | 276 |  | 238 | 241 | 139 | 5 | 3 |
| Taylor | 63 | 39 |  | 52 | 36 | 12 | 2 |  |
| Trempealeau | 126 | 103 |  | 92 | 70 | 65 | 1 | 1 |
| Vernon | 139 | 152 |  | 90 | 119 | 77 | 3 | 2 |
| Vilas | 31 | 23 |  | 32 | 9 | 7 | 1 | 5 |
| Walworth | 204 | 167 |  | 116 | 158 | 90 | 4 | 3 |
| Washburn | 36 | 36 |  | 33 | 18 | 17 |  |  |
| Washintgon | 123 | 104 |  | 84 | 89 | 53 |  | 1 |
| Waukesha | 278 | 244 |  | 182 | 199 | 131 | 2 | 8 |
| Waupaca | 226 | 168 |  | 126 | 161 | 100 | 2 | 5 |
| Waushara | 89 | 64 |  | 72 | 52 | 28 |  | 1 |
| Winnebago | 481 | 375 |  | 315 | 345 | 182 | 6 | 8 |
| Wood | 154 | 134 |  | 123 | 123 | 40 |  | 2 |
| Total | 15,119 | 12,057 | 9 | 11,545 | 9,748 | 5,337 | 200 | 355 |

TABLE NO. 16.-SHOWING DEATHS BY COUNTIES DURING CALENDAR YEAR 1911, ARRANGED ACCORDING TO COLOR, SEX, CONJUGAL CONDITION AND AGE GROUPS.-Con.

| Counties. | Age Grouping. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Under 2 mos | $\begin{gathered} \text { Under } \\ 1 \text { vr. } \end{gathered}$ | 1-4 | 5-9 | 10-19 | 20-29 | 30-39 | 40-49 |
| Adams | 11 | 9 | 4 | 3 | 2 | 6 | 8 | 7 |
| Ashland | 32 | 21 | 21 | 5 | 21 | 34 | 28 | 27 |
| Barron | 50 | 20 | 10 | 8 | 17 | 12 | 16 | 16 |
| Bayfield | 19 | 31 | 8 | 3 | 12 | 12 | 5 | 7 |
| Brown | 140 | 97 | 53 |  | 27 | 56 | 56 | 9 |
| Buffalo | 22 | 7 | 5 | 4 | 7 | 7 | 8 | 11 |
| Burnett | 23 | 5 | 4 | 3 | 5 | 7 | 7 | 4 |
| Calumet | 18 | 11 | 10 | 7 | 2 | 3 | 7 | 11 |
| Chippewa | 42 | 21 | 14 | 16 | 42 | 32 | 30 | 36 |
| Olark | 33 | 22 | 21 | 10 | 13 | 12 | 7 | 13 |

'I'ABLE NO. 16.-SHOWING DEATHS BY COUNTIES DURING CALENDAR YEAR 1911, ARRANGED ACCORDING 'IO COLOR, SEX, CONJUGAL CONDITION AND AGE GROUPS.-Con.

| Counties. | Age Grouping. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Under 2 mos. | $\begin{gathered} \text { Under } \\ 1 \text { yr. } \end{gathered}$ | 1-4 | 5-9 | 10-19 | 20-29 | 30-39 | 40-49 |
| Columbia | 34 | 12 | 20 | 10 | 19 | 20 | - 23 | 21 |
| Orawford.. | 27 | 5 | 9 | 1 | 2 | 11 | 11 | 10 |
| Dane .. | 83 | 46 | 40 | 22 | 36 | 61 | 90 | 63 |
| Dodge | 55 | 32 | 22 | 11 | 15 | 29 | 20 | 33 |
| Door | 22 | 19 | 16 | 5 | 10 | 10 | 14 | 9 |
| Douglas | 54 | 40 | 37 | 22 | 29 | 60 | 56 | 62 |
| Dunn | 27 | 18 | 8 | 7 | 13 | 16 | 18 | 13 |
| Eau Claire | 29 | 20 | 9 | 6 | 16 | 28 | 27 | 41 |
| Florence .. | 3 | 1 | 2 |  | 1 | 1 | 1 | 3 |
| Fond du Lac. | 59 | 45 | 29 | 12 | 34 | 39 | 38 | 36 |
| Forest . | 9 | 8 | 13 | 4 | 4 | 7 | 3 | 8 |
| Grant | 55 | 19 | 15 | 10 | 17 | 24 | 22 | 31 |
| Green . | 15 | 12 | 12 | . 2 | 11 | 14 | 9 | 9 |
| Green Lake | 17 | 16 | 8 | 2 | 7 | 6 | 8 | 7 |
| Iowa . | 18 | 13 | 8 | 1 | 9 | 14 | 14 | 12 |
| Iron | 16 | 12 | 4 | 2 | 5 | 11 | 7 | 4 |
| Jackson | 19 | 3 | 3 | 1 | 4 | 10 | 4 | 6 |
| Jefferson | 35 | 23 | 9 | 9 | 16 | 22 | 21. | 32 |
| Juneau | 24 | 15 | 4 | 2 | 7 | 9 | 18 | 12 |
| Kenosha | 60 | 48 | 34 | 9 | 14 | 27 | 35 | 27 |
| Kewaunee | 19 | 26 | 21 | 10 | 10 | 11 | 4 | 17 |
| La Crosse | 41 | 20 | 28 | 9 | 25 | 39 | 62 | 57 |
| Lafayette | 18 | 14 | 7 | 2 | 13 | 14 | 8 | 14 |
| Langlade | 25 | 12 | 13 | 7 | 10 | 9 | 15 | 9 |
| Lincoln | 27 | 14 | 17 | 8 | 8 | 16 | 7 | 14 |
| Manitowoc | 48 | 32 | 16 | 9 | 11 | 32 | 27 | 34 |
| Marathon | 88 | 70 | 68 | 22 | 23 | 42 | 37 | 42 |
| Marinette . | 49 | 38 | 24 | 11 | 21 | 21 | 15 | 27 |
| Marquette | 21 | 3 | 4 | 2 | 3 | 6 | 4 | 5 |
| Milwaukee | 724 | 705 | 415 | 128. | 206 | 529 | 477 | 482 |
| Monroe | 40 | 34 | 16 | 13 | 12 | 19 | 15 | 25 |
| Oconto . | 55 | 21 | 16 | 9 | 6 | 16 | 6 | 13 |
| Oneida . | 16 | - 8 | 10 | 3 | 3 | 9 | 14 | 12 |
| Outagamie | 56 | 32 | 24 | 15 | 26 | 43 | 37 | 45 |
| Ozaukee .. | 22 | 10 | 6 | 4 | 2 | 9 | 13 | 14 |
| Pepin . . | 6 | 3 | 3 | 2 | 4 | 4 | 1. | 8 |
| Pierce . | 20 | 12 | 11 | 5 | 10 | 16 | 10 | 15 |
| Polk | 23 | 7 | 11 | 2 | 13 | 13 | 9 | 16 |
| Portage | 56 | 27 | 27 | 9 | 23 | 31 | 17 | 19 |
| Price .. | 23 | 14 | 9 | 7 | 7 | 9 | 4 | - 11 |
| Racine | 73 | 50 | 41 | 15 | 31 | 50 | 62 | 50 |
| Richland | 30 | 14 | 10 | 4 | 12 | 11 | 14 | 5 |
| Rock | 57 | 28 | 33 | 18 | 28 | 41 | 52 | 58 |
| Rusk | 14 | 10 | 11 | 2 | 6 | 5 | 5 | 13 |
| St. Croix | 25 | 11 | 14 | 7 | 12 | 19 | 17 | 27 |
| Sauk | 35 | 21 | 15 | 4 | 15 | 16 | 21 | 20 |
| Sawyer | 7 | 5 | 4 | 2 | 6 | 4 | 6 | 6 |
| Shawano . | 48 | 26 | 26 | 10 | 12 | 15 | 15 | 18 |
| Sheboygan | 60 | 46 | 35 | 11 | 21 | 45 | 38 | 41 |
| Taylor .. | 23 | 8 | 4 | 2 | 8 | 3 | 4 | 9 |
| Trempeal:au | 27 | 13 | 9 | 9 | 7 | 4 | 18 | 8 |
| Vernon | 27 | 9 | 17 | 2 | 12 | 19 | 12 | 13 |
| Vilas | 10 | 4 | 9 | 2 | 5 | 1 | 1 | 4 |
| Walworth | 25 | 20 | 11 | 6 | 9 | 14 | 26 | 28 |
| Washburn | 13 | 6 | 2 | 3 | 4 | 5 | 5 | 7 |
| W abington | 31 | 10 | 10 | 4 | 4 | 11 | 12 | 16 |
| Waukesha | 43 | 23 | 12 | 5 | 24 | 41 | 30 | 49 |
| Waupaca .. | 28 | 20 | 24 | 11 | 13 | 20 | 15 | 26 |
| Waushara | 32 | 11 | 11 | 2 | 7 | 7 | 6 | 9 |
| Winnebago. | 75 | 52 | 39 | 17 | 40 | 55 | 78 | 70 |
| Wood ... | 48 | 16 | 15 | 6 | 15 | 26 | 19 | 23 |
| Total | 3,159 | 2,156 | 1,550 | 647 | 1,144 | 1,900 | 1,849 | 1,999 |

TABLE NO. 16.-SHOWING DEATHS BY COUNTIES DURING CALENDAR YEAR 191], ARRANGED AOCORDING TO COLOR, SEX, CONJUGAL CONDITION AND AGE GROUPS.-Con.

| Counties. | Age Grouping. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 50-59 | 60-69 | 70-79 | 80-89 | 93-99 | 100+ | Age un known. |
| Adams | 4 | 7 | 13 | 13 | 4 |  |  |
| Ashland | 40 | 27 | 22 | 9 | 3 | 1 | 7 |
| Barron | 27 | 43 | 43 | 13 | 2 |  |  |
| Bayfleld | 12 | 10 | 9 | 7 | 2 | 1 | 5 |
| Brown | 56 | 88 | 87 | 63 | 15 |  |  |
| Buffalo | 9 | 13 | 36 | 22 | 1 | 1 | 1 |
| Burnett | 7 | 9 | 3 | 9 |  |  | 1 |
| Calumet | 18 | 22 | 28 | 21 | 4 |  |  |
| Chippewa | 29 | 46 | - 47 | 27 | 6 | 1 | 5 |
| Clark .. | 24 | 23 | 36 | 19 | 1 | 1 |  |
| Columbia | 34 | 44 | 61 | 49 | 8 | 1 |  |
| Crawford | 19 | 17 | 32 | 22 | 4 |  |  |
| Dane | 94 | 102 | 140 | 112 | 20 |  | 3 |
| Dodge | 53 | 70 | 91 | 84 | 16 |  |  |
| Door | 18 | 27 | 28 | 22 | 2 |  | 1 |
| Douglas | 57 | 44 | 34 | 16 | 3 |  |  |
| Dunn .. | 23 | 36 | 45 | 23 | 7 |  | 1 |
| Eau Claire | 47 | 53 | 63 | 32 | 6 |  | 3 |
| Florence | 1 | 7 | 4 | 1 |  |  | 1 |
| Fond du Lac. | 63 | 80 | 101 | 98 | 16 | 1 | 1 |
| Forest | 6 | 4 | 7 | 3 |  |  |  |
| Grant | 30 | 58 | 66 | 62 | 11 | 1 | 1 |
| Green . | 23 | 47 | 49 | 41 | 8 |  |  |
| Green Lake | 13 | 20 | 28 | 29 | 4 |  |  |
| Iowa | 16 | 28 | 33 | 35 |  |  |  |
| Iron .. | 8 | 6 | $\cdot 4$ | 2 | 1 |  | 1 |
| Jackson | 15 | 26 | 33 | 34 | 3 |  | 1 |
| Jefferson | 40 | 39 | 59 | 68 | 9 |  | 1 |
| Juneau | 15 | 29 | 34 | 22 | 8 | 1 | 1 |
| Kenosha | 46 | 39 | 44 | 22 | 10 |  | 1 |
| Kewaunee | 11 | 21 | 35 | 23 | 9 |  | 2 |
| La Crosse | 72 | 72 | 79 | 64 | 10 |  |  |
| Lafayette | 18 | 19 | 30 | 42 | 5 |  |  |
| Langlade . | 16 | 16 | 21 | 12 | 2 | 1 |  |
| Lincoln ... | 20 | 26 | 11 | 14 |  |  | 2 |
| Manitowoc | 41 | 45 | 85 | 70 | 10 | 1 | 1 |
| Marathon | 59 | 74 | 74 | 30 | 4 |  | 3 |
| Marinette . | 25 | 39 | 38 | 14 | 2 |  | 2 |
| Marquette | 11 | 10 | 23 | 26 | 2 |  | 1 |
| Milwauke | 584 | 637 | 669 | 358 | 50 | 2 | 1 |
| Monroe | 21 | 34 | 57 | 46 | 5 | 1 | 4 |
| Oconto | 14 | 21 | 37 | 24 | 4 |  | 1 |
| Oneida | 13 | 18 | $\begin{array}{r}3 \\ 8 \\ \hline\end{array}$ | 3 |  |  | 3 |
| Outagamie | 51 6 | 66 26 | 82 23 | 55 | 10 | ....... | 1 |
| Pepin .. | 5 | 26 9 | 11 | 22 | 3 2 4 |  | 1 |
| Pierce | 25 | 33 | 59 | 33 | 4 |  |  |
| Polk | 18 | 27 | 37 | 26 | 3 |  | 3 |
| Portage | 24 | 37 | 48 | 29 | 4 |  | 3 |
| Price ... | $\begin{array}{r}9 \\ 56 \\ \hline\end{array}$ | 10 91 | 5 95 | 4 |  |  | 1 |
| Richland | 56 21 | 91 22 | 95 26 | 65 28 | 5 4 | 1 | 2 |
| Rock | 77 | 91 | 110 | 84 | 4 |  | 8 |
| Rusk | 10 | 8 | 7 | 4 | 1 | 1 |  |
| St. Oroix | 34 | 34 | 44 | 31 | 7 |  |  |
| Sauk. | 34 | 47 | 81 | 63 | 7 |  | 1 |
| Sawyer . | 4 | 7 | 6 | 6 |  |  |  |
| Shawano. | 15 | 27 | 47 | 28 | 7 |  | 1 |
| Sheboygan | 61 | 76 | 96 | 79 | 13 |  | 4 |
| Tremperaleau | 6 | 10 | 15 | 8 | 1 |  | 1 |
| Trempealeau | 19 | 22 | 49 | 34 | 8 |  | 2 |
| Vernon ...... | 17 | 51 | 67 | 36 | 7 | 1 | 1 |
| Vilas .... | ${ }^{7}$ | 7 68 | 2 |  | 4 |  | $\stackrel{1}{2}$ |
| W ashburn | 8 | 4 | 8 | 7 | 4 |  |  |

'TABLE NO. 16.-SHOWING DEATHS BY COUNTIES DURING CALENDAR YEAR 1911, ARRANGED ACCORDING TO COLOR, SEX, CONJUGAL CONDITION AND AGE GROUPS.-Con.

| Counties. | Age Grouping. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 50-59 | 60-69 | 70-79 | 80-89 | 90-99 | 100+ | Age unknown. |
| Washington | 25 | 26 | 38 | 36 | 3 | 1 |  |
| Waukesha ... | 41 | 65 | 98 | 68 | 17 |  | ${ }_{6}$ |
| Waupaca | 24 | 61 | 79 | 63 | 7 | 2 | 1 |
| Waushara | 9 | 20 | 15 | 20 | 2 |  | 2 |
| Winnebago | 83 | 112 | 121 | 93 | 17 | 1 | 3 |
| Wood .... | 30 | 25 | 42 | 18 | 4 |  | 1 |
| Total | 2,502 | 3,173 | 3,816 | 2,742 | 428 | 20 | 100 |

TYPHOID FEVER.
For the calendar year of 1911, 319 deaths from typhoid fever were reported.
The following table shows the total deaths reported from this disease since 1908:

1908 ..... 322
1909 ..... 337
1910 ..... 558
1911 ..... 319

It is evident from an examination of the number of deaths from typhoid fever by calendar years, that there is only a slight variation in the number of deaths each year, with the exception of 1910, when typhoid fever was very prevalent and epidemic in several localities. The mortality and morbidity reports, showing the presence of this disease in a locality, makes it possible to investigate the cause of the outbreak at once and thus avoid, in many cases, a severe epidemic.

Circulars published by the State Board of Health, relating to the prevention and control of typhoid fever, are distributed, free of charge, to all citizens of the state.

In addition the State Laboratory of Hygiene is prepared to make examinations of water, if the water supply is suspected of being polluted. The Laboratory will also assist in locating typhoid carriers, if it is suspected that the disease is carried in this manner.

Anti-vaccine is distributed by the Laboratory, free of charge, to all physicians of the state.

When typhoid fever is present in the home, all excreta from the patient should be thoroughly disinfected before it is finally disposed of and every precaution taken to prevent a spread of the disease.

An additional precaution against contracting typhoid fever is found in the anti-typhoid vaccination. All citizens of the state should avail themselves of this treatment if there is any danger of exposure to the disease.

Out of a total of 319 deaths from typhoid fever in 1911, 317 were white, one black and one Indian.

Arranging the deaths by sex, it is shown that 186 were males and 133 females. This gives a male excess of 53 and probably represents the increased hazard of the male population to infection from this very easily preventable disease.

The conjugal condition of the decedents is as follows: single 175 , married 127, widowed 11, divorced 2, and conjugal condition unknown 4.

The nativity of the deceased in the deaths reported was as follows:
Wisconsin ..... 171
Other United States ..... 4.9
Germans ..... 22
Irish ..... 2
Great Britain ..... 6
Norwegians ..... '
Swedish ..... 5
Polish ..... 9
Welsh ..... 1
Danish ..... 4
Italians ..... 2
French ..... 2
Canadian ..... 2
Bohemian ..... 4
Russian ..... 5
Austrian ..... 10
Other foreign ..... 12
Unknown ..... 6
The following tabulation shows the distriaution by age groups:
Under one year ..... 1
From 1 to 4 years ..... 6
From 5 to 9 years
14
14
From 10 to 19 years ..... 73
From 20 to 29 years ..... 89
From 30 to 39 years ..... 70
From 40 to 49 years
25
25
From 50 to 59 years ..... 24
From 60 to 69 years ..... 8
From 70 to 79 years ..... 6
From 80 to 89 years ..... 1
Age unknown ..... 2

The death rate from typhoid fever per 100,000 population for the state as a whole is 13 . The rate for the urban population, which includes all cities of 2,000 population or more is 18 per 100,000 population, and the rate for the rural section, which includes all of the state
with the exception of the urban population is 9 per 100,000 population. It, therefore, appears that typhoid fever was twice as prevalent in the urban centers as in the rural districts.

## SCARLET FEVER.

The deaths reported from scarlet fever by calendar years since the adoption of the uniform registration law are as follows:
1908 ..... 133
1909 ..... 372
1910 ..... 304
1911 ..... 225

This hows that there were fewer deaths from scarlet fever in 1911 than for either 1909 or 1910 . The work which is now being. done in the medical supervision of schools, especially when scarlet fever is present in the locality, has assisted greatly in reducing the number of cases of this disease and consequently there is a corresponding reduction in the number of deaths.

Arranging the deaths reported according to the color of the deceased, it is shown that 224 were white and in one case the color was unknown or not stāted.

104 were males and 121 females.
215 were single and 10 married.
The following table shows the distribution of deaths from scarlet fever by age groups:

Under two months ................................................. $\quad 1$
Under one year ........................................................ 19
From 1 to 4 years ............................................... 144
From 5 to 9 years ................................................. 21
*rom 10 to 19 years ..................................................... 25
From 20 to 29 years ..................................................... 6
From 30 to 39 years ................................................. 7
From 40 to 49 years ................................................. 1
From 60 to 69 years ..................................................... 1

## MEASLES.

For 1911, 248 deaths from measles were recorded. During 1908, 96 deaths were reported from this disease; for 1909, 170; and for 1910, 158.

The apparent steady increase in the number of deaths from this easily preventable disease is a matter of serious considoration. First of all parents must be educated to understand that measles is a dangerous disease and that every possible precaution should be taken to prevent the exposure of their children.

The state law now provides that all homes where a disease exists, which has been designated by the State Board of Health as dangerous and contagious, shall be placarded during the presence of such disease in the home. Under the provisions of this law typhoid fever, measles and whooping-cough must be placarded so as to notify the general public of the presence of such disease in the home. This, we believe, will aid very materially in preventing the needless exposure to these diseases of children whose parents are not aware of the presence of the disease in such home.

Measles is the most contagious of all infectious diseases, with the possible exception of smallpox in the unvaccinated, and consequently nearly every adult has, at one time or another, suffered from it. Those who reached adult life are, therefore, apt to look upon measles as a disease which every one must have, and are, consequently, apt to underrate its importance and to underestimate its dangers. In children under two years of age, the disease is exceedingly fatal. Among older children the death rate is lower and it is generally true that when death occurs it is due, not to measles itself, but to complications. But complications and untoward sequellae are so frequent in measles that the occurrence of the disease should be a matter of concern to the community.

The most common of these complications is pneumonia. Inflammation of the ear, necessitating mastoid operations, is also not infrequent, while bronchitis and inflammation of the eyes, sometimes of a very serious nature, are invariable accompaniments. It is thus evident that measles is a disease which should be avoided and the old-time idea that it is better to expose children to measles in order that they may contract it and be done with it should be discouraged. Cases of measles should be strictly isolated.

Many of the diseases of adult life are clearly traceable to the effects of the contagious diseases of childhood, It has been established to the satisfaction of the best teachers in America and Europe that all acute infections decrease one's general vitality to the extent that they lessen the surplus reserve which the later life strain has to draw upon. Thus whooping cough and measles pave the way to lung troubles; scarlet fever and smallpox to kidney troubles; diphtheria to heart trouble.

## DIPHTHERIA AND CROUP.

There were 417 deaths from diphtheria in 1908, 416 in 1909, 429 in 1910, and 332 in 1911.

The situation with reference to diphtheria is far from satisfactory when we realize that if antitoxin is administered in sufficient quantities in the early stages of the disease complete recovery is almost
invariable. The State Board of Health has made provision for supplying antitoxin free of charge to all indigent persons suffering from diphtheria. In some few cases the physician in attendance does not use antitoxin soon enough, or in large enough doses, but in a great majority of the cases, the parents do not engage the services of a physician as promptly as they should.

The tabulation of deaths from diphtheria by color is as follows: white 330 , Indian 1, and color unknown 1.

Classifying by sex, 173 were males and 159 females.
A tabulation by conjugal relation shows that 316 were single, 14 married, 1 widowed, and in 1 case the conjugal condition was unknown or not stated.

The following table shows the distribution of deaths from diphtheria and croup by age groups:

Under one year ............................................................... 20
From 1 to 4 years ..................................................... 136
From 5 to 9 years .................................................... 88
From 10 to 19 years ........................................................ 59
From 20 to 29 years .............................................................. 8





Age unknown .................................................................. 1

## WHOOPING COUGH.

There were 192 deaths from whooping cough in 1908, 225 in 1909, 200 in 1910, and 224 in 1911.
Table No. 20 shows the tabulation of deaths from whooping cough and other diseases by color, sex, conjugal relation and nativity.

The following table shows the distribution of deaths from whooping cough by age groups:

Under two months ..................................................... $\quad 27$
Under one year ............................................................. 109
From 1 to 4 years..........................................
From 5 to 9 years ......................................................... 10
From 10 to 19 years...............................................
This tabulation shows that the deaths from whooping cough are confined entirely to very young children. Every precaution should be taken to prevent a spread of whooping cough among young children, and the state law now requires that all homes where the disease exists must be placarded. This does not imply quarantine but is merely for the purpose of notifying the general public of the pre-
sence of the disease in the home. Children from homes where whooping cough exists are prohibited from attending school while the disease is present in the family.

All teachers should coobperate with the local health officers in the enforcement of these regulations.

## TUBERCULOSIS.

The tabulation of deaths from tuberculosis by calendar years since 1908 is as follows:

1908 ......................................................................... 2,509
1909 ........................................................................
1910 ...................................................................... . $2,40$. . 2, .
1911 .................................................................... . 2,405
Table No. 20 shows the total deaths from tuberculosis during 1911, according to sex, conjugal condition and nativity.

The tabulation by color is as follows: white 2,380 , black 10 , Indian 28 , and color unknown or not stated 7 .

The sex of the decedents is as follows: male 1,269, females 1,136 .
Classifying the conjugal condition it is shown that 1,140 were single, 1,067 married, 154 widowed, 20 divorced, and in 24 case $_{S}$ the conjugal condition was unknown or not stated.

The nativity of the decedents is as follows:
Born in Wisconsin ..... 1,363
Other United States ..... 350
German ..... 239
Irish ..... 43
Great Britain ..... 31
Norway ..... '97
Sweden ..... 46
Polish ..... 37
Welsh ..... 5
Danish ..... 17
Italian ..... 3
French ..... 1
Canadian ..... 24
Bohemian ..... 23
Russian ..... 13
Austrian ..... 42
Other foreign countries ..... 52
Nativity of deaeased unknown or not stated. ..... 39

The following table shows the distribution of deaths from tuberculosos by age groups.
Under two months ..... 4
Under one year ..... 34
From 1 to 4 years ..... 77
From 5 to 9 years ..... 41


The death rate for the state as a whole from tuberculosis, per 100,000 population, for 1911 , is 103 . The urban rate, which includes all deaths in cities of 2,000 population or more, is 120 and the rural rate 89. It therefore appears as might be expected that tuberculosis is much more prevalent in the urban centers than in the rural districts on account of the danger from contact infection and also from living in infected homes. When a sufficient number of county sanatoria, for the cure and treatment of tuberculosis in the advanced stages have been established, we confidently expect that there will be a rapid decline in the number of cases reported and also in the number of deaths from this disease.

## PNEUMONIA.

2,227 deaths from pneumonia were reported during 1911.
Next to tuberulosis, pneumonia is the most important single cause of death. On account of inaccuracies in stating the cause of death, so as to determine the sequence of diseases in producing death, we are lead to believe that many deaths are reported from pneumonia as the primary cause which should be reported from some other disease in which case pneumonia should be given as a secondary or contributory cause of death. This is especially true in cases of death from measles, whooping cough, scarlet fever and other various acute infections.

The color of the decedents in each case is as follows: white 2,202, black 4, Indian 12, and color unknown or not stated 9.

Classifying the deaths by sex, it is shown that 1,265 were males and 962 females.

1,086 were single, 691 married, 422 widowed, 14 divorced, and in 14 other cases the conjugal condition was unknown or not stated.

The death rate from pneumonia for the state as a whole is 95 per 100,000 population. The urban rate, which includes all deaths reported from pneumonia in cities having a population of 2,000 or more is 119 and the rural rate is 76 . This shows a much larger death rate from pneumonia for the urban centers.

## DIARRHEA AND ENTERITIS.

There were 1,233 deaths from diarrhea and enteritis, under two years of age in 1911.
Compared with the rates for 1908, 1909, and 1910, there has been a steady decline in the number of deaths reported from this easily preventable disease. This proves that the educational campaign which has been carried on in Wisconsin relative to the proper feeding of young children has not been in vain, and that it will continue to be more productive in the saving of child life after the methods of prevention are better understood and more generally practiced.

A distribution of deaths by months for 1911 is as follows:
January ................................................................. ${ }^{77}$
February .............................................................................. ${ }_{69}$
March ............................................................................... ${ }_{73}$








This shows that diarrhea and enteritis among children, under two years of age, is especially prevalent during the months of July, August and September. Improper feeding is probably accountable for a great majority of the deaths from this disease.

1,013 deaths from this disease were among young children under one year of age. This is significant and indicates that great care must be exercised in the proper feeding of young children. In nearly all of the poorly nourished, diseased children today during the first year of life thousands of them succumb at an early age from conditions directly traceable to the first year of life.. It is evident, therefore, that if measures are adopted to reduce the high death rate among young infants, there will be an appreciable decline in the rate for other age groups. The cause of infant mortality is a subject for serious consideration on account of the great loss entailed and also because $70 \%$ of the deaths are preventable.
Infantile diarrhea, congenital debility, measles and whooping cough are responsible for at least $60 \%$ of the deaths among children under one year of age. About $50 \%$ of the deaths from these four causes is due to diarrheal ailments, a result of insufficient, improper or bad milk feeding.

The death rate from diarrhea and entritis, under two years of age, for the state as a whole, is 52 per 100,000 population. The urban rate is 63 per 100,000 and the rural rate 44.

## MENINGITIS.

There were 465 deaths from meningitis in 1908,382 in 1909, 478 in 1910, and 437 in 1911.

This shows a decline in the number of deaths reported which is probably due, in a large measure, to the enforcement of better quarantine regulations. The State Board of Health has adopted and published a rule which requires that all cases of meningitis must be isolated from the rest of the family and quarantined for fourteen days after the first appearance of the disease. Persons living in a house where cerebral spinal meningitis is present are prohibited from mingling with the general public until the disease has terminated.

The color of the decedents in each case is as follows: white 432, black 1, Indian 3, and color unknown 1.

Classifying the deaths by sex, 254 were males and 183 females.
The tabulation by conjugal condition shows that 374 were single, 47 married, 10 widowed, 2 divorced, and in four cases the conjugal condition was unknown.

The following table shows the distribution of deaths from meningitis by age groups:
Under two months ..... 28
Under one year ..... 104
From 1 to 4 years ..... 123
From 5 to 9 years ..... 48
From 10 to 19 years
34
34
From 20 to 29 years
30
30
From 30 to 39 years
18
18
From 40 to 49 years ..... 15
From 50 to 59 years
16
16
From 60 to 69 years
12
12
From 70 to 79 years ..... 5
From 80 to 89 years ..... 3
Age unknown ..... 1

## CANCER

During 1908, 1,513 deaths from cancer were recorded. For 1909 there were 1,645 deaths; for 1910, 1,539; and for 1911, 1,622.

1,611 of the persons who died from this disease were white, 5 black, 2 Indian, and in 4 cases the color was unknown or not stated. 790 were males and 832 females.
Table No. 20, which shows the deaths by sex, conjugal condition, etc., gives the conjugal condition as follows: single 144, married 989, widowed 459 , divorced 12 , and unknown 18.

# The deaths from cancer by nativity is as follows: 

Born in Wisconsin340Other United States ..... 281
Germany ..... 549
Ireland ..... 82
Great Britain ..... 62
Norwegian ..... 95
Swedish ..... 39
Polish ..... 23
Welsh ..... 3
Danish ..... 16
Italian
43
43
Canadian
Canadian .....
15 .....
15
Bohemian
Bohemian
10
10
Russian
Russian
11
11
Austrian
36
36
Other foreign countries
Other foreign countries ..... 14
The following is the tabulation of deaths from cancer by age groups: ..... 2
From 1 to 4 years
From 1 to 4 years
From 5 to. 9 years ..... 1
From 10 to 19 years ..... 5
From 20 to 29 years ..... 14 ..... 14 ..... 62
From 30 to 39 years
From 30 to 39 years
From 40 to 49 years ..... 186
From 50 to 59 years ..... 369
From 60 to 69 years ..... 480 ..... 480 ..... 346
From 70 to 79 years
From 70 to 79 years
From 80 to 89 years ..... 139
From 90 to 99 years ..... 16

## SUICIDES.

For the year ending Dec. 31, 1911, 281 deaths from suicide were reported.

The tabulation of deaths from suicide by sex is as follows: males 229; females 52 .

## ACCIDENTAL DEATHS.

During 1911, 1,490 deaths from external causes other than suicides and homicides were reported.

The following table shows the total accidental deaths by causes during 1911:
Poisoning by food ..... 22
Other acute poisonings ..... 40
Conflagration ..... 29
Burns (conflagration excepted) ..... 82
Absorption of deleterious gases (conflagration excepted) ..... 18 ..... 242
Accidental drowning
Accidental drowning
Traumatism by firearms ..... 79
Traumatism by cutting or piercing instruments ..... 2
Traumatism by fall ..... 146
Traumatism in mines and quarries ..... 3
Traumatism by machines ..... 25
Traumatism by other crushing ..... 423
Injuries by animals ..... 29
Excessive cold ..... 12
Effects of heat ..... 47
Lightning ..... 17
Electricity (lightning excepted) ..... 10
Fractures (cause not specified) ..... 161
Other external violence ..... 103

TABLE NO．17．－SHOWING OAUSES OF DEATHS IN WISCONSIN DURING THE CALENDAR YEAR OF 1911，ARRANGED BY MONTHS．

| Name of Disease． | Deaths by Months． |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\underset{\sim}{\dot{4}}$ | 寝 | $\stackrel{\text { • }}{\substack{\text { B }}}$ | $\stackrel{3}{3}$ | 萵 |  | 0 <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 | $\begin{array}{c\|} \dot{4} \\ \frac{0}{g} \\ \hline d \\ \Delta \\ 0 \\ z \end{array}$ | 迢 | $\begin{aligned} & \dot{E} \\ & \dot{B} \\ & \dot{E} \\ & \text { 合 } \\ & \stackrel{\rightharpoonup}{E} \end{aligned}$ |
| I |  |  |  |  |  |  |  |  |  |  |  |  |  |
| General diseases： | 31 | 23 | 15 | 29 | 23 | 20 | 22 | 25 | 30 | 26 | 49 | 26 | ．． |
| Tyjhoid fever． | 31 | 23 | 1. | 29 | 23 | 20 | 2 |  |  | ．．． |  |  |  |
| Relapsing fever |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Malaria ．．．．．．． |  | 1 | 2 | 1 | ．．． |  |  |  |  |  |  | 1 |  |
| Smallpox |  |  | 1 |  | －1 |  |  |  |  |  | 5 | $\stackrel{1}{8}$ |  |
| Measles | 17 | 22 | 41 | 48 | 54 | 27 | 11 | 6 | 7 | 2 | ${ }^{5}$ | 8 | $\cdots$ |
| Scarlet fever． | 25 | 24 | 28 | 21 | 30 | 12 | 17 | 7 | 9 19 | 14 | 12 | 26 9 |  |
| Whooping cough | 22 | 24 | 29 | 29 | 28 | 18 | 17 | 14. | 19 | 88 | ${ }^{7} 7$ | 34 |  |
| Diphtheria and croup．．．．．．．． | 46 | 35 | 28 | 26 | 19 | 20 | 11 | 25 | 24 | 37 | 27 | 34 11 |  |
| Influenza ．．．．．．．．．．．．．．．．．．．． | 60 | 105 | 81 | 49 | 24 | 9 | 3 | 4 | 1 | 4 | 9 | 1 |  |
| Miliary fever |  |  |  | 1 |  | ． | ． |  |  |  |  | 1 |  |
| Asiatic cholera |  |  |  |  |  |  |  | 2 | 1 |  | 3 |  |  |
| Cholera nostras |  | 1 | 1 | $\stackrel{\square}{5}$ | 2 | 1 | 4 | 2 12 | 15 | 13 | 6 | $\ddot{2}$ |  |
| Dysentery ．．．．．． | 5 | 4 |  | 5 | 1 | 4 | 3 | 12 | 15 | 13 | 6 | 2 |  |
| Plague ．．． |  |  |  |  |  |  | ．．．． |  |  |  |  |  |  |
| Yellow fever |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Leprosy ． |  |  | 1 |  |  |  |  |  | 2 | 4 | 7 | 2 |  |
| Erysipelas | 18 | 12 | 13 | 12 | 13 | 7 | 4 | 1 | 2 | 4 | 7 | 1 | $\ldots$ |
| Other epidemic diseases．．．．．． | 2 | 1 | 1 | 1 |  |  | 1 |  |  |  |  |  |  |
| Purulent infection and septi－ caemia | 10 | 8 | 5 | 8 | 17 | 19 | 15 | 6 | 6 | 4 | 10 | 7 | ．．． |
| Glanders ．．．．．．．．．．．．．．．．．．．．．．． |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Anthrax ． |  |  |  |  |  |  | 1 |  |  |  |  |  |  |
| Rabies |  |  | 1 |  |  |  | 1 |  |  |  |  | 5 |  |
| Tetanus | 2 | 1 | 2 | 3 | 2 | 1 | 10 | 2 | 3 1 | 4 | 3 1 | 5 | $\ldots$ |
| Mycoses | 1 | ．．．．． | ．．．．． | ．．．．． |  |  | 1 | $\cdots$ | 2 | 1 |  | $\cdots$ | $\ldots$ |
| Pellagra ．．．．．．．．．．．．．．．．．．．．．． |  |  |  |  | 1 |  |  | 1 | 2 |  |  | 1 |  |
| Beriberi ${ }^{\text {a }}$ ．${ }^{\text {a }}$ ．．．．．．．．．．．．． |  |  |  |  |  |  |  |  | 146 | 118 | 131 | 140 | 1 |
| Tuberculosis of the lungs．．．． | 193 | 176 7 | 193 | 201 | 206 4 | 179 | 154 | 150 | 146 8 | 118 2 | 131 2 | 140 | 1 |
| Acute miliary tuberculosis．．． | 4 | 7 18 | 2 15 15 | 6 11 | 4 7 | 1 5 | 2 7 | 12 | r 12 | 13 | 4 | 7 |  |
| Tuberculous meningitis．．．．．． | 8 | 18 | 15 | 11 | 11 | 5 11 | 12 | 129 | 10 | 13 9 | 4 7 | 13 | $\ldots$ |
| Abdominal tuberculosis ．．．．． | 15 | 12 | 15 | 13 2 | 11 3 | 11 | 12 1 | 9 1 | 1 | 9 | 1 | 13 | $\cdots$ |
| Pott＇s disease | 1 | 1 | 2 | 2 | 3 | 1 | 1 | 1 | 1 |  | 1 | 2 | ． |
| White swellings ．．．．．．．．．．．．． |  | 2 | 1 | 4 |  |  |  | 1 |  | 3 | 2 | 3 |  |
| Tuberculosis of other organs | 3 | 2 | 5 | 4 | 5 8 | 3 | 4 11 | 4 | 4 | 3 | 3 | 4 |  |
| Disseminated tuberculosis．．．． | 2 | $\cdots$ | 4 | 6 | 8 | 3 | 11 | 4 | 4 | 3 | 3 | 4 |  |
| Rickets ．．．．．．．．．．．．．．．．．．．．．．． | 3 | 1 | 3 | 1 | 1 | 1 | 1 | 5 | 2 | 2 |  |  |  |
| Syphilis ．．．．．．．．．．．．．．．．． | 7 | 7 | 9 | 5 | 2 | 1 | 3 | 3 | 3 | 3 | 9 | 3 | ．． |
| Gonococcus infection．．．．．．．．． | 1 | 1 | 1 |  |  |  |  |  |  | 3 <br> 3 |  | 4 |  |
| C＇ancer of the buccal cavity．． | 3 | － 3 | 3 | $\stackrel{2}{57}$ | 7 74 | 1 59 | 3 76 | 4 66 | 3 64 | 85 | 66 | 4 68 |  |
| Cancer of the stomach，liver | 73 | 59 | 77 | 57 | 74 | 59 | 76 | 66 | 64 | 85 | 66 | 68 |  |
| Cancer of the peritoneum，in－ testines，rectum．．．．．．．．．．．．．． | 13 | 20 | 16 | 15 | 14 | 16 | 17 | 19 | 19 | 12 | 6 | 25 |  |
| Cancer of the female genital organs | 10 | 14 | 10 | 20 | 11 | 11 | 6 | 18 | 17 | 8 | 7 | 8 |  |
| Cancer of the breast．．．．．．．． | 3 | 10 | 8 | 12 | 9 | 7 | 7 | 11 | 9 | 6 | 6 | 11 |  |
| Cancer of the skin．．．．．．．．．．．． | 5 | 7 | 4 | 4 | 4 | 1 | 7 | 2 | 5 | 4 | 3 | 4 | － |
| Cancer of other organs or of organs not specifled．．．．．．．． | 20 | 21 | 26 | 26 | 23 | 20 | 18 | 32 | 21 | 26 | 28 | 19 |  |
| Other tumors（tumors of the female gefital organs ex－ cepted） | 9 | 9 | 6 | 7 | 9 | 12 | 4 | 12 | 9 | 7 | $\begin{array}{r}6 \\ \hline 19\end{array}$ | 12 |  |
| Acute articular rheumatism． | 10 | 15 | 18 | 15 | 19 | 19 | 18 | 9 | 9 | 11 | 19 | 8 |  |
| Chronic rheumatism and gout....... ．．．．．．．．．．．．．．．．．．．．． | 7 | 9 | 6 | 13 | 10 | 8 | 7 | 8 | 10 | 3 | 3 | 6 | － |
| Scurvy ．．．．．．．．．．．．．．．．．．．．．．．． |  | 31 | 1 |  | 1 |  |  |  |  | 26 | 37 | 16 |  |
| Diabetes ．．．．．． | 29 | 31 | 26 | 29 | 24 | 13 4 | 16 | 20 | 31 5 | 26 4 | 37 3 | 5 |  |
| Exophthalmic goitre．．．．．．．． | 3 | 5 | 8 | 4 | 3 | 4 | 5 | 5 | 5 | 4 | 3 | 5 |  |
| Addison＇s disease ．．．．．．．．．．．． | 1 | 3 | 1 | 1 |  | － 3 | $\frac{1}{5}$ | 4 | 5 |  |  | 4 |  |
| Leuchaemia ．．．．．．．．．．．．．．．．．．． | ． 2 | 3 | 4 | 4 |  | 1 | 5 | 4 | 5 | 2 | 2 | 4 |  |

TABLE NO. 17.-SHOWING CAUSES OF DEATHS IN WISCONSIN DURING THE CALENDAR


TABLE NO. 17.-SHOWING CAUSES OF DEATHS IN WISCONSIN DURING THE CALENDAR YEAR OF 1911, ARRANGED BY MONTHS.

| Name of Disease. | Deaths by Months. |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 获 | 垵 | ¢ | $\frac{\dot{3}}{3}$ |  |  | $\begin{aligned} & \dot{\text { ®}} \\ & \text { O} \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ | $\begin{aligned} & \text { \& } \\ & \text { © } \\ & \text { B } \\ & 0 \\ & 0 \\ & \text { Z } \end{aligned}$ |  | E E है है |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Acute bronchitis $\ldots$.......... Chronic bronchitis | 48 29 | 53 27 | 39 28 | 28 35 | 16 | - 8 | ${ }_{10}^{7}$ | 8 | 13 | 12 | 19 | 18 |  |
| Broncho pneumonia | 77 | 87 | 68 | 71 | 49 | 22 | 23 | 14 | 17 | 18 | 29 | 30 |  |
| Pneumonia | 293 | 251 | 261 | 225 | 165 | 61 | 45 | 42 | 62 | 75 | 133 | 109 | ... |
| Pleurisy | 6 | 8 | 8 | 11 | 6 | 5 | 7 | 3 | 4 | 4 | 7 | 9 | $\ldots$ |
| Pulmonary congestion, pulmonary apoplexy | 32 | 30 | 22 | 20 | 22 | 16 | 11 | 19 | 18 | 13 | 20 | 20 |  |
| Gangrene of the lung......... | 2 |  | 1 |  | 1 |  |  |  |  |  |  | $\stackrel{2}{9}$ |  |
| Asthma ............... | 11 | 11 | 8 | 12 3 | 10 | 6 1 | 5 2 | 7 1 | 4 2 | 5 2 | 12 2 | 9 2 |  |
| Pulmonary emphysema...... | 2 | 2 | 1 | 3 |  | 1 | 2 | 1 | 2 | 2 | 2 | 2 |  |
| tory system (tuberculosis excepted) | 8 | 2 | 2 | 8 | 7 | 5 | 1 | 3 | 5 | 1 | 2 | 4 | $\ldots$ |
| Diseases of the digestive system: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Diseases of the mouth and annexa | 1 | 2 | 2 |  |  |  | 1 | 2 | 3 | 1 | 1 | 1 | $\ldots$ |
| Diseases of the pharynx..... | 5 | 2 | 8 | 2 | 3 | 2 | 4 | 4 | 3 | 7 | 1 | 7 |  |
| Diseases of the oesophagus.. | 1 | 1 | 3 | 1 | 3 | 2 5 | 3 | 2 | 4 | $\stackrel{2}{5}$ | 6 | 5 |  |
| Uleer of the stomach......... <br> Ul <br> Other diseases of the stom- |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Diarrhea and enteritis (under two years) | 77 | 58 | 69 | 73 | 79 | 70 | 139 | 219 | 220 | 116 | 57 | 56 | $\ldots$ |
| Diarrhea and enteritis (two years and over) | 14 | 11 | 8 | 15 | 10 | 17 | 18 | 13 | 20 | 12 | 10 | 7 | $\ldots$ |
| Ankylostomiasis ................ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intestinal parasites ........ | ${ }_{2}^{2}$ | 1 | 36 | 26 | 26 | 26 | 28 | 22 | 18 | 12 | 20 | 19 |  |
| Appendicitis and typhlitis... 18 22 36 26 26 26 28 22 18 12 20 19 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hernia, intestinal obstruc- tion | 21 | 21 | 20 | 24 | 21 | 18 | 23 | 23 | 28 | 24 | 25 | 19 | $\ldots$ |
| Other diseases of the intes- tines.........................$~$ | 9 | 7 | 9 | 9 | 9 | 8 | 4 | 5 | 10 | 7 | 5 | 5 | $\ldots$ |
| liver |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hydatid tumor of the liver.. |  | 1 |  |  | 1 |  |  |  |  |  |  |  |  |
| Oirrhosis of the liver........ | 34 | 25 | 24 | 30 | 24 | 19 | 25 | 16 | 24 | 8 | 31 | 5 |  |
| Biliary calculi ............... | 7 | 4 | 4 | $\stackrel{2}{9}$ | 7 | 4 | $\stackrel{2}{16}$ | 3 | 4 <br> 8 | 16 | 6 5 | 2 9 1 |  |
| Other diseases of the liver... | 10 | 12 | 17 | 9 | 12 | 13 | 16 | 13 2 | 1 | 16 1 | . ${ }^{5}$ | 1 |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Other diseases of the digestive system (cancer and tuberculosis excepted) ....... | 4 | 4 | 3 | 3 | 4 |  | 3 |  | 1 | 1 |  | 3 |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nonvenereal diseases of the genito-urinary system and annexa: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Acute nephritis | 11 | 13 | 114 | 12 129 | 139 | 96 | 89 | ${ }_{96}^{11}$ | 114 | 98 | 112 | ${ }_{97}^{11}$ |  |
| Bright's disease ................ | 109 | 105 | 114 | 129 | 139 | 96 | 89 | 96 | 114 | 98 | 112 |  |  |
| Chyluria <br> Other diseases of the kidneys and annexa | 3 | 3 | 9 | 12 | 5 | 1 | 5 | 4 | 5 | 3 | 3 | 5 |  |
| Calculi of the urinary passages | 1 |  |  |  | . 1 |  |  |  |  |  |  |  |  |
| Diseases of the bladder ...... | 10 | 14 | 11 | 9 | - 4 | 7 |  | 5 | 12 | 11 | 6 | 6 |  |


| Name of Disease. | Deaths by Months. |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{aligned} & \text { di } \\ & \text { Di } \\ & \text { ה } \end{aligned}$ | 苞 | $\underset{\underset{z}{\mathrm{Z}}}{\stackrel{\rightharpoonup}{\circ}}$ | ¢ | 盛 |  |  | $\begin{aligned} & \dot{\oplus} \\ & \stackrel{0}{0} \\ & 0 \\ & 0 \\ & \hline 0 \end{aligned}$ |  |  |  |
| Diseases of the urethra, urireary abscess, etc........... I) seases of the prostate |  | 6 |  |  |  |  |  |  |  | 1 |  |  |  |
| Nonvenereal diseases of the male genital organs. | 10 | 6 | 10 | 6 | 13 | 4 | 11 | 9 | 12 | - 3 | 6 | 11 |  |
| Uterine haemorrhage (nonpuerperal) |  |  | 1 |  |  | 1 |  | 1 | 2 |  |  | 1 |  |
| Utterine tumor (noncancerous) | 2 |  | 1 | 2 | 1 | 3 |  |  | 2 |  | 2 | 1 |  |
| Other diseases of the uterus. | 3 | 1 |  | 1 | 4 | 1 | 2 |  | 4 | 3 | 2 | 1 |  |
| Cysts and other tumors of | 1 | 1 | 4 | 1 | 1 | 1 | 1 | 3 | 1 |  | 1 |  |  |
| Salpingitis and other diseases of the female genital organs | 1 |  | 5 | 3 | 4 |  |  |  | 1 | - | 1 |  |  |
| Nonpuerperal diseases of the breast (cancer excepted)... | 1 |  | 5 | 3 | 4 | 1 | 3 | 2 | 1 | 1 | 1 | 2 | $\ldots$ |
| VII |  |  |  |  |  |  |  |  |  |  |  |  |  |
| The puerperal state: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Accidents of pregnancy. | 3 | 3 | 3 | 1 | 1 |  |  | 2 | 2 | 4 |  | 3 |  |
| Puerperal hemorrhage.. | 3 | 3 | 2 | 1 | 2 | 5 | 3 | 3 | 4 | 1 | 3 | 4 |  |
| Other accidents of Jabor. | 6 | 4 | 4 | 4 | 3 | 3 | 1 |  | 2 | 3 | 2 | 6 |  |
| Puerperal septicaemia ........ | 13 | 19 | 19 | 17 | 20 | 13 | 6 | $\ddot{8}$ | 8 | 10 | 12 | 13 |  |
| Puerperal albuminuria and convulsions | 4 | 4 | 3 | 2 | 1 | 5 | 3 | 8 2 | 2 | 10 | $\ldots$ | 13 1 | $\ldots$ |
| Puerperal phlegmasia alba dolens, embolus, sudden death | 2 |  | 3 2 | 1 | 1 | 5 1 | 1 | 2 2 | 2 |  | 1 | 1 2 |  |
| Following childbirth (not otherwise defned) |  | 1 |  |  | 1 |  | 1 | 2 |  |  | 1 | 2 |  |
| Puerperal diseases of the breast ....................... |  |  |  |  |  |  |  |  |  | $\cdots$ | 1 |  |  |
| VIII |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Diseases of the skin and of the cellular tissue: <br> Gangrene |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Furuncle . | 3 1 | 6 | 9 | 6 | 2 | 4 | 9 3 | 8 | 5 | 1 | 1 | 5 | $\cdots$ |
| Acute abscess |  | 3 | 3 | 2 | 3 | 3 | 3 | 2 | 1 | 1 |  | 2 |  |
| Other diseases of the skin and annexa | 1 | 3 | 2 | 2 | 2 | 5 | 1 | 2 3 | 5 |  | 4 | 1 |  |
| IX |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Diseases of the bones and of the organs of locomotion: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Diseases of the bones (tuberculosis excepted) | 6 | 2 | 5 | 3 | 3 | 4 | 2 | 3 | 2 | 1 | 2 | 1 |  |
| Diseases of the joints (tuberculosis and rheumatism excepted) | 1 | 1 | 1 | 1 |  |  |  |  |  |  |  |  | $\ldots$ |
| Amputations ................ | 1 |  |  | 2 |  |  |  | 1 | 1 |  |  | 2 | $\cdots$ |
| Other diseases of the organs of locomotion $\qquad$ |  |  |  |  |  |  |  | 1 |  |  |  |  | $\ldots$ |
| X |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Malformations: <br> (still births not included).. <br> Congenital malformations | 26 | 21 | 26 | 24 | 17 | 12 | 22 | 25 | 23 | 13 | 15 | 15 | $\cdots$ |

TABLE NO. 17.-SHOWING OAUSES OF DEATHS IN WISCONSIN DURING THE CALENDAR YEAR OF 1911, ARRANGED BY MONTHS-Continued.


TABLE NO．18．－SHOWING CAUSES OF DEATH IN WISCONSIN DURING THE CALENDAR YEAR OF 1911，ARRANGED ACCORDING TO AGE GROUPING．

| Name of Disease． | Age Grouping． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\stackrel{\text { H }}{\sim}$ | 0 |  | à ¢े ले | 哃 | $\xrightarrow{8}$ | 令 | 8 <br>  | ¢ | $\begin{aligned} & \infty \\ & \stackrel{\infty}{1} \\ & \infty \end{aligned}$ | 边 | ＋ |  |
| $\boldsymbol{Y}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| General diseases： Typhoid fever |  | 1 | 6 | 14 | 73 | 89 | 70 | 25 | 24 | 8 | 6 | 1 |  |  | 2 |
| Typhus fever ． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Malaria ．．．．．．．． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Smallpox |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Measles | 15 | 47 | 109 | 28 | 27 | 9 | 6 | 4 | 1 | 1 | 1 |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Whooping cough | 27 | 109 | 77 | 10 | 1 |  |  |  |  |  |  |  |  |  |  |
| Diphtheria and croup | ， | 20 | 136 | 88 | 59 | 8 | 6 | 7 | 1 | 2 | 1 |  |  |  | 1 |
| Influenza ．．．．．． | 17 | 15 | 11 | 4 | 6 | 8 | 14 | 25 | 22 | 59 | 82 | 86 | 10 |  | 1 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Oholera nostras ．．．．．．．．．．．．．．．． |  | 1 | ${ }^{3}$ |  | 3 |  |  |  | 3 | 2 | 1 | 2 |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Tetanus | 8 | 3 | 1 |  | 9 | 1 | 5 | 5 | 2 | 1 |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pellagra <br> Beriberi |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{ll}\text { Tuberculosis of the lungs．．．．．} & 2\end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Acute miliary tuberculosis．．．．．． Tuberculous meningitis．．．．．．．． | $\cdots$ |  | 3 38 3 | 17 | 6 18 | 10 10 | 12 | 9 | 4 4 | 1 |  |  |  |  | 1 |
| Abdominal tuberculosis |  | 16 5 | 11 | 17 | 13 | 27 | 27 | 19 | 13 | 13 | 4 |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Tuberculosis of other organs．．． | 1 | 2 |  |  | 5 | 9 | 4 | 7 | 5 | 3 |  | I |  |  | 1 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Rickets ．．．． | 1 | 12 | 6 |  |  |  | 1 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cancer of the stomach，liver．．．Cancer of the peritoneum，in－ <br> testines，$\cdots \cdots$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Oancer of the breast ．．．．．．．．．．．． |  |  |  |  |  | 1 | 8 | 22 | 29 | 20 | 10 | 7 | 2 |  |  |
| Cancer of other organs or of organs not specified |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Other tumors（tumors of thefemale genital organs ex－ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Acute articular rheumatism．．．． | 1 |  | 8 | 17 | 36 | 21 | 15 | 18 | 24 | 11 | 16 | $\stackrel{5}{2}$ | 1 |  | 1 |
| $\begin{array}{ll}\text { Chronic } \\ \text { Scurvey } & \text { reumatism and gout．}\end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Exophthalmic goitre |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Leuchaemia |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## TABLE NO. 18 -SHOWING CAUSES OF DEATH IN WISCONSIN DURING THE CALENDAR YEAR OF 1911, ARRANGED AOCORDING TO AGE GROUPING-Continued.

| Name of Disease. | Age Grouping. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\xrightarrow{H}$ | 16 | $\stackrel{9}{1}$ | ¢ ¢ ¢ N | 吊 | $\begin{gathered} \text { or } \\ \text { な } \\ \hline \end{gathered}$ | $\begin{aligned} & \text { pr } \\ & \text { î } \end{aligned}$ | \% | \% | ¢ | \% | $\stackrel{+}{\text { + }}$ |  |
| Alcoholism (acute or chronic). |  |  |  |  |  | 8 | 32 | 29 | 17 | 10 | 3 | 1 |  |  | 5 |
| Chronic lead poisoning......... |  |  |  |  |  | 1 |  |  | 2 | 1 | 1 | 1 |  |  |  |
| Other chronic occupation poisonings |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |
| II |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Diseases of the nervous system and of the organs of special sense: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Encephalitis .................... | 1 | 7 | 3 |  | 2 | 5 | 9 | 3 | 4 | 8 |  | 1 |  |  |  |
| Meningitis . | 28 | 104 | 123 | 48 | 34 | 30 | 18 | 15 | 16 | 12 | 5 | 3 |  |  | 1 |
| Locomotor ataxia |  |  |  |  |  |  | 2 | 3 | 14 | 10 | 6 | 1 |  |  |  |
| Other diseases of the spinal cord | 3 | 4 | 14 | 5 | 4 | 8 | 9 | 9 | 17 | 15 | 19 | 7 |  |  |  |
| Cerebral plexy hemorrhage, apo- | 18 | 4 | 5 | 2 | 7 | 13 | 38 | 112 | 195 | 320 | 424 | 265 | 19 | 1 | 5 |
| Softening of the brain........ |  |  |  | 2 |  |  |  | 2 | 4 | 11 | 10 | 11 |  |  |  |
| Paralysis without specified cause ................................ |  | 1 |  | 1 | 5 | 2 | 8 | 22 | 33 | 76 | 100 | E 6 | 10 |  | 2 |
| General paralysis of the insane. |  |  |  |  | 1 | 6 | 24 | 20 | 27 | 14 | 12 | 7 | 1 |  |  |
| Other forms of mental alienation |  |  |  |  | 5 | 2 | 2 | 14 | 8 | 7 | 6 | 3 |  |  | 1 |
| Epilepsy | 2 | 3 | 4 |  | 16 | 14 | 16 | 10 | 7 | 10 | 5 | 5 |  |  |  |
| Convulsions (nonpuerperal) |  |  |  | 2 | 2 | 4 | 1 | 4 | 2 | 2 | 1 |  |  |  |  |
| Convulsions of infants...... | 235 | 119 | 41 |  |  |  |  |  |  |  |  |  |  |  |  |
| Chorea ..... |  | 1 | , | 3 | 1 | 2 |  |  |  | 2 |  |  |  |  |  |
| Neuralgia and neuritis........... |  |  | 2 |  |  |  | 2 |  | 3 | 6 | 7 | 2 |  |  |  |
| Other diseases of the nervous system | 2 | 3 | 7 | 4 | 8 | 10 | 5 | 16 | 13 | 15 | 9 | 6 |  |  | 1 |
| Diseases of the eyes and their annexa | 1 | , |  |  | , | 1 |  |  | 1 |  | 2 |  |  |  |  |
| Diseases of the ears............. |  | 2 | 1 | 1 | , | 1 | 1 | 1 | 1 | 1 | 2 |  |  |  |  |
| Diseases of the circulatory system: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pericarditis .................... | 2 |  |  | 3 |  | 1 | 1 | 1 | 4 | 4 | 4 | 3 |  |  |  |
| Acute endocarditis $\ldots$........... | 1 | 11 |  | 6 | 13 |  | 10 | 14 | 18 | 9 | 6 | 2 |  |  |  |
| Organic diseases of the heart.. Angina pretoris ............... | 19 | 11 | 6 | 12 | $\begin{array}{r}38 \\ 1 \\ \hline\end{array}$ | 48 | 78 3 | '23 | 270 | 359 | 428 | 228 | 21 |  | 5 |
| Angina prctoris <br> Diseases of the arteries, ather oma, aneurysm, etc |  |  | 1 |  | 1 | 3 | 3 | 10 | 18 | 30 58 | 32 136 | 12 | 2 19 |  |  |
| Embolism and thrombosis..... | 1 |  | 2 |  | 3 | 7 | 3 | 23 | 10 | 15 | 17 | 12 | 1 |  |  |
| Diseases of the veins (varices, hemorrhoids, phlebitis, etc.). | 1 |  |  |  |  | 2 | 1 | 1 | 2 | 15 | 1 | 12 |  |  |  |
| Diseases of the lymphatic system (lymphangitis, etc.). | 1 | 1 | 1 |  | 1 |  |  |  |  | 1 |  | 2 |  |  |  |
| Hemorrhage; other diseases of the circulatory system........ |  |  |  | 1 | 2 | 2 | 4 |  | 1 | 2 |  |  |  |  |  |
| Diseases of the respiratory system: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Dise: ises of the nasal fossae... |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Diseases of the larynx.......... Diseas ${ }^{\circ}$ S of the thyroid body. | . 4 | 10 | 13 | 4 | 1 | 1 | 2 | 1 | 1 | 1 | 5 | 1 |  |  |  |
| Acute bronchitis ....... | 44 | 81 | 33 |  | 2 |  | 3 | 3 | 3 | 18 | 32 | 32 | \% |  |  |
| Chronic bronchitis |  | 3 | 1 |  | 1 | 1 | 1 | , | 10 | 38 | 81 | 79 | 10 |  |  |
| Broncho-pneumonia | 59 | 137 | 108 | 12 | 4 | 6 | 2 | 11 | 10 | 33 | 73 | 44 | 15 |  |  |
| Pneumonia | 133 | 230 | 140 | 30 | 48 | 93 | 112 | 130 | 154 | 194 | 253 | 186 | 15 | 1 | 3 |
| Pleurisy ........................ |  |  | 5 | 2 | 6 | 4 | 6 | 6 | 16 | 13 | 14 | 6 |  |  |  |
| Pulmonary congestion, pul monary apoplexy |  | 10 | 4 | 2 | 3 | 10 | 9 | 22 | 19 | 41 | 49 | 41 | 6 |  |  |

TABLE NO．18．－SHOWING CAUSES OF DEATH IN WISOONSIN DURING THE CALENDAR YEAR OF 1911，ARRANGED ACCORDING TO AGE GROUPING－Continued．

| Name of Disease． | Age Grouping． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | ｜r｜rn | ＋ |  | $\stackrel{\stackrel{\rightharpoonup}{1}}{\square}$ | 令 | 号 | ＋ | 令 | 8 <br>  | 穴 | \％ | \％ | ＋ |  |
| Gangrene of the lung． |  |  | 1 | 1 |  | 2 | 1 |  | 1 |  |  |  |  |  |  |
| Asthma ．．．．．．．．．．．．． | 2 |  |  | 2 |  |  |  | 3 | 16 | 29 | 31 | 15 | 1 |  | 1 |
| Pulmonary emphysema ． | ． 1 |  | 1 | 2 |  | 1 | 3 | 1 | 1 | 7 | 2 | 1 |  |  |  |
| Other diseases of the respira－ tory system（tuberculosis ex－ cepted） | － 3 | 2 | 5 | 2 | 2 | 7 | 6 | 4 | 4 | 4 | 9 |  |  |  |  |
| Diseases of the digestive system： |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Diseases of the mouth and an－ nexa | ． | 2 | 1 | 1 | 1 | 1 |  | 1 |  |  |  |  | 1 |  |  |
| Diseases of the pharynx ．．．．．．． | － | 3 | 9 | 8 | 6 | 5 | 2 | 4 | 2 | 3 | 2 | 2 | 2 |  |  |
| Diseases of the oesophagus．．．． | ． 1 |  |  |  |  |  | 1 | 1 | 2 | 1 | 3 |  |  |  |  |
| Ulcer of the stomach．．．．．．．．．．． |  | 2 | 1 |  | 3 | 1 | 7 | 6 | 9 | 11 | 8 | 4 |  |  |  |
| Other diseases of the stomach （cancer excepted） | 71 | 71 | 22 | 7 | 3 | 10 | 7 | 18 | 23 | 35 | 37 | 35 | 1 |  | 1 |
| Diarrhea and enteritis（under two years |  |  | 220 |  |  |  |  |  |  |  |  |  |  |  |  |
| Diarrhea and enteritis（two years and over． $\qquad$ |  |  | 5 | 6 | 5 | 9 | 6 | 10 | 7 | 22 | 43 | 36 | 2 |  |  |
| Ankylostomiasis ．．．．．．．．．．．． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intestinal parasites |  |  | 1 | 1 |  | 1 |  |  | 1 | 1. |  | 1 |  |  |  |
| Appendicitis and typhlitis． |  | $?$ | 5 | 30 | 84 | 41 | 46 | 25 | 23 | 9 | 5 | 1 | 1 |  | 1 |
| Hernia，intestinal obstruction． | 17 | 28 | 13. | 11 | ， | 12 | 18 | 22 | 35 | 37 | 43 | 20 | 6 |  | 2 |
| Other diseases of the intestines | 9 | 1 | 3 | 2 | 2 | 2 | 7 | 8 | 12 | 14 | 10 | 15 | 2 |  |  |
| Acute yellow atrophy of the liver |  |  |  |  |  |  |  | 2 |  | 4 |  | 1 |  |  |  |
| Hydatid tumor of the liver |  | ．．． |  |  |  |  | 1 | 1 |  |  |  |  |  |  |  |
| Cirrhosis of the liver． |  |  |  | ．． | 3 | 3 | 26 | 47 | 83 | 65 | 60 | 18 |  |  |  |
| Biliary calculi | 1 | 1 |  |  |  |  | 5 | 8 | 10 | 10 | 9 | 5 |  |  |  |
| Other diseases of the liver．．．．． | 11 | 1 | 2 | 1 | 3 | 8 | 4 | 20 | 21 | 19 | 32 | 14 | 1 |  | 2 |
| Diseases of the spleen．．．．．．．．．． |  |  |  |  |  | ， |  |  |  |  |  |  | ．．． |  |  |
| Simple peral） peritonitis（nonpuer－ | 1 | 1 | 4 | 4 | 9 | 11 | 18 | 4 | 10 | 4 | 3 | 5 |  |  |  |
| Other diseases of the digestive system（cancer and tubercu－ losis excepted） | － |  | 1 |  | 2 | 2 | 5 | 2 | 7 | 3 | 1 | 2 |  |  |  |
| VI． <br> Nonvenereal diseases of the gen－ ito－urinary system and an－ nexa： |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Acute nephritis | 4 | 10 | 7 | 6 | 10 | 11 | 21 | 10 | 12 | 16 | 18 | 6 |  |  |  |
| Bright＇s disease |  |  |  | 9 | 29 | 49 | 78 | 121 | 192 | 274 | 367 | 158 | 19 |  | 2 |
| Chyluria ．．．．．．．．．．．．．．．．．．．．．． |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |
| Other diseases of the kidneys and annexa | 6 | 1 |  | 1 | $\cdots$ | 1 | 3 | 7 | 10 | 15 | 7 | 7 | 2 |  |  |
| Calculi of the urinary passages |  |  |  |  |  |  |  | 1 |  |  |  | 3 |  |  |  |
| Diseases of the bladder．．．．．．．．． | 1 |  | ．． | ．．． | 1 | 1 | 1 | 3 | 3 | 15 | 44 | 33 | 3 |  |  |
| Diseases of the urethra，uri－ nary abscess，etc．． | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Diseases of the prostate．．．．．．． |  |  |  |  |  |  |  |  | 4 | 16 | 41 | 35 | 5 |  |  |
| Nonvenereal diseases of the male genital organs．．．．．．．．．．． |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |
| Uterine hemorrhage（nonpuer－ peral） |  |  |  |  |  | 2 | 1 | 2 | 1 |  |  |  |  |  |  |
| Uterine tumor（noncancerous）． |  |  |  |  |  | ， | 2 | ， | 2 | 1 | 2 |  |  |  |  |
| Other diseases of the uterus．．． |  | ． | ．． | ．．． | 1 | 6 | 6 | 5 | 2 | 1 |  | 1 |  |  |  |
| Cysts and other tumors of the ovary |  |  |  |  |  | 2 | 4 | 6 |  | 2 |  | 1 |  |  |  |
| Salpingitis and other diseases of the female genital organs． |  |  |  |  | 3 | 11 | 4 | 3 |  |  |  | 2 |  |  |  |
| Nonpuerperal diseases of the breast（cancer excepted）．．．．． |  |  |  |  |  |  |  | 2 | 1 |  | 1 | 1 |  |  |  |

TABLE NO. 18.-SHOX ING CAUSES OF DEATH IN WISCONSIN DURING THE CALENDAR YEAR OF 1911. ARRANGED ACCORDING TO AGE GRDUPING-Continued.


15-B. H.


TABLE NO. 19-SHOWING THE TOTAL DEATHS IN EAOH COUNTY DURING THE CALENDAR YEAR OF 1911, ARRANGED ACCORDING TO THE CAUSES OF DEATH.

| Counties. | $\begin{aligned} & \dot{0} \\ & 0 \\ & \text { む } \\ & \text { O } \\ & 00 \\ & 0 \\ & 0 \\ & H \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Adams | 1 |  |  |  |  | 1 |  | 1 | 3 | 5 |  |  |
| Ashland | 13 | . |  |  |  | 2 | 2 | 2 | 5 | 1 |  |  |
| Barron | 3 |  |  |  |  | 1 | 1 |  | 4 | 9 |  |  |
| Bayfield | 2 |  |  |  |  | 2 | 1 | 6 | 5 |  |  |  |
| Brown | 6 |  |  |  |  | 11 | 6 | 5 | 11 | 9 | 1 |  |
| Buffalo | 2 |  |  |  |  | 3 |  |  | 1 | 3 |  |  |
| ${ }_{\text {Burnett }}$ |  |  |  |  |  |  | 1 | 2 | 4 |  |  |  |
| Calumet Chippewa | 2 5 |  |  |  |  | 3 | 1 | 2 | 1 | 1 |  |  |
| Clark ... | ${ }_{3}^{5}$ |  |  |  |  | $\stackrel{1}{3}$ | 4 | 5 | 10 | 5 |  |  |
| Columbia | 1 |  |  |  |  | 3 7 | 4 | 5 | 4 |  |  |  |
| Crawford |  |  |  | 1 |  | 1 | 1 | 1 | 1 | $\begin{array}{r}15 \\ 3 \\ \hline\end{array}$ |  |  |
| Dane | 3 |  |  |  |  | 13 | 6 | 4 | 4 | 3 19 |  |  |
| Dodge | 5 |  |  |  |  | 5 | 2 | $\stackrel{4}{2}$ | 5 | 19 | 1 |  |
| Door | 1 |  |  |  |  | 4 | 2 | 3 | ${ }_{2}^{5}$ | 4 | 1 |  |
| Douglas | 14 |  |  |  |  | 2 | 2 | 6 | 19 | 3 |  |  |
| Dunn .. | 2 |  |  |  |  |  |  | 1 | 19 2 | 8 |  |  |
| Eau Claire | 3 |  |  |  |  | 1 |  |  | 4 | 5 |  |  |
| Florence ....... |  |  |  |  |  |  |  |  |  | 1 |  |  |
| Fond du Lac.. | 4 |  |  |  |  |  | 5 | 4 | 11 | 8 |  |  |
| Grant . | 6 |  |  |  |  | 7 |  | 6 | 1 |  |  |  |
| Green | 1 |  |  |  |  | 1 | 1 | 5 | 2 | 6 |  |  |
| Green Lake |  |  |  |  |  | 3 | 1 | 1 |  | 3 |  |  |
| Iowa | 2 |  |  |  |  |  | 2 | 2 | 1 | 5 |  |  |
| Iron | 3 | . |  |  |  | $\cdots{ }^{1}$ | 2 | 2 | 1 | 5 |  |  |
| Jackson |  |  |  |  |  | 2 |  |  | 1 | 2 |  |  |
| Jefferson | 7 |  |  |  | 1 | 5 | 4 | 3 | 1. | 10 |  |  |
| Juneau | 2 |  |  |  |  | 4 |  | 1 | 1 | 10 7 |  |  |
| Kenosha | 12 |  |  |  |  | 4 | 5 | 7 | 4 | 2 |  |  |
| Kewaunee |  |  |  |  |  | 10 | 6 | 3 | 1 | 3 |  |  |
| La Crosse . | 5 |  |  |  |  |  | ${ }^{2}$ | 9 | 11 | 6 |  |  |
| Lafayette . |  |  |  |  |  | 1 |  |  | 1 | 4 |  |  |
| Langlade | 1 |  |  |  |  |  | 1 |  | 1 | 1 |  |  |
| Lincoln ... | 4 |  |  |  |  |  | 5 |  | 3 | 2 |  |  |
| Manitowoc | 7 |  |  |  |  |  | 3 | 5 | 1 | 2 |  |  |
| Marinette | 12 |  |  |  |  | 11 4 | 16 1 | 8 | 15 | 7 |  |  |
| Marquette | 2 |  |  |  |  | 4 | 1 | $\begin{array}{r}11 \\ 3 \\ \hline\end{array}$ | 1 2 | 1 |  |  |
| Milwaukee | 100 |  |  |  |  |  | 66 | $\stackrel{3}{2}$ | 98 | 22 |  |  |
| Monroe |  |  |  |  |  | 8 | $\stackrel{6}{3}$ | 22 4 | $\stackrel{9}{5}$ | 22 |  |  |
| Oconto | 2 |  |  |  |  | 7 | 2 | 10 | $\stackrel{5}{2}$ | 5 |  |  |
| Oneida | 1 |  |  |  |  | 1 |  | 1 |  | 1 |  |  |
| Outagamie | 6 |  |  | 1 |  | 5 | $\ddot{5}$ | 3 | 1 | 2 |  |  |
| Ozaukee | 1 |  |  |  |  |  | 1 | 1 | 2 | 1 |  |  |
| Pepin |  |  |  |  |  |  | 1 |  |  | 5 |  |  |
| Pierce | 1 |  |  |  |  |  | 1 |  | 1 | 5 |  |  |
| Polk | 2 |  |  |  |  | 1 | 2 | 2 |  | 4 |  |  |
| Portage | 3 |  |  |  |  | 3 | 3 | 10 | 9 | 6 |  |  |
| Price ... | 3 |  |  |  |  |  | 5 |  |  |  |  |  |
| Racine | 14 |  |  |  |  |  | 5 | 2 | 12 | 19 |  |  |
| Richland | 5 |  |  |  |  | 5 | 2 |  | 2 | 5 |  |  |
| Rock | 1 |  |  |  |  | 16 |  | 12 | 6 | 6 |  |  |
| Rusk |  |  |  |  |  | 4 | 1 | 1 | 1 | 2 |  |  |
| St. Oroix. | 1 |  |  |  |  |  | 1 |  | 4 | 7 |  |  |
| Sauk . | 2 |  |  |  |  | 4 |  | 2 | 1 | 9 |  |  |
| Shawano ........ | 1 |  |  |  |  |  |  |  | 1 |  |  |  |
| Sheboygan ..... | 5 |  |  |  |  | 1 | 3 7 | $\stackrel{6}{15}$ | 4 2 | 5 |  |  |
| Taylor ........ | 1 |  |  | 1 |  |  | 1 |  | 1 | 1 |  |  |
| Trempealeau... | 2 |  |  |  |  |  |  | 3 |  | 12 |  |  |
| Vernon ........ | 3 |  |  |  |  | 9 |  | 1 | ... | 9 |  |  |

IABLE NO. 19.-SHOWING THE TOTAL DEATHS IN EAOH COUNTY DURING THE CALENDAR YEAR OF 1911, ARRANGED ACOORDING TO THE CAUSES OF DEATH-Continued.

| Counties. |  |  |  |  |  |  |  | 80 0 0 0 0 0 0 0 0 0 0 |  | ※ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Vilas |  |  |  |  |  | 2 | 2 |  | 1 |  |  |  |
| Walworth | 1 |  |  |  |  | 6 | 1 | 1 | 3 | 16 |  |  |
| W ashburn . |  |  |  |  |  |  |  |  | 4 | 1 |  |  |
| Washington | 1 |  |  |  |  |  | 3 |  | ${ }_{2}^{2}$ | $\stackrel{2}{9}$ |  |  |
| Waukesha | 1 |  |  |  |  | 2 | 5 |  | 3 | 9 |  |  |
| Waupaca . | 2 |  |  |  |  | 5 | 7 | 6 | 4 | 12 |  |  |
| Waushara |  |  |  |  |  | 2 | 1 | 6 | 1 | 3 |  |  |
| Winnebago | 10 |  |  |  |  | 18 | ${ }_{3}$ | 3 | 13 | 5 |  |  |
| Wood .... | 4 |  |  | 1 | 1 | 2 | 3 | 2 | 1 |  |  |  |
| Total | 319 |  |  | 4 | 2 | 248 | 225 | 224 | 332 | 360 | 2 |  |

'I'ABLE NO. 19.-SHOWING THE TOTAL DEATHS IN EACH COUNTY DURTNG THF OALENDAR YEAR OF 1911, ARRANGED ACCORDING TO THE CAUSES OF DEATH-Continued.

| Counties. |  | $\begin{aligned} & \dot{0} \\ & \stackrel{\rightharpoonup}{\Phi} \\ & \stackrel{0}{0} \\ & 0 \\ & \stackrel{N}{n} \end{aligned}$ |  | $$ |  |  |  |  |  |  |  |  | 苞 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Adams |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ashland |  |  |  |  |  | 3 |  | 1 |  |  |  |  |  |
| Barron | 1 | 1 |  |  |  | 2 |  |  |  |  |  |  |  |
| Bayfield |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Brown | 1 |  |  |  |  | 1 |  | ${ }_{3}^{3}$ |  | . . |  |  |  |
| Buffalo <br> Burnett |  |  |  |  |  |  |  | 2 | . |  |  |  |  |
| Burnett . <br> Calumet | 1 |  |  |  |  |  | 1 |  |  |  |  |  |  |
| Chippewa | 1 |  |  |  |  | 1 |  | 1 |  |  |  |  |  |
| Clark ... | 1 | 2 |  |  |  | 3 |  | 2 |  |  |  |  |  |
| Columbia |  |  |  |  |  | 3 |  | 1 |  |  |  | 1 |  |
| Crawford |  |  |  |  |  | 1 |  |  |  |  |  | 1 |  |
|  |  |  |  |  |  | 5 |  | $6$ |  |  |  |  |  |
| Dodge | 1 | 1 |  |  |  | 1 | 1 | $3$ |  |  |  | 1 |  |
| Door Douglas |  | 1 |  |  |  |  | 1 1 | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |  |  |  |  |  |
| Douglas <br> Dunn |  | 1 |  |  |  | 3 | 1 | 2 |  |  |  |  |  |
| Eau Claire | $\ddot{2}$ | 1 |  |  |  | 2 |  | 4 |  |  |  |  |  |
| Florence |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fond du Lac | 1 | 4 |  |  |  |  |  | 3 |  |  |  |  |  |
| Forest . |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Grant |  | 4 |  |  |  | 1 |  | 1 |  |  |  |  |  |
| Green ....... Green Lake |  | 2 |  |  |  | 1 |  |  |  |  |  | 2 |  |
| Green Lake <br> Iowa |  | 1 |  |  |  | 1 |  | 1 |  |  |  | 1 |  |
| Iron .. |  |  |  |  |  |  |  | 1 |  |  |  |  |  |
| Jackson |  |  |  |  |  |  |  |  |  |  |  |  |  |

TABLE NO. 19.-SHOWING THE TOTAL DEATHS IN EAOH OOUNTY DURING THE CALENDAR YEAR OF 1911, ARRANGED AOCORDING 'TO I'HE OAUSES OF DEATH-C'ontinued.

| Counties. |  |  |  | $\begin{aligned} & \dot{0} \\ & \pm \\ & \pm \\ & 3 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Jefferson |  | 2 |  |  |  |  |  | 3 |  |  |  |  |  |
| Juneau |  | 1 |  |  |  |  |  |  |  |  |  | 1 |  |
| Kenosha |  | 2 |  |  |  | 1 |  |  |  |  |  |  |  |
| Kewaunee |  | 1 |  |  |  | 1 |  | 1 |  |  |  |  |  |
| La Crasse |  | 2 |  |  |  | 2 | ..... | 11 |  |  |  | 3 | - |
| Lafayette <br> Langlade |  | 1 |  |  |  | 2 |  |  |  |  |  | 1 | 1 |
| Lincoln . |  | 1 |  |  |  | 1 |  | 1 |  |  |  | 1 |  |
| Manitowoc |  |  |  |  |  | 3 |  |  |  |  |  | 1 |  |
| Marathon | 2 | 2 |  |  |  | 1 |  | 3 |  |  |  |  | 1 |
| Marinette |  | 2 |  |  |  | 1 |  | 1 |  |  |  |  |  |
| Marquette |  |  |  |  |  | 1 |  |  |  |  |  | 1 |  |
| Milwaukee | 1 | 15 |  |  | 1 | 24 |  | 20 |  |  | 2 | 9 | 1 |
| Oconto |  |  |  |  |  | 1 |  |  |  |  |  |  |  |
| Oneida .. |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Outagamie |  | 3 | ... |  |  | 1 | .... | 2 |  |  |  | 1 | .... |
| Ozaukee |  |  |  |  |  |  |  |  |  |  |  | 2 |  |
| Pepin |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pierce |  |  |  |  |  | 1 |  |  |  |  |  | 1 |  |
| Polk ... |  | 1 |  |  |  | 2 | ... | 1 |  |  |  |  |  |
| Portage |  | 1 | . . |  |  | 2 |  | 4 |  |  |  |  |  |
| Price |  | 1 |  |  |  | 1 |  |  |  |  |  |  |  |
| Richland |  |  | ... |  |  | 1 | 1 | 2 |  |  |  | 4 |  |
| Rock |  | 1 |  |  |  | 3 |  | 4 |  |  |  | 2 |  |
| Rusk |  |  |  |  |  |  |  |  |  |  |  |  | i |
| St. Oroix |  |  |  |  |  | 1 |  | 1 |  |  |  | 1 |  |
| Sauk .. |  | 1 |  |  |  | 1 |  | 2 |  |  |  |  |  |
| Sawyer |  |  |  |  |  |  |  | 1 |  |  |  |  |  |
| Shawano |  | 1 |  |  |  | 1 |  | 1 |  |  |  |  |  |
| Sheboygan |  | 4 |  |  |  | 1 |  | 2 |  |  |  | 1 |  |
| Trempealeau | 2 |  |  |  |  | 1 |  |  |  |  |  |  |  |
| Vernon ..... |  |  |  |  |  |  |  | 2 |  |  |  |  | 1 |
| Vilas |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Walworth . |  |  |  |  |  | 3 |  | 2 |  |  |  | 1 | . |
| Washburn . Washington | 1 |  |  |  |  | 1 |  |  |  |  |  |  |  |
| Waukesha . |  | 1 |  |  |  | 1 |  | 2 |  |  |  |  |  |
| Waupaca |  | 2 |  |  |  | 1 | i | 2 |  |  |  | 1 |  |
| Waushara |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Winnebago |  | 2 |  |  |  | 3 |  | 1 |  |  |  | 1 |  |
| Wood . |  |  |  |  |  |  | 1 | 3 |  |  |  |  |  |
| Total | 15 | 70 | $\ldots$ |  | 1 | 95 | 7 | 115 |  |  | 2 | 38 | 5 |

## TABLE NO. 19.-SHOWING THE TOTAL DEATHS IN EACH COUNTY DÜRING THE OALENDAR YEAR OF 1911, ARRANGED ACCORDING TO THE CAUSES OF DEATH-Continued.

| Counties. |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Adams |  |  | 6 | 1 |  | 1 |  |  |  |  |
| Ashland |  |  | 29 |  | 2 |  |  |  | 1 |  |
| Barron |  |  | 12 |  | 1 | 1 |  |  |  | 1 |
| Bayfield |  |  | 11 | 2 |  |  |  |  |  |  |
| Brown |  |  | 43 | 2 | 12 | 4 | 1 |  |  | 1 |
| Buffalo |  |  | 10 |  |  |  |  |  | 2 |  |
| Burnett |  |  | 7 |  | 1 | 3 |  |  | 2 |  |
| Calumet |  |  | 3 |  | 1 | 1 |  |  | 2 | 1 |
| Chippewa |  |  | 40 |  |  | 1 | 1 |  | 3 | 1 |
| Clark |  |  |  |  |  | 2 |  |  |  |  |
| Columbia |  |  | 15 | 1 |  | 2 |  |  | 1 | 1 |
| Crawiord |  |  | 9 |  |  |  |  |  | 1 |  |
| Dane |  |  | 70 | 3 | 9 | 6 |  |  | 1 | 2 |
| Dodge |  |  | 26 |  | 1 |  |  |  |  |  |
| Door |  |  | 18 | 1 | 2 |  |  |  |  | 2 |
| Douglas | 1 |  | 37 | 2 | 5 | 6 |  |  | 1 | 1 |
| Dunn |  |  | 20 |  | 1 | 1 | 1 |  |  | 1 |
| Eau Claire |  |  | 30 |  | 1 | 2 |  |  | 1 | 2 |
| Florence |  |  | 1 |  |  |  |  |  |  |  |
| Fond du Lac |  |  | 42 |  | 2 | 4 | 1 |  | 1 |  |
| Forest |  |  | 5 | 2 | 1 | 1 |  |  |  | 1 |
| Grant |  |  | 25 | 1 |  | 3 |  |  |  | 1 |
| Green |  |  | 18 |  |  | 2 |  |  | 1 |  |
| Green Lake |  |  | 11 | 1 | 3 | 1 |  |  |  |  |
| Iowa |  |  | 17 | 1 |  |  |  |  |  |  |
| Iron ... |  |  | 7 | 1 |  | 1 |  |  | 1 |  |
| Jackson |  |  | 15 |  |  | 1 |  |  |  |  |
| Jefferson | 1 |  | 27 | 3 | 1 | 2 |  |  | 1 | 2 |
| Juneau |  |  | 18 | 1 | 1 |  |  |  |  |  |
| Kenosha |  |  | 25 | 1 | 1 | 2 |  |  | 2 |  |
| Kewaunee |  |  | 17 |  | 1 |  |  |  | 1 |  |
| Lafayette |  |  | 19 |  | $\stackrel{1}{2}$ | 7 |  |  | 1 | 1 |
| Langlade |  |  | 7 |  |  |  |  |  | 1 |  |
| Lincoln |  |  | 10 |  | 1 |  |  |  |  |  |
| Manitowoc | 1 |  | 41 |  | 3 | 5 |  |  |  | 3 |
| Marathon |  |  | 34 | 1 | 1 | 6 |  |  |  |  |
| Marinette |  | . | 24 |  | 1 | 4 |  |  | 1 |  |
| Marquette |  |  | 10 |  | 1 |  |  |  |  |  |
| Milwaukee | 2 |  | 527 | 6 | 18 | 19 | 3 |  | 7 | 19 |
| Monroe |  |  | 26 | 2 | 2 | 1 | 1 |  |  |  |
| Oconto |  |  | 19 | 1 |  | 1 |  |  |  | 1 |
| Oneida |  |  | 8 | 1 |  | 1 |  |  |  |  |
| Outagamie |  |  | 47 | 1 | 1. | 6 | 2 |  | 1 | 2 |
| Ozaukee |  |  | 11 | 2 | 2 | 2 |  |  | 1 |  |
| Peoin |  |  | 4 |  | 1 | 2 |  |  |  |  |
| Pierce |  |  | 13 |  |  | 4 |  |  |  |  |
| Polk |  |  | 19 |  | 2 |  |  |  |  | 1 |
| Portage |  |  | 40 |  | 1 | 5 | 1 | 1 |  |  |
| Price. |  |  | 12 |  |  | 3 |  |  |  |  |
| Racine |  |  | 61 |  | 7 | 2 |  |  | 1 | 1 |
| Richland |  |  | 13 | 1 | 1 | 2 |  |  |  |  |
| Rock |  |  | 47 |  | 5 | 2 |  |  | 2 | 1 |
| Rusk |  |  | 3 |  |  |  |  |  |  |  |
| St. Croix |  |  | 20 |  |  | 2 |  |  | 1 |  |
| Sauk .. |  |  | 12 | 1 | 1 | 2 | 1 | 1 |  | 1 |
| Sawyer |  |  | 9 |  | 2 |  |  |  |  |  |
| Shawano |  |  | 22 | 1 | 1 | 1 |  |  |  |  |
| Sheboygan |  |  | 45 | 3 | 3 | 3 | 1 |  | 1 |  |
| Taylor |  |  | 4 |  |  |  |  |  |  |  |
| Trempealeau |  |  | 15 | 1 |  | 1 | 1 |  |  | 1 |
| Vernon |  |  | 18 |  | 3 | 2 |  |  | 1 |  |
| Walworth |  |  | 13 |  |  | $\cdots$ | 1 |  | 1 | $\cdots$ |

TABLE NO. 19.-SHOWING THE TOTAL DEATHS IN EACH COUNTY DURING THE CALENDAR YEAR OF 1911, ARRANGED ACCORDING TO THE C'AUSES OF DEATH-Continued.

| Counties. |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Washburn |  |  | 6 |  |  | 1 |  |  |  |  |
| Washington |  |  | 7 |  | 1 |  |  |  | 1 | ...... |
| Waukesha . |  |  | 44 | 1 | 6 |  |  | 1 |  |  |
| Waupaca |  |  | 21 | 2 | 2 | 1 | ..... |  |  |  |
| Waushara |  | . . | 13 | 1 |  |  |  |  |  | . ${ }^{\text {a }}$ |
| Winnebago |  |  | 51 | 1 | 2 | 4 |  |  |  | 1 |
| Wood ..... |  |  | 16 |  | 1 |  | 1 |  |  |  |
| Total | 5 |  | 1988 | 48 | 119 | 137 | 16 | 3 | 42 | 52 |

TABLE NO. 19.-SHOWING THE TOTAL DEATHS IN EACH COUNTY DURING THE CALEN'AAR YEARi OF' 1911, ARRANGED' ACC'ORDING T'O I'HE ICAUSES OF DEATH-Continued.

| Counties. | $\begin{aligned} & \dot{\sim} \\ & \stackrel{0}{0} \\ & \stackrel{y}{0} \\ & \dot{\sim} \end{aligned}$ |  |  | $\begin{aligned} & \text { Cancer of the buc- } \\ & \text { cal cavity. } \end{aligned}$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Adams |  |  |  |  | 1 |  |  |  |  |  |
| Ashland |  | 2 |  |  | 4 | 1 | 3 | . . . . . | 1 | 2 |
| Barron |  |  |  | 1 | 11 | 2 |  |  | 1 |  |
| Bayfield |  |  |  |  |  | 2 |  |  | 1 | ... |
| Brown . |  | 3 |  |  | 38 | 4 | 5 | 2 | 1 | 4 |
| Buffalo |  |  |  | 1 | 8 | 1 |  |  |  | 2 |
| Burnett |  | 1 |  | 1 | 4 |  |  |  |  | 2 |
| Calumet |  |  |  |  | 9 | 1 | 2 | 1 |  | 3 |
| Chippewa |  |  |  |  | 16 | 2 | 5 | 1 | 1 | 1 |
| Clark .... |  |  |  | 1 | 5 | 3 |  |  |  | 6 |
| Columbia |  |  |  |  | 11 | 5 |  | 3 | 1 | 2 |
| Crawford |  |  |  | 2 | 7 |  |  | 1 |  | 3 |
| Dane .. |  |  |  | 1 | 31 | 12 | 2 | 2 | 7 | 11 |
| Dodge | 1 | 2 |  | 1 | 24 | 6 | 3 | 4 | 1 | 8 |
| Door ... |  |  |  |  | 9 |  |  | 1 | 1 | 4 |
| Douglas |  | ? |  |  | 9 |  | 1 | 1 | . ... | 1 |
| Dunn . . |  |  |  |  | 6 | 4 | 1 | 2 |  | 2 |
| Eáu Claire |  | 1 |  | 1 | 7 | 3 | 5 | 4 | . . . | 7 |
| Florence |  |  |  |  | 2 | 1 | ...... |  |  |  |
| Fond du Lac. |  | 3 |  | 2 | 23 | 8 | 2 | 1 | 1 | 4 |
| Forest . |  | 1 |  |  |  |  |  |  |  | 1 |
| Grant |  |  |  | 2 | 10 | 2 | 2 | 1 |  | 4 |
| Green ...... |  |  |  |  | 12 | 5 | 2 | 1 |  |  |
| Green Lake | 1 |  | 1 |  | 5 | 2 | 1 |  | 1 | 3 |
| Iowa .... |  |  |  |  | 6 | 2 | 1 | 1 |  | 4 |
| Iron |  |  |  |  | 1 |  | 1 | - |  |  |
| Jackson |  |  |  | 2 | 6 |  |  | 1 |  | 1 |
| Jefferson |  |  |  |  | 17 | 3 | 2 |  |  | 5 |
| Juneau . |  | 2 | 1 |  | 6 | 3 | 2 |  |  | 3 |
| Kenosha | 1 |  |  | 1 | 6 | 2 | 1 | 3 |  | 2 |
| Kewaunee |  |  |  |  | 9 |  | 2 | 3 |  | 3 |
| La Crosse |  | 2 |  |  | 18 | 3 | 9 |  | 2 | 7 |

TABLE NO. 19.-SHOWING THE TOTAL DEATHS IN EACH OOUNTY DURING THE CALENDAR YEAR OF' 1911, ARRANGED ACIOORDING TO THE CAUSES OF DEAT'H—Continued.

| Counties. |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lafayette |  |  |  | 1 | 8 |  | 1 | 1 |  | 3 |
| Langlade |  |  |  | 1 | 2 | i |  | 2 | 1 |  |
| Lincoln ... | 1 |  |  |  | 7 |  | 2 | 1 |  |  |
| Manitowoc | 1 |  |  |  | 12 | 1 |  | 1 | 1 | 6 |
| Marinette | 1 |  | 1 |  | ${ }_{6}^{12}$ | 3 5 5 | 1 | 1 |  | 4 |
| Marquette |  |  | 1 |  | 6 2 2 | 5 |  | 2 | 1 | 2 |
| Milwaukee | 7 | 26 |  | 5 | 162 | 47 |  | 19 |  |  |
| Monroe | 1 | 1 |  | 1 | 9 | 4 | $\stackrel{4}{2}$ | 2 | 1 | 55 6 |
| Oconto |  |  |  | 1 | 5 |  | 2 |  | 1 | 2 |
| Outagamie |  |  | 1 |  | 17 |  |  |  |  |  |
| Ozaukee . |  |  | 1 |  | 17 5 5 |  | 5 | 2 | 1 | ${ }^{6}$ |
| Pepin . |  |  |  |  | ${ }_{3}^{5}$ |  |  |  |  | 3 |
| Pierce |  |  |  |  | 17 | 1 |  |  |  | 1 |
| Polk . |  |  |  |  | + | 3 | 2 |  | 2 | 1 |
| Portage |  | 2 |  | $1{ }^{-}$ | 6 | 2 | 1 | 1 | 1 | 1 |
| Price |  |  |  |  | 3 |  | 1 | 1 |  | 1 |
| Racine |  |  |  | 1 | 26 | 5 | 1 | 1 | 1 | 6 |
| Richland |  |  |  |  | 5 |  |  | 1 | 1 | 6 |
| Rock <br> Rusk |  | 1 |  | 1 | 22 | 8 | 2 | 5 | 1 | 14 |
| St. Croix | 1 | 1 |  |  | 1 |  |  | 1 | 1 | 1 |
| Sauk ... | 1 |  |  | 1 | 9 13 | 1 |  |  | 1 | 4 |
| Sawyer |  |  |  |  | $\begin{array}{r}13 \\ 3 \\ \hline\end{array}$ | 4 |  | 6 | 4 | 4 |
| Shawano |  | 1 |  | i* | 3 7 | 1 | 1 |  |  | 1 |
| Sheboygan |  |  | 1 | 2 | 23 | $\cdots$ | 1 | 1 | 1 2 | 1 19 |
| Taylor ... |  |  |  |  | 23 5 | 9 | 1 | 1 |  |  |
| Trempealeau |  | 1 |  |  | 9 | 1 |  |  |  |  |
| Vernon | 1 |  |  | 1 | 8 |  |  | 1 |  | 1 |
| Vilas ..... |  |  |  |  | 1 |  |  | 1 |  |  |
| Walworth |  |  |  |  | 6 | 3 |  | 3 | 1 | 5 |
| W ashington |  |  |  |  | $\stackrel{2}{9}$ | 1 |  |  |  | 1 |
| Waukesha . | 1 | 1 |  |  | 9 | 1 | 1 |  |  | 5 |
| Waupaca |  | 1 |  | 2 1 | 17 10 | 2 4 4 | ${ }_{3}^{2}$ | 2 | 1 | 6 |
| Waushara |  | 1 |  | 1 | 10 6 | 4 | 3 | 1 | 1 | 5 |
| Winnebago | 4 | 1 |  | 1 | 31 | 7 | 5 | 7 | 3 | 11 |
| W00.1 |  |  |  |  | 11 |  | 3 |  |  | 2 |
| Total | 20 | 55 | 6 | 37 | 824 | 192 | 140 | 99 | 50 | 280 |

TABLE NO. 19.-SWOWING THE TOTAL DEATHS IN EACH OOUNTY DURING THE 'C'ALEND'AR YEAARI OF' 1911, ARRANGED AACIOORDING' TO THE IOAUS'ES OF DEATH $\quad$-Continued.

| Counties. | $\left\lvert\, \begin{aligned} & n \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}\right.$ |  |  | $\begin{aligned} & \dot{0} \\ & \stackrel{\rightharpoonup}{0} \\ & \tilde{U} \\ & \text { U } \end{aligned}$ |  |  |  |  |  | Other general diseases. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Adams |  |  |  |  |  |  |  |  | 1 |  |
| Ashland | 2 |  | 1 |  | 1 |  | 1 |  |  |  |
| Barron |  | 2 | 2 |  | 5 | 1 |  | 2 |  | 1 |
| Bayfield |  |  |  |  |  |  |  |  | 1 |  |
| Brown ${ }^{\text {Buffalo }}$ |  | 3 | 3 2 |  | 10 | 2 | 1 |  | 5 |  |
| Burnett | 1 |  | 2 |  | 1 | 1 |  |  | 1 |  |
| Calumet |  |  | $i$ |  | 1 |  |  |  | 1 |  |
| Chippewa | 1 | 1 | 3 |  | 6 | 1 |  |  | 4 |  |
| Clark . |  |  |  |  | 4 | 2 |  | 1 | 3 |  |
| Columbia |  | 3 |  |  | 6 |  |  |  | $\stackrel{3}{2}$ | 1 |
| Orawford | 2 | 3 | 1 |  |  | 1 |  |  |  | 2 |
| Dane . | 9 | 5 | 3 |  | 11 | 1 |  | 2 | 9 | 2 |
| Dodge | 1 |  | 3 |  | 10 | 1 |  |  | 7 | 1 |
| Door .. | 2 |  | 2 |  | 4 |  |  |  |  |  |
| Douglas | 1 | 3 | 2 |  | 2 |  |  | $i$ |  |  |
| Dunn | 4 | 1 |  |  | 3 |  |  |  | 2 |  |
| Fau Claire | 2 | 1 | 4 |  | 7 | 2 |  | 1 | 5 | ...... |
| Florence .. |  | 1 |  |  |  |  |  |  |  |  |
| Fond du Lac | 6 | 3 | 1 |  | 4 | 1 |  |  | 5 |  |
| Fnrest | 1 |  |  |  |  | 1 |  |  | 1 |  |
| Grant | 2 | 2 |  |  | 9 | 4 |  |  | 3 |  |
| Green | 1 | 1 |  |  | 1 |  |  |  | 9 |  |
| Green Lake | 1 |  |  |  | 1 | 3 |  | 3 | 3 |  |
| rowa . | 1 | 3 1 |  |  | 3 | ...... |  |  | 3 | ...... |
| Jackson |  | 1 |  |  | 1 |  |  |  |  |  |
| Tefferson | 2 | 5 | 2 |  | 3 | 1 |  | 1 | 4 | 1 |
| Juneau | 1 | 1 | 2 |  | 1 |  |  |  | 2 |  |
| Kenosha | 1 | 1 | 1 |  | 3 | 1 |  |  | 5 | 2 |
| Kewaunee | 1 |  | 3 |  | 3 |  |  |  |  |  |
| La Crosse | 3 | ? | 2 |  | 9 | 3 |  |  |  | 3 |
| Lafavette | 2 | 1 | 1 |  | 2 | 1 |  |  | 3 |  |
| Langlade <br> Tincoln | 1 |  |  |  | 4 | 1 | 1 |  | 3 | ..... |
| Manitowoc |  | 7 | 2 |  |  |  |  | 1 | 2 | 1 |
| Marathon | 2 | 8 | 3 |  | 8 | 1 | 1 |  |  | 1 |
| Marinette | 1 | 4 | 1 |  | 5 |  |  | 1 | 2 |  |
| Milwaukee | 12 | 40 | 6 | 1 |  |  | 1 | 10 |  |  |
| Monroe | 4 | 1 | 4 |  | 5 | 1 |  |  | ${ }_{3}^{17}$ | 1 |
| conto | 1 | 2 | 2 |  | 1 |  |  |  | 3 |  |
| Oneida ... |  | 1 |  |  | 1 |  |  |  | 2 | $\ldots$ |
| Ontagamie | $\stackrel{3}{2}$ | 4 | 2 |  | 8 |  |  |  | 9 | 1 |
| Ozaukee | 2 | 1 |  |  | 2 |  |  | 1 | 2 |  |
| Pierce . . | 1 | 5 | 1 |  |  |  | .,... |  |  |  |
| Polk . |  |  | 2 |  | 1 |  |  | 1 |  |  |
| Portage |  | 8 | 2 |  | 2 | 1 |  |  | 1 | 1 |
| Price . | 1 |  |  |  |  |  | 1 |  | 1 | 1 |
| Rachine | 2 | 4 |  |  | 9 | 1 |  | 4 | 4 | 2 |
| Richland | 3 | 2 |  |  | 2 | 1 |  |  | 2 |  |
| Rusk . | 4 | 5 2 | 3 |  | 15 1 | 2 |  |  | 5 | 2 |
| St. Oroix | 3 | 1 |  |  | 4 |  |  |  | 3 | 1 |
| Sauk | 2 | 3 | 1 |  | 5 | 1 |  | 2 | 2 | 1 |
| awyer |  |  |  |  |  |  |  |  |  |  |
| Shawano | 1 |  | 1 |  | 1 | 1 |  |  | 1 |  |

TABLE NO. 19.-SHOWING THE TOTAL DEATHS IN EACH OOUNTY DURING THE CALENDAR YEAR OF 1911, ARRANGED ACICORDING TO THE 'CAUSIES OF DEATH-Continued.

| Counties. |  |  |  |  | $\begin{aligned} & \dot{\infty} \\ & \stackrel{0}{0} \\ & \stackrel{0}{0} \\ & \stackrel{\rightharpoonup}{0} \end{aligned}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sheboygan |  | 1 | 1 |  | 8 |  |  | 1 | 2 |  |
| Taylor |  | 4 |  |  |  |  |  | 1 |  |  |
| Trempealeau | 1 | 2 | 1 |  | 4 |  |  |  |  |  |
| Vernon | 3 | 1 | 4 |  | 2 |  |  | 1 | 3 |  |
| Vilas ... | 1 |  |  |  |  |  |  |  |  |  |
| Walworth | 1 |  | 4 |  | 3 | 2 | 1 |  | 3 | ..... |
| Washburn . |  | 1 |  |  |  |  |  |  | 2 |  |
| Washington |  | 4 | 1 |  | 3 |  |  | 2 |  |  |
| Waukesha | 1 | 4 | 6 |  | 9 | 2 |  |  |  | 3 |
| Waupaca | 2 | 6 |  |  | 2 |  |  | 1 | 4 | 2 |
| Waushara |  |  |  |  | 2 |  |  | 1 |  |  |
| Winnebago |  | 3 | 2 | 1 | 6 | 3 |  |  | 5 |  |
| Wood | 1 | 2 | 1 |  | 1 |  |  | 2 |  |  |
| Total | 102 | 170 | 90 | 2 | - 298 | 54 | 7 | 42 | 153 | 32 |

TABLE NO. 19.-SHOWING THE TOTAL DEATHS IN EACH OOUNTY DURING THE CALENDAR' YEAR OF 1911, ARRANGED ACICORDING TO THE CAAUSES OF DEATH-Continued.

| Counties. |  |  |  | $\begin{aligned} & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Adams |  |  |  |  |  | 2 |  |  | 2 |  |
| Ashland | 3 |  |  |  | 1 | 11 |  | 1 | 16 |  |
| Barron |  |  |  |  |  | 2 |  |  | 13 | 1 |
| Bayfield | 2 |  |  |  |  | 4 |  |  | 4 |  |
| Brown | 3 |  |  |  |  | 17 | 1 | 3 | 34 |  |
| Buff alo |  |  |  |  |  |  |  |  | 11 | $\ldots$ |
| Burnett |  |  |  |  |  |  |  |  | 5 | $\ldots$ |
| Calumet |  |  |  |  |  |  |  |  | 10 |  |
| Chippewa |  |  |  | 1 |  | 7 |  | 3 | 11 | 1 |
| Clark |  |  |  |  |  | 7 |  | 2 | 12 |  |
| Columbia | 1 |  |  |  |  | 7 | 1 | 2 | 27 |  |
| Crawford |  |  |  |  |  | 2 |  |  | 11 |  |
| Dane | 1 |  |  |  | 3 | 11 | 1 | 8 | 51 | 1 |
| Dodge | 7 |  |  |  |  | 11 |  | 2 | 42 | 1 |
| Door |  |  |  |  |  | 1 |  | 3 | 8 |  |
| Douglas | 8 |  |  |  | 1 | 11 | 2 |  | 22 |  |
| Dunn | 1 |  |  |  |  | 1 | 1 | 2 | 7 |  |
| Eau Claire |  |  |  |  |  | 3 |  |  | 15 |  |
| Florence |  |  |  |  | 1 |  |  |  | 2 |  |
| Fönd du Lac | 3 |  |  |  | 2 | 12 | 1 | 5 | 38 | 2 |
| Forest | 1 |  |  |  |  | 1 |  |  |  |  |

TABLE NO. 19.-SHOWING THE TOTAL DEATHS IN EACH COUNTY DURING THF CALENDAR YEAR OF 1911, ARRANGED ACCORDING. TO THE CAUSES OF DEATH-Continued.

| Counties. |  |  |  | $\begin{aligned} & \text { Other chronic } \\ & \text { poisonings. } \end{aligned}$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Grant | 1 |  |  |  | 1 | 5 |  | 6 | 17 | 4 |
| Green | 2 |  |  |  |  | 7 |  | 4 | 11 | 2 |
| Green Lake | 1 |  |  |  |  | 2 |  | 1 | 9 | ..... |
| Iowa | 2 |  |  |  | 2 | 3 |  |  | 18 | ..... |
| Iron | 3 |  |  |  |  |  |  |  | 2 |  |
| Jackson | 2 | 1 |  |  |  | 1 |  | 2 | 16 |  |
| Jefferson | 1 |  |  |  |  | 7 | 1 | 1 | 22 | 2 |
| Juneau |  |  |  |  | 1 | 2 | 1 |  | 9 |  |
| Kenosha | 2 | 1 |  |  |  | 11 | 2 | 3 | 18 | ...... |
| Kewaunee |  |  |  |  |  | 1 |  |  | 6 |  |
| La Crosse | 1 |  |  |  |  | 8 |  | 2 | 24 | 1 |
| Lafayette | 1 | 1 |  |  |  | 6 | 1 | 2 | 14 | ...... |
| Langlade . |  |  |  |  |  | 6 |  | 1 | 9 | $\ldots .$. |
| Lincoln ... | 2 |  |  |  |  | 3 |  |  | 18 |  |
| Manitowoc | 1 |  |  |  |  | 7 |  |  | 32 | 1 |
| Marathon | 1 |  |  |  | 3 | 18 | 1 | 1 | 28 | 1 |
| Marinette | 2 |  |  |  | 1 | 4 |  |  | 9 |  |
| Marquette |  |  |  |  |  |  | 1 |  | 6 |  |
| Milwaukee | 24 | 2 |  |  | 8 | 90 | 10 | 24 | 252 | 6 |
| Monroe .. | 1 |  |  | .... | 1 | 3 | ...... | 1 | 18 | 1 |
| Oconto . |  |  |  |  |  | 2 |  |  | 14 |  |
| Oneida $\ldots$ | 2 |  |  |  |  | $\stackrel{5}{10}$ |  |  | 3 |  |
| Outagamie Ozaukee | 2 |  |  |  | 1 | 10 |  |  | 30 | 1 |
| Ozaukee |  |  |  |  | 1 |  |  |  | 10 | 1 |
| Pepin |  |  |  |  |  |  |  |  | 8 |  |
| Pierce |  |  |  |  | 1 | 6 | 1 |  | 21 |  |
| Polk ... |  | ..... | . . . |  |  | 2 |  |  | 15 | 1 |
| Portage |  |  |  |  |  | 8 |  | 2 | 20 |  |
| Price | 1 |  |  |  |  | 3 |  |  | 3 |  |
| Racine | 2 |  |  |  | 1 | 16 | 1 | 4 | 39 | 1 |
| Richland | 1 |  |  |  | 1 |  | 1 |  | 11 |  |
| Rock | 10 |  |  |  | 2 | 8 | 1 | 5 | 47 | 3 |
| Rusk .... |  |  |  |  |  | 3 |  | 1 | 3 |  |
| St. Oroix |  |  |  |  | 3 | 5 |  |  | 19 | 2 |
| Sauk .. | ..... |  |  |  |  | 4 | 2 |  | 27 |  |
| Sawyer |  |  |  |  |  | 1 |  |  | 2 |  |
| Shawano |  |  |  |  | 1 | 7 |  | 2 | 13 | 1 |
| Sheboygan | 1 | 1 |  |  |  | 8 |  | 2 | 43 | 1 |
| Taylor .... |  |  |  |  |  | 1 |  |  | 6 |  |
| Trempealeau |  | ... |  |  |  |  |  |  | 11 | 1 |
| Vernon ...... | 2 | .... |  |  | 1 | 7 |  | 2 | 20 | 1 |
| Vilas ... | $\stackrel{2}{8}$ |  |  |  |  | 3 |  |  | 1 |  |
| Walworth | 3 |  |  |  |  | 4 | 1 | 2 | 17 | $\ldots .$. |
| Washburn |  |  |  |  |  |  |  | 1 |  |  |
| Washington | 1 |  |  |  |  | 3 | 1 | 1 | 16 |  |
| Waukesha | 1 |  |  |  | 2 | 7 |  | 3 | 36 | 1 |
| Waupaca |  |  |  |  |  | 6 | 1 | 2 | 31 |  |
| Waushara | 1 |  |  |  |  |  |  |  | 6 |  |
| Winnebago | 4 | 1 |  |  | 4 | 14 | 3 | 6 | 60 | 1 |
| Wood .. |  |  |  |  |  | 3 |  | 2 | 13 | 1 |
| Total | 105 | 7 |  | 1 | 43 | 437 | 36 | 114 | 1428 | 40 |

TABLE NO. 19-Continued. SHOWING THE TOTAL DEATHS IN EAOH COUNTY DURING THE CALLENDAR YEAR OF 1911, ARRANGED ACCORDING TO 'I'HE CAUSES OF DEATH.


TABLE NO. $19-$ Continued. SHOWING THE TOTAL DEATHS IN EACH COUNTY DURING THE 'CALENDAAR YEAR OF 1911, ARRANGED ACGORDING TO TVHE CAUSES OF DEATH.

| Counties. |  |  |  | $\begin{aligned} & \dot{0} \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & \text { anc } \end{aligned}$ | $\begin{aligned} & 1 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Shawano | 2 |  |  | 4 | 1 | 2 |  |  |  |  |  | 3 |
| Sheboygan .... | 8 | 1 | 1 | 1 | 1 | 11 |  |  | 1 |  |  |  |
| Taylor ........ | 1 |  |  |  |  | 2 |  |  |  |  |  |  |
| Trempealeau .. |  | 1 | 1 | 3 | - | 1 |  |  | 1 |  |  |  |
| Vernon ........ | 5 | 1 |  | 1 | . . . . . | 2 | . .... |  | 1 |  |  |  |
| Vilas .. |  |  |  |  |  |  |  |  |  |  |  |  |
| Walworth ..... | 8 | 1 |  | 4 | . . . . . | 4 |  | 3 | 8 |  |  |  |
| Washburn ..... |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Washington .. | 2 |  |  | 2 |  | 2 |  |  |  | 1 |  | 1 |
| Waukesha .. | 2 | 4 | 7 | 3 |  | 3 | , | ..... | 4 |  |  |  |
| Waupaca . | 9 |  | 2 | 1 |  | 3 |  |  |  |  |  |  |
| Waushara .... | 3 |  | 1 | 2 |  |  |  |  | 2 |  |  |  |
| Winnebago ... | 14 | 20 | 1 | 6 |  | 19 | 1 |  | 3 |  |  |  |
| Total .... | 316 | 112 | 48 | 94 | 18 | 395 | 9 | 22 | 99 | 8 | 13 | 31 |

14. 

TABLE NO. 19-Continued. SHOWING THE TOTAL DEATHS IN EAOH COUNTY DURING THE CALENDAR YEAR OF 1911, ARRANGED ACCORDING TO THE CAUSES OF DEATH. .

| Counties. |  |  |  | Diseases of the arteries, atheroma, aneurysm. |  |  |  |  |  <br> $\stackrel{\otimes}{\leftrightarrows}$ <br> 4 $\begin{aligned} & 0.0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  <br> $\stackrel{9}{\$ 1}$ <br> 0 <br>  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Adams |  | 11 | 2 | 1 |  |  |  |  |  |  |  |  |
| Ashland | 1 | 21 | 2 | 3 | 1 |  |  | 1 |  |  |  | $\ddot{2}$ |
| Barron |  | 19 | 1 | 2 |  |  |  |  |  | 3 |  | 4 |
| Bayfield |  | 1 |  | 1 | $\therefore$ |  |  |  |  |  |  | 2 |
| Brown | 2 | 34 | 2 | 7 | 4 |  |  | 1 |  | 1 |  | 6 |
| Buffalo | 2 | 10 | 1 | 2 |  |  |  |  |  | 1 |  | 2 |
| Burnett |  | 4 |  |  |  |  |  |  |  |  |  | 1 |
| Calumet | 3 | 8 | 1 | 1 | 1 | 1 |  |  |  | 1 |  | 2 |
| Chippewa | 3 | 29 |  | 3 | 3 |  |  |  |  | 1 |  | 2 |
| Clark | 4 | 16 | 1 | 3 |  |  |  |  |  |  |  | 2 |
| Columbia | 1 | 23 |  | 4 |  |  |  |  |  |  |  | 2 |
| Crawford | 1 | 10 |  | 3 | 2 |  |  | 1 |  | 1 |  | 3 |
| Dane | 1 | 43 | 2 | 22 | 5 | 1 |  |  |  | 1 | 1 | 5 |
| Dodge | 4 | 27 | 1 | 9 | 2 |  |  |  |  | 3 |  | 10 |
| Door | , | 8 | 1 | 4 | ...... | 1 | . ..... |  |  |  |  | 4 |

TABLE NO. 19-Continued. SHOWING THE TOTAL DEATHS IN EACH OOUNTY DURING THE 'GALENDAR YEAR OF" 1911, ARRANGED ACGORDING TO I'HE CAUSES OF DEATH.

| Counties. |  |  |  |  |  |  |  |  |  |  | Diseases of the thyroid body. | 3 0 0 0 0 0 0 0 0 4 4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Douglas |  | 39 | 1 | 4 | 1 |  |  | 1 |  | 1 |  | 2 |
| Dunn |  | 19 | 1 | 3 |  |  |  |  |  | 1 |  | 3 |
| Eau Claire | 1 | 22 | 1 | 4 | 5 | 1 | $\cdots$ |  |  | 2 |  |  |
| Florence |  | 1 | 1 |  |  |  |  |  |  |  |  | 1 |
| Fond du Lac.. | 1 | 34 | 3 | 10 | 3 |  |  |  |  | 1 |  | 8 |
| Forest |  | 3 |  |  |  |  |  |  |  |  |  | 1 |
| Grant |  | 29 | 3 | 10 |  |  |  | 1 |  |  | 1 | 7 |
| Green |  | 10 | 3 | 8 | 1 |  |  |  |  |  | 1 | 3 |
| Green Lake | 1 | 5 |  | 12 |  |  |  |  |  |  |  | 1 |
| Iowa |  | 10 |  |  |  |  |  |  |  | 1 |  |  |
| Iron .... | 1 | 6 | 1 | 1 |  |  |  |  |  |  |  |  |
| Jefferson |  | 12 |  | 6 | 1 |  |  | 1 |  | 1 |  | ${ }_{9}$ |
| Juneau |  | 6 | 1 | 3 |  |  |  | 1 |  |  |  | 1 |
| Kenosha | 1 | 20 | 4 | 3 | 1 |  |  |  |  |  |  | 3 |
| Kewaunce |  | 5 |  | 2 |  |  |  |  |  |  |  | 1 |
| La Crosse |  | 34 | 2 | 6 | 2 | 1 |  |  |  |  |  | 3 |
| Lafayette |  | 10 | 3 | 4 | 1 |  |  |  |  |  |  | 1 |
| Langlade |  | 10 | 2 | 2 |  |  |  |  |  |  |  | 1 |
| Lincoln |  | 4 | 1 |  | 2 |  |  |  |  | 1 |  | 1 |
| Manitowoc | 1 | 34 |  | 15 | 2 | 1 |  |  |  |  |  | 2 |
| Marathon | 2 | 28 | 1 | 6 | 2 | 1 |  |  |  |  |  | 1 |
| Marinette | 1 | 20 |  | 3 |  |  | 1 |  |  |  |  | 1 |
| Marquette |  | 7 | 1 | 1 | 1 |  |  |  |  | 1 |  | 3 |
| Milwauke | 44 | 371 | 25 | 92 | 21 | 5 | 5 | 6 |  | 5 | 1 | 79 |
| Monroe | 3 | 21 | 1 | 2 | 1 |  |  | 1 |  |  |  | 1 |
| Oconto |  | 12 | 1 |  |  |  |  |  |  |  |  |  |
| Oneida |  | 8 |  |  |  | 1 |  |  |  |  |  |  |
| Outagamie | 1 | 41 | 4 | 3 | 2 |  |  |  |  |  |  | 2 |
| Ozaukee |  | 14 |  | 4 |  |  |  |  |  |  |  |  |
| Pepin | ... | 3 |  | 3 | 2 |  |  |  |  |  |  | 4 |
| Pierce |  | 28 | 1 | 5 | 2 | 1 |  |  |  |  |  | 3 |
| Polk |  | 19 |  | 1 |  |  |  |  |  |  |  | 3 |
| Portage |  | 24 | ...... | 9 | ..... |  | ..... |  |  |  |  | 7 |
| Price |  | 7 |  | 1 |  |  |  |  |  | 1 |  | 1 |
| Racine | 2 | 23 | 1 | 4 | 3 |  |  |  |  | 2 |  | 8 |
| Richland | 1 | 10 | 1 | 1 |  |  |  | 1 |  | 1 |  | 1 |
| Rock | 2 | 49 | 2 | 8 | 5 |  |  | 1 |  | 2 |  | 4 |
| Rusk | 3 | 1 |  |  |  |  |  |  |  |  |  |  |
| St. Croix | 2 | 17 | 2 | 2 | 2 |  |  |  |  |  |  | 4 |
| Sauk | 1 | 33 | 3 | 2 |  |  |  |  |  |  | 1 |  |
| Sawyer | 1 | 2 | 1 |  |  |  |  |  |  | 1 |  |  |
| Shawano | 1 | 15 |  | 1 | 1 |  |  |  |  |  | 1 | 6 |
| Sheboygan | 1 | 44 | 3 | 5 | \% |  |  |  |  | 1 |  | 8 |
| Taylor |  | 6 |  | 1 |  |  |  |  |  |  |  | 2 |
| Trempealeau | . | 26 | 1 |  |  | 1 |  |  |  |  |  | 2 |
| Vernon |  | 20 | 1 | 6 |  | 1 |  | 1 |  | 1 | 1 | 1 |
| Vilas |  | 5 |  |  |  |  |  |  |  |  |  |  |
| Walworth |  | 28 | 1 | 4 |  | 1 |  |  |  | 1 |  | 3 |
| Washburn . |  | 4 |  |  | 1 |  |  |  |  |  | 1 |  |
| Washington ... |  | 16 | 1 | 2 |  |  |  |  |  |  |  | 2 |
| Waukesha | 2 | 41 | 1 | 13 |  |  |  |  |  | 4 |  | 2 |
| Waupaca | 1 | 25 | 4 | 6 | 3 |  |  |  |  | 2 |  | 3 |
| Waushara |  | 9 | 2 | 3 |  |  |  |  |  |  |  | 1 |
| Winnebago | 4 | 46 | 3 | 20 | 8 | 1 | 1 | 1 |  |  | 1 | , |
| Wood | 1 | 22 | 3 |  |  |  |  |  |  | 1 |  | 3 |
| To:al | 101 | 1646 | 105 | 367 | 94 | 18 | 7 | 18 |  | 43 | 9 | 258 |

TABLE NO. 19-Continued. SHOWING THE TOTAL DEATHS IN EACH COUNIV DURING THE CALENDAR YEAR OF' 1911, ARRANGED ACOCORDING T"O 'I'HE CAUSES OF DEATH.


TABLE NO． $19-$ Continued．SHOWING THE TOTAL DEATHS IN EACH COUNTY DURING THE CALENDAR YEAR OF 1911，ARRANGED ACCORDING TO＇IHE CAUSES OF DEATH．

| County ． | n \＃ 0 0 0 0 0 0 0 0 0 |  |  |  | $\begin{aligned} & \text { Pulmonary congestion, } \\ & \text { pulmonary apoplexy. } \end{aligned}$ |  |  |  |  | 플 O B B |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Shawano | 4 | 8 | 18 |  |  |  |  |  |  |  |  |  |
| Sheboygan ．．．． | 13 | 13 | 27 | 1 | 8 |  | 1 | 2 |  |  | 1 |  |
| Taylor ．．．．．．．． | 1 | 1 | 4 |  |  |  | 1 |  |  |  | 1 |  |
| Trempealeau ．． | 5 | 3 | 8 |  | 1 |  | 1 | 1 |  |  | 1 |  |
| Vernon ．．．．．．．． | 1 | 9 | 13 | 1 | 1 |  | 3 |  | 1 | 1 | 1 |  |
| Vilas |  | 3 | 9 |  |  |  |  |  | 1 | 2 |  |  |
| Walworth ．．．．． | 5 | 4 | 23 |  | 6 |  |  |  | 1 |  | 1 |  |
| W ashburn |  | 1 | 5 |  | 3 |  | 1 |  |  |  |  |  |
| Washington ．．． |  | 6 | 19 |  | 3 |  | 1 | 1 | 1 |  |  |  |
| Waukesha ．．．． | 4 | 4 | 19 |  | 4 |  | 1 |  |  |  |  | ． 1 |
| Waupaca ．．．．． | 3 | 3 | 25 | 2 | 5 |  |  |  |  |  |  |  |
| Waushara ．．．． |  | 4 | 9 |  | 1 |  |  | 1 |  |  |  |  |
| Winnebago ．．． | 5 | 9 | 58 | 3 | 14 |  | 4 |  |  |  | 2 | 1 |
| Wood ．．．．．．．．． | 2 | 8 | 13 | 1 | 3 |  | 1 |  | 2 |  |  |  |
| Total | 229 | 505 | 1722 | 78 | 243 | 6 | 100 | 20 | 48 | 12 | 49 | 9 |

TABLE NO．19－Continued．SHOWING THE TOTAL DEATHS IN EACH OOUNTY DURING＇THE CALENDLAR YEAR OF 1911，ARRANGED ACOORDING TO TVHE CAUSES OF DEATH．

| County． |  |  | $\left\|\begin{array}{\|c\|} 1 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \end{array}\right\|$ |  |  |  |  |  | 4 <br>  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Adams |  |  | 3 | 1 |  |  |  |  |  |  |  |  |
| Ashland | 1 | 2 | 10 | 1 |  |  |  | 3 | 3 |  |  |  |
| Barron |  | 4 | 9 | 1 |  |  | 5 |  | 3 |  |  |  |
| Bay fleld |  | 3 | 10 |  |  |  |  |  | 1 |  |  |  |
| Brown ． | 3 | 7 | 64 | 1 |  |  | 20 | 10 | 1 |  |  | 8 |
| Buffalo ． | 1 | 4 | 2 |  |  | 1 |  | 2 | 1 |  |  | 1 |
| Burnett <br> Calumet |  |  |  |  |  |  | 2 | 2 |  |  |  | 1 |
| Calumet <br> Chippewa |  |  | $\begin{array}{r}3 \\ 11 \\ \hline\end{array}$ |  |  |  | 4 | 3 | ．．． |  |  | 2 |
| Chippewa Clark | 1 | 3 | 11 7 |  |  |  | 8 | 1 |  |  |  | 4 |
| Clark |  | 3 | 7 | 2 |  |  | 1 | 2 |  |  |  | 2 |
| Columbia | 3 | 2 | 7 | 3 |  |  | 5 | 3 | 3 |  |  | 8 |
| Crawford |  | 4 | 3 |  |  |  | 1 | 2 |  |  |  | 4 |
| Dane |  | 11 | 28 | 8 |  |  | 16 | 8 | 4 |  |  | 8 |
| Dodge |  | 3 | 18 | 8 |  |  | 3 | 7 | 2 |  |  | 8 |
| Door |  | 4 | 3 | 1 |  |  | 1 | 1 |  |  |  |  |
| Douglas | 1 | 4 | 27 | 2 |  |  | 5 | 5 | 1 |  |  | 7 |
| Dunn ．．．．． |  | 3 | 10 | 1 |  | 1 | 5 | 2 | 2 |  |  | 3 |
| Eau Claire | 2 | 3 | 8 | 2 |  |  | 7 |  |  |  |  | 1 |

TABLE NO. $19-$ Continued. SHOWING THE TOTAL DEATHS IN EACH COUNTY DURING THE CALENDAAR YEAR OF 1911, ARRANGED ACCORDING TO THE CAUSES OF DEATH.

| County | чวセшоцง әчม よо ләอІก |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fond du Lac.. |  | 7 | 29 | 3 |  |  | 19 | 7 | 4 |  |  | 4 |
| Forest |  |  |  |  |  |  | 1 | 1 |  |  |  |  |
| Grant |  | 3 | 7 | ${ }_{6}$ |  |  | 5 | 3 | 1 |  |  | 3 |
| Green | 1 | 4 | 7 | 3 |  |  | 3 | 1 | 1 |  |  | 7 |
| Green Lake |  | 1 | 7 | 1 |  |  |  | 1 | 1 |  |  | 1 |
| Iowa |  | 5 | 2 |  |  |  | 4 | 3 |  |  |  | 1 |
| Iron . |  |  | 10 |  |  | 1 |  | 1 |  |  |  |  |
| Jackson |  | 2 |  | 1 |  |  |  | 5 |  |  |  | 1 |
| Jefferson Juneau | 1 | 3 | 12 | 4 |  |  | 1 | 6 | 4 |  |  | 7 |
| Juneau ... | 2 | 3 12 | $\begin{array}{r}5 \\ 34 \\ \hline\end{array}$ | 4 |  |  | 1 | 2 |  |  |  | 2 |
| Kewaunee |  | 5 | 23 | 2 |  |  | 3 | 2 |  |  |  |  |
| La Crosse |  | 3 | ${ }^{3}$ | 1 |  |  | 11 | 20 | 1 |  |  | 10 |
| Lafayette |  | 3 | 5 | 3 |  |  | 3 |  |  |  | 1 | 2 |
| Langlade |  | 2 | 11 | 1 |  |  | 4 | 1 |  |  |  | 2 |
| Lincoln . | 1 | 2 | 11 |  |  |  |  | 1 |  |  |  | 4 |
| Manitowoc |  | 7 | 11 | 4 |  |  | 9 | 3 | 1 |  |  | 5 |
| Marathon | 1 | 7 | 41 | 2 |  |  | 5 | 5 | 3 |  |  | 8 |
| Marinette | 2 | 1 | 26 | 1 |  |  |  | 3 |  |  |  | 3 |
| Marquette |  |  | 1 |  |  |  |  | 1 |  |  |  |  |
| Milwaukee | 13 | 101 | 432 | 26 |  | 1 | 52 | 58 | 18 |  | 1 | 91 |
| Monroe | 2 | 1 | 14 |  |  |  | 3 | 1 | 2 |  |  |  |
| Oconto |  | 1 | 15 |  |  |  | 1 | 4 |  |  |  | 1 |
| Oneida |  | 5 | 9 |  |  |  | 1 |  |  |  |  | 3 |
| Outagamie .... |  | 4 | 26 | 2 |  |  | 2 | 1 | 1 |  |  | 3 |
| Ozaukee .. | 1 |  | 8 | 2 |  |  | 1 | 1 |  |  |  | 1 |
| Pepin |  |  | 2 | 3 |  |  |  |  |  | 1 |  |  |
| Pierce |  | 3 | 8 | 4 |  |  |  | 2 | 1 |  |  | 2 |
| Polk | 2 | 3 | 5 |  |  |  | 5 | 1 | 1 |  |  | 1 |
| Portage |  | 5 | 20 |  |  |  |  |  | 2 |  |  | 4 |
| Price |  |  | 5 | 1 |  |  | 2 |  |  |  |  | 1 |
| Racine | 1 | 15 | 27 | 7 |  |  | 8 | 4 |  |  |  | 8 |
| Richland | 1 | 1 | 9 | 4 |  |  | 1 | 2 | 3 |  |  | 1 |
| Rock | 1 | 7 | 12 | 3 |  |  | 4 | 4 | 2 | 1 |  | 4 |
| Rusk |  |  | 3 | 1 |  |  |  | 2 |  |  |  | 1 |
| St. Croix | 2 | 3 |  | 5 |  |  |  | 5 | 1 |  |  | 2 |
| Sauk |  | 8 | 13 | 2 |  | 1 | 2 | 2 | 2 | 1 |  | 4 |
| Sawyer |  |  | 3 |  |  |  |  | 1 |  |  |  |  |
| Shawano |  |  | 19 | 1 |  |  | 1 | 8 |  | 1 |  | 3 |
| Sheboygan |  | 4 | 32 | 3 |  |  | 10 | 1 |  |  |  |  |
| Taylor ..... |  | 3 | 8 |  |  |  |  | 1 |  |  |  | 1 |
| Trempealeau |  | 3 | 9 | 1. |  | 1 |  | 3 |  |  |  |  |
| Vernon |  | 3 | 1 | 1 |  |  |  |  | 1 |  |  | 1 |
| Vilas |  |  | 1 |  |  |  |  |  |  |  |  |  |
| Walworth | 1 | 6 | 7 | 4 |  |  | 1 | 4 | 6 |  |  | 2 |
| Washburn . |  |  | 3 |  |  |  |  | 1 | I |  |  |  |
| Washington |  | 3 | 5 | 1 |  |  | 4 | 5 | 2 | 1 |  | 4 |
| Waukesha |  | 8 | 15 | 3 |  |  |  | 4 | 2 | 2 |  | 7 |
| Waupaca | 1 | 3 | 10 | 5 |  |  |  | 3 | 4 |  |  |  |
| Waushara |  | 3 | 9 | 1 |  |  | 1 | 2 |  |  |  | 1 |
| Winnebago |  | 8 | 15 | 7 |  |  | 11 | 11 |  | 1 |  | 9 |
| Wood . | 4 | 3 | 10 | 1 |  |  | 7 |  |  |  |  | 6 |
| Total | 52 | 341 | 1233 | 155 |  | 6 | 273 | 267 | 87 | 8 | 2 | 305 |

16-B. H.

I'ABLE NO. 19-Continued. SHOWING THE TOTAL DEATHS IN EACH COUNIY DURING I'HE CAILENDIAR YEAR OF 1911, ARRANGED AICICORDING TVO I'HE CAUSES OF' DEATH.

| Counties. |  |  |  |  |  |  |  | 管 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Adams |  | 1 |  |  |  |  | 1 |  | 1 |  | 1 |  |
| Ashland |  | 3 |  |  |  |  | 6 |  |  |  | 2 |  |
| Barron |  | 3 |  | 1 |  | 2 | 12 |  |  |  | 1 |  |
| Bayfield | 1 | 1 |  |  | 1 |  | 5 |  |  |  |  |  |
| Brown | 1 | 1 | 1 |  |  | 2 | 47 |  | 1 |  |  |  |
| Buffalo |  | 1 |  |  |  | 2 | 8 |  |  | 1 | 1 |  |
| Burnett |  |  |  |  | 1 |  | 3 |  |  |  |  |  |
| Calumet |  | 2 |  |  |  | 1 | 15 |  |  |  | 3 |  |
| Chippewa | 1 | 3 |  | 2 | 1 | 2 | 9 |  | 1 |  |  |  |
| Clark Columbia |  | 1 |  | 1 | 1 |  | 11 |  | 1 |  |  |  |
| Columbia | 1 | 2 |  | 1 |  |  | 18 |  |  |  | 2 |  |
| Dane .... |  | 1 |  | 2 | 1 | 1 | 9 47 |  |  |  | 1 |  |
| Dodge |  | 1 |  |  | 2 | 3 | ${ }_{34}^{47}$ |  |  |  | 1 |  |
| Door | 1 | 1 |  | 1 |  |  | 21 |  |  |  |  |  |
| Douglas | 1 |  |  | 5 | ..... | 6 | 21 |  |  |  |  |  |
| Dunn | 1 |  |  | 1 |  |  | 14 |  |  |  | 1 |  |
| Eau Claire | 2 | 2 |  | 1 |  | 1 | 25 |  | 1 |  | 1 |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fond du Lac Forest | 1 | 3 |  | 2 |  | 5 | 32 |  |  |  | 2 |  |
| Grant |  | 5 | 1 | 1 |  | 3 | 15 |  |  |  |  |  |
| Green |  | 1 |  |  | 2 |  | 15 |  |  |  | 2 |  |
| Green Lake | 1 | 2 |  | 1 | 1 | 2 | 4 |  |  |  |  |  |
| Iowa |  |  | 1 | 1 |  | 1 | 9 |  | 2 |  | 1 |  |
| Iron |  |  |  | 1 |  |  | 3 |  | 2 |  | 1 |  |
| Jackson |  |  |  |  |  | 1 | 4 |  | 2 |  |  |  |
| Jefferson | 1 | 2 |  |  | 1 | 1 | 20 8 |  | 1 | 1 | 1 |  |
| Kenosha | 2 | 3 |  | 1 | 1 | 1 | 14 |  |  |  |  |  |
| Kewaunee | 1 | 1 |  | 1 |  |  | 14 |  |  |  | 1 |  |
| La Crosse | 2 | 10 |  | 2 | 1 | 3 | 21 |  | 6 |  | 2 |  |
| Lafayette | 1 | 2 |  | 1 |  | 3 | 11 |  | ${ }_{2}^{6}$ |  | 1 |  |
| Langlade |  | 2 |  | 2 |  |  | 9 |  |  |  | 1 |  |
| Lincoln |  |  |  |  |  | 1 | 13 |  |  |  |  |  |
| Manitowoc | 2 | 5 4 |  | 1 |  | 2 | 31 |  | 2 |  | 3 |  |
| Marinette | 2 | 4 2 |  | 1 |  | 2 4 | 31 19 |  | 3 3 |  | 2 |  |
| Marquette |  |  |  |  |  |  | 19 5 |  | 3 |  |  |  |
| Milwaukee | 10 | 27 | 1 | 11 | 8 | 29 | 291 |  | 11 |  | 24 |  |
| Monroe . |  | 1 |  | 1 |  | 1 | 6 |  | 1 |  | 1 |  |
| Oconto Oneida |  | 2 |  | 3 |  |  | 5 |  |  |  | 2 |  |
| Outagamie | 3 | 2 |  | 3 |  | 2 | 3 24 |  | 5 |  | 2 |  |
| Ozaukee .. |  | 1 |  |  |  | 2 | $\stackrel{1}{6}$ |  |  |  | 2 |  |
| Pepin |  |  |  | 2 |  |  | 4 |  |  |  |  |  |
| Pierce |  |  |  |  | 1 | 1 | 11 |  | 2 |  | 4 |  |
| Polk |  |  |  |  |  | 1 | 12 | 1 |  |  | 2 |  |
| Price | 3 |  |  | 1 |  | 2 | 12 |  | 1 |  | 1. |  |
| Racine | 1 | 1 |  | 3 | 1 | 1 | 1 |  |  |  |  |  |
| Richland |  | 2 |  | 2 |  | 2 | ${ }_{6} 6$ |  |  |  |  |  |
| Rock | 1 | 6 |  | 2 |  | 5 | 28 |  | 1 |  | 2 |  |
| Rusk |  |  |  |  |  |  | 2 |  | 1 |  | 1 |  |
| t. Oroix |  | 1 |  |  |  | 1 | 16 |  |  |  | 1 |  |
| Sauk |  | 3 | 1 | 1 | 1 | 1 | 22 |  | 2 |  | 1 |  |

TABLE NO. 19—Continued. SHOWING THE TOTAL DEATHS IN EACH COUNTY DURING 'I'HE CALEENDAR YEAR OF 1911, ARRANGED ACCORDING "TO THE CAUSES O'F DEA'TH.


TABLE NO. 19-Continued. SHOWING THE TOTAL DEATHS IN EACH COUNTY DURING THE CALENDAR YEAR, OE' 1911, ARRANGED ACICORDING TO THE CAUSES OF DEATH.

| Counties. |  |  |  |  |  |  |  |  | Accidents of pregnancy. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A ${ }^{\text {dams }}$ |  |  |  |  |  |  |  |  |  | 1 |  | 1 |
| Ashland |  |  |  |  |  |  |  |  | 1 |  |  | 3 |
| Barron |  |  |  |  |  |  |  |  |  |  |  |  |
| Bayfield |  |  |  |  |  |  |  |  |  |  |  | 5 |
| Brown. | 1 |  |  | 1 | 1 | ${ }_{1}^{2}$ |  |  |  | 1 |  | 5 |
| Buffalo Burnett |  |  |  |  |  |  |  |  |  |  | 1 |  |
| Calumet | i |  |  |  |  |  |  |  |  | 1 |  |  |
| Chippewa | 1 |  |  |  |  |  |  |  |  |  | 1 | 1 |
| Clark .... |  |  |  |  |  |  |  |  |  | 1 | 1 | 1 |
| Columbia |  |  |  |  |  |  |  |  | 1 |  |  | 2 |
| Crawford | 2 |  |  |  |  |  |  |  |  | 1 3 | 2 |  |
| Dane . | 6 |  |  | 1 |  |  | 1 |  | 2 | 3 | 2 <br> 2 <br> 2 |  |
| Dodge | $\stackrel{2}{2}$ |  |  |  | i |  |  |  |  |  |  | 1 |
| Douglas | 2 |  |  |  |  |  | 3 |  |  |  |  | 3 |
| Dunn ... | 4 |  |  |  |  |  |  |  |  |  |  | 5 |

TABLE NO. 19-Continued. SHOWING THE TOTAL DEATHS IN EACH OOUNTY DURING 'I'HE CALENDLAR YEAR OF' 1911, ARRANGED ACICORDING TO I'HE CAUSES OF DEATH.

| Counties. |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eau Claire .. | 1 |  | 1 | 2 |  |  |  |  |  |  |  | 1 |
|  | $\stackrel{1}{4}$ |  |  |  |  |  |  |  |  |  |  |  |
| Forest ....... | 4 |  |  |  |  |  | 3 |  |  |  | 1 | 3 |
| Grant | 4 |  |  | 1 |  |  | 1 |  |  | 1 | 2 | 5 |
| Green | 2 |  |  |  |  |  |  |  |  |  |  | 1 |
| Green Lake | 2 |  |  |  |  |  |  |  |  | 1 | 1 |  |
| Iron ... |  |  |  |  |  |  |  |  |  |  |  |  |
| Jackson |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Jefferson | 6 |  |  |  |  |  |  | 1 |  | 1 |  | 1 |
| Juneau |  |  |  |  |  |  |  |  |  | 1 | 1 |  |
| Kenosha <br> Kewaunee | 2 |  |  |  |  |  |  |  | 1 | 1 |  | 2 |
| La Orosse. | 6 |  |  |  |  |  |  |  |  | 1 |  | 1 |
| Lafayette . | 2 |  |  |  |  |  |  |  |  |  | 1 | 8 |
| Langlade |  |  |  |  |  |  |  |  |  |  |  |  |
| Lincoln . |  |  |  |  |  |  |  |  |  |  |  |  |
| Manitowoc . | 1 |  |  |  |  |  |  |  | 1 | 1 |  | 3 |
| Marathon | 2 |  |  |  |  |  | 1 |  |  |  | 1 | 1 |
| Marquette |  |  |  |  |  |  |  |  | 1 |  | 1 | 1 |
| Milwaukee | 15 |  | 2 | 5 | 10 | 6 | 8 | 2 | 8 | 6 | 3 | 29 |
| Monroe . |  |  |  | ..... |  |  |  |  |  |  |  | 2 |
| Oneida |  |  |  |  |  |  |  |  |  |  | 1 | 2 |
| Outagamie |  |  |  |  |  |  |  |  |  | 1 | 2 | 3 |
| Ozaukee |  |  |  |  |  | 2 |  |  |  | 1 | 2 | 3 |
| Pepin . |  | 1 |  |  |  |  |  |  |  |  |  |  |
| Pierce | 1 |  |  |  | 1 | 1 |  |  |  |  |  |  |
| P.olk | 2 |  |  |  | 2 | 1 |  |  |  |  | 2 | 3 |
| Portage |  |  |  |  | 1 |  |  |  |  | 2 |  | $\stackrel{3}{2}$ |
| Price |  |  |  |  |  |  |  |  |  |  |  |  |
| Richland | 7 |  |  |  |  |  | 2 |  |  | 3 |  | 4. |
| Rock . | 3 |  |  |  | 2 |  | 1 |  |  |  | 2 | 1 |
| Rusk .... |  |  |  |  |  |  |  |  |  | 1 | 2 | 1 |
| St. Oroix | 1 3 |  |  |  |  |  |  |  |  | 1 |  | 3 |
| Sawyer |  |  |  |  | 1 |  |  | 1 |  |  |  | 3 |
| Shawano ... |  |  |  |  |  |  |  |  |  |  |  |  |
| Sheboygan | 3 1 |  | 2 |  | 1 | . | 1 |  | 1 |  | 1 | 2 |
| rempealeau.... |  |  |  |  |  |  |  |  |  | 2 | 1 | 1 |
| Vernon | 1 |  |  |  |  |  |  |  |  | 1 | 1 | 1 |
| ilas .. |  |  |  |  |  |  |  |  |  | 1 | 1 | 1 |
| Talworth |  |  |  |  |  |  |  |  |  |  |  | 2 |
| Vashburn ... |  |  |  |  |  |  |  |  |  |  | 1 | 2 |
| Washington. |  |  |  |  |  | 2 |  |  |  |  | 1 |  |
| Vaukesha . | 1 |  |  | 1 |  |  | 1 |  | 2 |  | 1 | 5 |
| Vaushara | 2 |  |  |  |  |  |  |  |  |  | 1 | 2 |
| Vinnebago. | 3 |  |  |  | 2 |  | 1 | 1 |  |  |  | 3 |
| ood |  |  |  |  |  |  |  | 1 | 4 | 2 | 2 | 3 |
| Total.... | 101 | 1 | 6 | 11 | 22 | 15 | 23 | 6 | 22 | 34 | 38 | 158 |

TABLE NO. 19—Continued. SHOWING THE TOTAL DEATHS IN EACH COUNTV DURING THE CALENDIAR YEAR OF 1911, ARRANGED ACICORDING ITO ITHE CAUSES OF DEAT'H.

| Counties. |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Adams |  |  |  |  | 1 |  |  |  |  |  |  |  |
| Ashland |  |  |  |  | 2 |  | 1 | 1 |  | 1 |  |  |
| Barron |  | 2 | 1 |  | 1 |  |  |  |  |  |  |  |
| Bayfield |  |  |  |  |  |  |  | 1 |  |  |  |  |
| Brown |  |  |  |  | 1 | 2 | 1 |  | 2 |  | 1 |  |
| Buffalo |  |  |  |  |  |  |  |  |  | 1 |  |  |
| Burnett |  |  |  |  |  |  |  |  |  |  |  |  |
| Calumet Chipewa |  |  |  |  | 1 3 |  |  |  |  |  |  |  |
| Chipewa <br> Clark | 1 |  |  |  | 3 |  | 1 |  |  |  |  |  |
| Columbia | 1 |  |  |  | 1 |  |  | 1 | 1 |  |  |  |
| Crawford |  |  |  |  | 1 | 1 |  |  |  |  |  |  |
| Dane ... |  | 1 |  |  | 1 | 1 |  | 1 | 1 |  |  |  |
| Dodge |  |  |  |  |  |  |  | 1 |  |  |  |  |
| Door. | 1 | 1 |  |  |  |  |  |  |  |  |  |  |
| Douglas . |  |  |  |  | 1 |  | 2 1 | 1 |  |  |  |  |
| Dunn Cauare |  |  |  |  |  |  | 1 | 1 |  |  |  |  |
| Florence . |  |  |  |  | 1 |  |  |  |  |  |  |  |
| Fond du Lac |  |  |  |  | 4 | 1 |  | 1 | 2 |  |  |  |
| Forest |  |  |  |  |  |  |  |  |  |  |  |  |
| Grant |  |  |  |  |  |  |  | 1 |  |  |  |  |
| Green .... |  |  | 1 |  |  |  |  | 1 | 1 |  |  |  |
| Green Lake |  | 1 |  |  | 1 |  |  | 1 |  |  |  |  |
| Iron . . |  |  |  |  |  |  |  | 1 | ..... |  |  |  |
| Jackson |  |  |  |  |  |  |  |  |  |  |  |  |
| Jefferson |  |  |  |  | 1 |  |  |  |  |  |  |  |
| Juneau |  |  |  |  |  |  |  |  |  |  |  |  |
| Kenosha .... | 1 |  |  |  | 1 |  | 1 |  |  |  |  |  |
| Kewaunee : . <br> La Crosse |  |  |  |  |  |  | 1 |  | 1 |  |  |  |
| Lafayette |  |  |  |  |  |  |  |  |  |  |  |  |
| Langlade |  |  |  |  |  |  |  |  |  |  |  |  |
| Lincoln ... |  |  |  |  | 2 |  |  |  |  |  |  |  |
| Manitowoc |  |  |  |  |  |  | 2 | 1 |  |  |  |  |
| Marathon |  |  |  |  | 1 |  |  |  | 1 |  |  |  |
| Marinette Marquette |  |  |  |  |  |  |  |  |  |  |  |  |
| Milwaukee | 10 | 3 |  |  | 12 | 2 | 3 | 9 | 9 |  | 3 |  |
| Monroe | 1 |  |  |  | 1 |  |  | 1 |  |  |  |  |
| Oconto | 1 |  |  |  |  |  |  |  | 2 |  |  |  |
| Oneida |  |  | ...... |  | 2 | 1 |  |  |  |  |  |  |
| Outagamie Ozaukee |  | 1 |  |  |  |  |  | 1 | 1 |  |  |  |
| Pepin .. |  |  |  |  |  |  |  |  |  |  |  |  |
| Pierce | 1 |  |  |  |  |  |  | 1 |  |  |  |  |
| Polk |  |  | 1 |  | 1 |  |  |  |  |  |  |  |
| Portage | 2 |  |  |  |  |  |  |  |  | 1 |  |  |
| Price |  |  |  |  |  |  |  |  |  |  |  |  |
| Racine | 1 |  |  |  | 1 |  |  | 1 | ..... |  |  |  |
| Richland |  |  |  |  |  |  |  | 1 | 3 |  |  |  |
| Rusk | 1 |  |  |  |  |  |  |  |  |  |  |  |
| St. Oroix | 1 | 1 |  |  |  |  |  |  | 1 |  |  |  |
| Sauk .. |  |  |  |  |  |  |  |  |  |  |  |  |
| Shawano | 1 |  |  |  |  |  |  | 1 | 1 |  |  |  |

TABLE NO. 19-Continued. SHOWING THE TOTAL DEATHS IN EACH COUNTY DURING THE CAIAENDLAR YEAR OF 1911, ARRANGED ACOORDING TO JJHE CAUSES OF DEATH.


TABLE NO, $19 \rightarrow$ Continued. SHOWING THE TOTAL DEATHS IN EACH COUNTY DURING THEE CALENDAR YEAR OF 1911, ARRANGED ACCORDING TO THE CAI'SES OF DEATH.

| Counties. |  |  |  |  |  | $\begin{aligned} & \dot{1} \\ & 0 . \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & \text { on } \end{aligned}$ | ® 0 0 0 0 0 0 0 0 0 0 0 0 0 0 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Adams | 1 | 3 | 1 | 1 | 9 | 1 |  |  |  | 1 |  |  |
| Ashland | 1 | 17 | 1 |  | 8 | 1 |  |  |  | 1 |  |  |
| Barron | 3 | 24 | 5 |  | 7 |  |  |  |  | 2 |  |  |
| Bayfleld |  | 18 |  |  | 9 |  |  | 1 |  |  |  |  |
| Brown . | 7 | 68 | 3 |  | 49 | 3 |  |  | $\cdots$ |  |  |  |
| Buffalo | 2 | 9 |  |  | 9 |  |  | 1 |  |  |  |  |
| Burnett |  | 7 | 4 |  | 6 |  |  |  |  |  |  |  |
| Calumet |  | 2 | 10 |  | 9 |  |  | 1 |  | 1 |  |  |
| Chippewa | 2 | 8 | 24 |  | 26 | 1 |  | 1 |  |  | 1 |  |
| Clark . | 2 | 3 | 18 |  | 11 | 1 |  |  |  |  |  |  |
| Columbia | 3 | 21 |  |  | 25 |  |  | 1 |  |  |  |  |
| Orawford | 5 | 9 | 1 |  | 11 |  |  | 1 |  |  |  |  |
| D'ne | 14 | 42 | 5 |  | 46 | 1 | 1 | 1 |  | 1 |  |  |
| Dodge | 8 | 28 | 5 |  | 35 | 3 |  |  |  | 2 | 1 |  |
| Door |  | 9 | 2 |  | 6 |  |  |  |  |  |  |  |
| Douglas | 2 | 41 | 6 |  | 13 | 3 |  | 1 |  | 2 |  |  |
| Dunn | 3 | 16 | 1 |  | 15 |  |  |  | 1 |  |  |  |
| Eau Claire | 4 | 12 | 1 |  | 28 | 1 |  | 1 |  |  |  |  |
| Florence |  | 1 |  |  | 4 |  |  |  |  |  |  |  |
| Fond du Lac | 6 | 32 | 3 |  | 37 | i |  |  |  |  |  |  |

TABLE NO．19—Continued．SHOWING THE TOTAL．DEATHS IN EACH COUNTY DURING THE CALAENDAR YEAR OF 1911，ARRANGED ACCORDING TO THE CAUSES OF DEATH．

| Counties． |  |  |  |  |  | ci 0 0 0 0 0 0 0 0 0 0 0 0 0 |  | 㫛 <br> สํ゙テ <br> $=3$ <br> 穴品 <br> 家管 <br> 苞 <br> on |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Forest |  | 4 | 2 |  | 3 |  |  |  |  | 1 |  |  |
| Grant | 3 | 24 | 6 |  | 21 | 1 |  | 1 |  |  | 1 | ．．．．． |
| Green |  | 9 | 1. |  | 21 |  | 2 |  |  | 3 | ．．．．．． |  |
| Green Lake | 5 | 10 | 1 |  | 8 |  |  |  |  | 1 |  | ．．．．．． |
| Iowa | 2 | 6 | 1. |  | 19 |  |  |  |  | 1 | ．．．．．． |  |
| Iron | 2 | 10 | 2 |  | 4 |  |  |  |  | 1 |  |  |
| Jackson |  | 13 |  |  | 14 |  |  |  |  | 2 |  |  |
| Jefferson |  | 17 | 4 |  | 19 |  |  | 1 |  |  | 1 |  |
| Juneau | 4 | 12 | 3 |  | 14 |  |  |  |  | 1 | ．．．．．． | ．．．${ }^{\text {a }}$ |
| Kenosha | 2 | 35 | 7 |  | 14 | 2 |  | 3 | ．．．． | i | $\cdots$ | 1 |
| Kewaunee | 2 | 5 | 2 |  | 15 |  |  |  |  | 1 | 1 | ．．．．．． |
| La Crosse |  | 20 | 8 |  | 39 | 1 |  | 3 | 1 | 1 | ．${ }^{\text {a }}$ |  |
| Lafayette |  | 9 | 5 |  | 12 | 1 |  | 1 | ．．．．．． | 1 | 1 |  |
| Langlade | 4 | 14 | 3 |  | 12 |  |  |  |  | 1 |  |  |
| Lincoln ． | 2 | 16 | 2 |  | 6 |  |  |  |  | 1 |  |  |
| Manitowoc | 3 | 22 | 5 |  | 32 |  |  | 2 |  | 2 |  |  |
| Marathon | 3 | 54 | 7 |  | 19 | 1 |  | 2 | 1 | 2 | 1 |  |
| Marinette | 1 | 34 | 3 | 1 | 21 |  |  | 1 |  | ．．．． |  |  |
| Marquette | 3 | 9 | 2 |  | 11 |  |  |  |  |  | 2 | ．${ }^{\text {．}}$ |
| Milwarke ${ }^{\text {a }}$ | 35 | 446 | 78 | 2 | 167 | 22 | 2 | 21 | 6 | 26 | 3 | 1 |
| Monroe | 2 | 28 | 3 |  | 16 | 1 |  | 1 | 1 | 1 | ．．．．．． |  |
| Oconto | 5 | 36 | 5 |  | 17 |  |  |  |  | 1 |  |  |
| Oneida |  | 10 | ？ |  | 1 |  |  |  |  |  |  |  |
| Outagamie | 1 | 30 | 3 |  | 33 |  |  | 2 |  | 1 |  |  |
| Ozaukee ．． |  | 13 | 1 |  | 15 |  |  | 2 |  |  |  |  |
| Pepin ．． |  |  | 2 |  | 4 |  |  | ．．．．． |  | 1 |  |  |
| Pierce | 2 | 13 |  |  | 7 |  | 1 |  |  | 2 | ．．．．． |  |
| Polk ． | 3 | 9 | 4 |  | 10 |  |  |  | 1 | $\cdots$ |  |  |
| Portage | 2 | 24 | 6 |  | 8 | 1 |  |  |  | 2 |  |  |
| Price ． | 4 | 15 | 4 |  | 3 |  |  |  |  |  |  |  |
| Racine | 8 | 40 | 8 |  | 28 | 1 |  | 9 | 1 | 3 | 1 |  |
| Richland | 4 | 15 | 1 |  | 6 | 1 |  | 1 |  |  |  |  |
| Rock | 13 | 28 | 6 |  | 30 | 1 | 1 | 3 |  |  |  |  |
| Rusk | 2 | 9 | 2 |  | 1 |  |  | 1 |  | 1 | 1 | ．．．．${ }^{\text {a }}$ |
| St．Croix | 1 | 18 |  |  | 22 |  |  | 1 |  |  |  |  |
| Sauk | 5 | 19 | 4 |  | 23 |  |  | ．．．．．． |  |  |  |  |
| Sawyer |  | 5 |  |  | 4 |  |  |  |  |  |  |  |
| Shawano | 6 | 16 | 5 |  | 26 |  |  | 1 |  | 2 | i |  |
| Sheboygan | 6 | 32 | 2 |  | 39 | 1 |  | 3 | 2 | 2 | 1 | ．$\cdot$. |
| Taylor | 3 | 15 |  |  | 5 |  |  |  |  | 1 |  |  |
| Trempealeau | 3 | 17 |  |  | 22 |  |  | 1 | 1 | ．．．．． |  |  |
| Vernon ．．． | 6 | 7 | 2 |  | 16 |  |  | 1 |  | 2 |  |  |
| Vilas | 1 | 5 | 2 |  | 1 |  |  | $\cdots$ |  | 1 |  |  |
| Walworth | 7 | 10 | 4 |  | 21 | 1 |  | 3 |  | ．．．．．． |  |  |
| W ashburn | 2 | 6 | 1. |  | 3 |  |  |  |  |  |  |  |
| W ashington． | 2 | 19 |  |  | 19 |  |  | 1 | 1 |  |  |  |
| Waukesha | 3 | 22 | 8 |  | 36 | 2 |  | 3 | 1 | 2 |  |  |
| Waupaca | 1 | 13 | 2 |  | 24 |  |  | 2 | 1 | 1 |  |  |
| Waushara | 5 | 14 | 6 |  | 9 | 1 |  |  |  |  |  |  |
| Winnebago | 3 | 46 | 9 |  | 48 | 1 |  | 4 | 1 | 3 | 1 | ．．．． |
| Wood ．．． | 5 | 21 | 6 |  | 13 |  |  | 1 |  |  | 1 |  |
| Total． | 239 | 1694 | 324 | 4 | 1344 | 55 | 7 | 84 | 20 | 81 | 17 | 2 |

TABLE NO. $19-$ Continued. SAOWING THE TOTAL DEATHS IN EACH COUNTY DURING THE CALENDLAR YEAR OF 1911, ARRANGED ACOCORDING TO THE CAUSES OF DEATH.

| Counties. |  | $\dot{\infty}$ 0 0 0 $\ddot{3}$ $\tilde{0}$ $\pm$ 0 | O. 0 0 0 0 0 0 0 0 0 0 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Adams |  |  |  |  |  |  |  |  |  |  |  |  |
| Ashland |  | 1 |  |  |  | 3 |  | 2 | 1 |  | 2 | 1 |
| Bayfield |  |  |  |  | 1 | 2 |  | 5 | 1 |  | 1 |  |
| Brown . |  |  | 2 |  |  | 3 | 3 | 9 4 | ${ }_{2}^{2}$ |  | 2 |  |
| Buffalo |  |  |  |  |  | 3 | 3 | $\stackrel{4}{2}$ | 3 |  | 2 |  |
| Burnett |  |  |  |  | 1 |  |  | 1 |  |  | 1 |  |
| Calumet |  |  | 2 |  |  |  |  | 1 | 1 |  | 1 |  |
| Ohippewa |  |  |  |  | 2 |  |  | 1 | 1 |  | 2 |  |
| Clark .... <br> Columbia |  |  |  |  | 1 |  |  |  | 2 |  | 1 |  |
| Orawford |  |  |  |  |  | 1 |  | 2 |  |  | 1 | ..... |
| Dane . | 1 | 1 | 1 |  | 1 | 3 |  | 2 6 | 3 |  |  |  |
| Dodge |  |  | 1 | 2 | 1 | 3 |  | ${ }_{6}^{6}$ | 3 |  | 4 |  |
| Door Douglas |  |  |  |  |  | 1 |  | 6 |  |  |  |  |
| Douglas |  |  |  | 1 |  | 1 |  | 7 | 2 |  | 2 |  |
| Eau Claire |  | 1 |  | 1 |  | 1 | i. | 1 | 1 |  |  |  |
| Florence. |  | 1 |  |  |  | 1 | 1 |  |  |  |  |  |
| Fond du Lac. |  |  | 1 | 2 |  | 2 | 2 | 3 | 4 |  | 1 |  |
| Forest |  | 1 |  |  |  | 1 |  |  |  |  |  |  |
| Grant |  |  |  | 1 |  | 1 |  |  | 4 |  | 1 |  |
| Green Lake |  |  |  | 1 |  |  |  | 3 | 1 |  | 2 |  |
| Iowa |  |  |  |  | 1 | 1 |  |  |  |  |  |  |
| Iron ... |  |  |  |  |  |  |  |  |  |  | 1 |  |
| Jackson |  |  | 1 |  |  | 1 |  | 1 |  |  | 1 | 2 |
| Juneau .. |  |  |  |  |  |  |  | 1 | 1 |  |  |  |
| Kewaunee |  |  |  | 1 |  | 1 | 1 | 10 | 1 |  | 4 |  |
| La Crosse |  | 3 |  | 1 |  |  |  | 2 | 1 |  |  |  |
| Lafayette |  |  |  |  |  | 1 | 2 | 7 | 1 |  | 5 |  |
| Langlade |  |  |  |  |  | 2 |  |  |  |  | 1 |  |
| Lincoln . |  |  |  | 1 | i |  |  | 2 | 2 |  |  |  |
| Manitowoc |  |  |  | 1 |  | 1 |  | 6 | 1 |  | 2 |  |
| Marathon |  | 2 |  | , | 2 | 5 | 2 | 2 | 4 |  | 5 |  |
| Marquette |  |  |  |  |  | 2 | $\cdots$ | 3 | 2 |  | 2 |  |
| Milwaukee |  |  |  | 9 | 11 |  | 4 | 39 | 2 |  | 16 |  |
| Monroe |  |  | 2 | 1 |  | 1 | 4 | 39 | 2 1 |  | 16 1 |  |
| Oconto |  |  |  |  |  | 1 |  |  | 1 |  | 1 |  |
| Oneida |  |  |  |  | 3 | 1 |  | 7 | 1 |  |  |  |
| Outagamie |  |  |  | 1 |  | 2 |  | 6 | 2 |  | 1 |  |
| Ozaukee |  |  |  |  |  | ... |  | 1 | 1 |  | 1 |  |
| Pierce |  |  |  |  |  |  |  | 1 | 1 |  |  |  |
| Polk |  |  | 1 |  |  | 3 |  | 2 3 3 |  |  |  |  |
| Portage |  |  |  |  |  | 1 |  | 1 | 2 |  | 3 |  |
| Price |  |  |  |  |  |  |  |  | 3 |  |  |  |
| Racine |  |  |  | 1 |  | 2 |  | 4 | 3 | 1 | 7 |  |
| Richland |  |  |  | 2 |  | 1 |  | 1 |  |  | 1 |  |
| Rock |  |  | 1 |  | 1 | 1 | 2 | 4 | 4 |  | 7 |  |
| St. Oroix |  |  |  | 1 | 1 | 1 |  | 2 | 2 |  |  |  |
| Sauk |  |  | i | 1 |  |  |  | 5 4 | 1 |  | 1 |  |
| Sawyer . |  |  |  |  |  |  |  |  | 2 |  |  |  |
| Shawano |  |  | 1 |  |  | 1 |  | 10 | 1 | 1 | 2 |  |
| Sheboygan |  |  |  |  |  |  |  | 10 | 1 | 1 | 1 |  |

TABLE NO. 19—Continued. SHOWING THE TOTAL DEATHS IN EACH COUNTY DIURING THE CALAENDAAR YEAR OF 1911, ARRANGED ACICORDING TO THEE CAUSES OF DEA'TH.


TABLE NO. 19-COntinued. SHOWING THE TOTAL DEATHS IN EACH COUNTY DURING THE CALENDAR YEAR OF 1911, ARRANGED AOCORDING TV 'IVHE CAUSES O'F DEATH.

| Counties. |  |  |  |  | Excessive cold. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Adams | 1 | 1 |  |  |  |  |  |  |  |
| Ashland | 1 | 8 |  |  |  |  |  |  | 2 |
| Barron | 1 | .... |  |  |  |  | 1 |  | 1 |
| Bayfield |  | 2 |  |  |  |  |  |  |  |
| Brown | 1 | 5 | 2 |  | 1 | 1 |  |  |  |
| Buffalo |  |  |  |  |  | 1 |  |  |  |
| Burnett | 1 | 1 |  |  |  |  |  |  |  |
| Calumet | 1 | 3 |  |  |  |  |  |  |  |
| Chippewa |  | 3 | 3 |  |  | 2 |  |  |  |
| Clark |  | 5 |  |  |  | 1 |  |  |  |
| Oolumbia |  | 8 |  |  |  | 2 |  |  |  |
| Crawford |  | 1 |  |  |  |  |  |  |  |
| Dane |  | 13 | 2 |  | 1 | 1 |  |  | 1 |
| Dodge |  | 4 |  |  |  | 1 |  |  | 1 |
| Door |  |  |  |  |  |  |  |  |  |
| Douglas |  | 27 | ..... |  |  | 1 | 1 | 1 | 1 |
| Dunn .. | 1 |  |  |  |  |  | 1 |  |  |
| Eau Claire |  | 8 |  |  | 1 | 2 | 1 |  |  |
| Florence |  |  |  |  |  |  |  |  |  |
| Fond du Lac. | 1 | 9 | 2 |  |  |  |  |  |  |
| Forest |  | 4 |  |  | 1 |  |  |  |  |
| Grant |  | 6 |  |  |  | 2 |  |  |  |
| Green ........ |  | 1 | 1 |  |  |  |  |  | 1 |

IABLE NO. 19-Continued. SHOWING THE TOTAT. DEATHS IN EACH OOUNTY DIURING 'IHE IOALIENDAR YEAR OF 1911, ARRANGED ACICORDING TO THE CAUSES OF DEATH.

| Counties. |  |  |  |  | 0 0 0 0 0 0 0 0 0 0 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Green Lake . |  |  |  |  |  |  |  |  |  |
| Iowa |  | 1 |  |  |  |  |  |  |  |
| Iron ... | 1 | 2 |  |  |  |  |  |  |  |
| Jackson |  | 5 | ..... |  |  |  |  |  |  |
| Jefferson |  | 3 |  |  |  |  |  |  |  |
| Juneau | 1 | 8 |  |  |  | 1 | 1 |  |  |
| Kewaunee |  | 14 | 1 |  |  | 1 | 1 |  |  |
| La Crosse | 1 | 9 |  |  | 1 | 1 |  | 1 |  |
| Lafayette |  |  |  |  |  | 1 |  |  |  |
| Langlade |  | 4 | 1 |  |  |  |  |  |  |
| I.incoln ... |  | 2 | 1 |  |  |  |  |  |  |
| Manitowoc |  | 1 |  |  |  | 2 |  |  |  |
| Marinette | i. | 12 7 | 1 |  |  | 1 |  | 1 | 2 |
| Marquette |  |  |  |  |  | 1 |  |  |  |
| Milwaukee | 3 | 95 | 8 | $\ldots$ |  | 6 |  | 4 | 6 |
| Oconto . |  | 8 | 1 |  |  |  | 2 |  |  |
| Oneida |  | 6 | 1 |  |  |  |  |  |  |
| Outagamie |  | 5 |  |  |  |  |  |  |  |
| Ozaukee |  | 2 |  |  |  |  |  |  |  |
| Pepin ... |  |  |  |  |  |  |  |  |  |
| Pierce |  |  |  |  |  |  |  |  |  |
| Polk ... | 1 | 4 |  |  |  | 1 |  |  |  |
| Price |  | 1 | i |  | 1 | 3 | 1 |  | 1 |
| Price |  | $\stackrel{2}{2}$ |  |  |  |  |  |  |  |
| Racine . <br> Richland | 1 | 13 | 1 |  |  | 7 |  |  |  |
| Rock | 1 | 21 |  |  |  |  |  |  |  |
| Rusk |  | 21 7 |  |  |  |  |  |  | 1 |
| St. Croix | 1 | 1 |  |  |  |  |  |  |  |
| Sauk. | 1 | 6 |  |  |  | 3 | 2 | 1 |  |
| Sawyer |  | 3 |  |  | 1 |  |  |  |  |
| Shawano |  | 7 |  |  |  | 2 |  |  | 3 |
| Sheboygan | 1 | 8 | i |  |  |  | 2 |  |  |
| Taylor ... |  | 3 |  |  | 1 |  | 2 |  |  |
| Trempealeau |  | 1 |  |  |  | 1 |  |  | 1 |
| Vernon Vilas |  | 3 |  |  | 1 | 1 |  |  |  |
| Walworth |  |  | .... |  |  |  |  |  | 1 |
| Washburn |  | 2 |  |  | 1 | 1 | 1 |  |  |
| Washington |  | 3 |  |  |  |  | 1 |  |  |
| Waukesha | 2 | 11 | 1 |  | 1 |  |  | 1 | 1 |
| Waupaca <br> Waushar |  | 3 |  |  | 1 | 1 |  |  | 1 |
| Winnebago |  | 21 |  |  |  | 1 | 1 |  |  |
| Wood | 2 | 1 | 1 |  |  |  | 1 | 1 | ..... |
| Total | 25 | 423 | 29 |  | 12 | 47 | 17 | 10 | 24 |

TABLE NO. 19-Continued. SHOWING THE TOTAL DEATHS IN EACH COUNTY DURING THE CALENDAR YEAR OF 1911, ARRANGED ACCORDING TO TVHE C'AUSES OF DEAT'H.

| Counties. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Adams |  |  |  | 1 |  |  | 2 | 4 |
| Ashland | 1 | 3 | 3 | 3 |  |  | 5 | 18 |
| Barron |  |  |  | 3 |  | 1 | 2 | 20 |
| Bayfield |  |  |  | 1 | $\stackrel{2}{2}$ |  | 1 | 10 |
| Brown . |  | 1 | ... | 9 | 2 | 3 | 4 | 48 6 |
| Buffalo |  |  |  |  |  |  |  | ${ }_{3}^{6}$ |
| Burnett Calumet |  |  | 1 | 1 |  |  | 6 | 3 |
| Chippewa |  |  | 1 | 4 |  | 2 | 4 | 10 |
| Clark ... |  |  |  |  |  |  | 3 | 21 |
| Columbia |  |  | 4 | 4 |  | 4 | 2 | 15 |
| Crawford |  |  |  |  |  | 1 | 2 6 | 10 |
| Dane .. |  | 3 | 8 | 6 |  | 5 1 | 6 7 | 37 29 |
| Dodge |  |  | 3 | 1 |  | 1 | 4 |  |
| Door ${ }^{\text {Douglas }}$ |  |  | 1 | ${ }_{3}^{1}$ |  |  | 6 | 30 |
| Dunn |  |  |  | 2 |  | 1 | 6 | 16 |
| Eau Claire |  |  | 2 | 6 | 2 | 1 | 16 | 16 |
| Florence . | 1 |  |  | 1 |  |  | 1 |  |
| Fond du Lac |  |  | 5 | 2 |  | 1 | 8 | 18 |
| Forest ....... |  |  |  |  |  |  |  |  |
| Grant . |  |  | 4 | 2 |  |  | 9 3 | 8 |
| Green ...... |  |  | 1 2 |  |  | 1 |  | 8 |
| Green Lake Iowa |  |  | 2 <br> 3 | 1 | 1 | 1 | 3 | 8 |
| Iron ......... |  |  |  |  |  |  |  | 4 |
| Jackson |  |  |  |  |  |  | 3 | 4 |
| Jefferson |  |  | 3 | 1 |  |  | 11 | 11 |
| Juneau |  |  | 2 | 1 |  |  | 11 | ${ }_{27}^{11}$ |
| Kenosha | 2 |  | 3 | 3 |  |  | 2 | $\stackrel{27}{8}$ |
| Kewaunee |  |  | 1 |  |  |  | $\begin{array}{r}3 \\ 2 \\ 2 \\ \hline\end{array}$ | $\stackrel{8}{26}$ |
| La Crosse |  |  | 2 | 5 |  |  |  | 11 |
| Lafayette <br> Langlade | 1 |  | 1 |  |  |  | 1 | 18 |
| Lincoln . |  | i | 2 |  |  |  | 2 | 11 |
| Manitowoc |  |  | 4 |  |  |  | 1 | 43 |
| Marathon |  |  | 5 | 5 |  |  | 12 | 40 |
| Marinette | 1 |  | 1 |  |  |  | 5 | $\stackrel{24}{3}$ |
| Marquette |  |  | 1 |  |  |  | $\stackrel{Y}{2}$ | 3 |
| Milwaukee | 2 | 2 | 31 | 12 |  | 1 | 3 | 436 |
| Monroe |  |  | 1 | 1 |  |  | 3 3 | 17 |
| Oconto |  |  |  | 1 |  | 1 $\ldots$ | 3 | 24 14 |
| Oneida ${ }^{\text {Outagamie }}$ |  |  | 8 | 1 |  |  | 17 | 14 35 |
| Ozaukee .. |  |  |  |  |  |  | 4 | 6 |
| Pepin .. |  |  |  | 1 |  |  | 1 | 3 |
| Pierce ..... |  |  |  |  |  |  |  | 7 |
| Polk |  |  | 1 |  |  |  | 4 | 13 |
| Portage |  |  | 1 |  |  |  | 10 | 18 |
| Price . |  |  | 1 | 1 |  |  | 1 | 7 |
| Racine |  |  | 4 | 1 | 1 |  | 8 | 60 |
| Richland |  |  | 2 | 1 | 1 | 1 | 8 | 20 |
| Rock |  |  | 3 | 1 | 2 | 1 | 8 | 39 |
| Rusk .... |  |  |  | 1 |  |  | 1 | 7 |
| St. Croix |  |  | 1 |  | 1 |  | 2 | 15 |
| Sauk |  |  | 1 |  | 2 |  | 3 | 15 |
| Sawyer | 1 |  |  |  |  |  | 3 | 7 |
| Shawano .. |  | i | 1 5 | 1 |  |  | 7 | 18 52 |

TABLE NO，19－Continued．SHOWING THE TOTAL DEATHS IN EACH COUNTY DURING．THE CALENDAR YEAR OF 1911，ARRANGED ACCORDING TO THE CAUSES OF DEATTH：

| Counties． |  | $\left\{\begin{array}{l} \dot{E} \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \end{array}\right.$ | $\begin{aligned} & \text { Fract ures, (cause } \\ & \text { not specified). } \end{aligned}$ |  |  |  |  | 圱 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Taylor |  |  |  | 1 |  |  | 2 | 10 |
| Trempealeau |  |  | 3 |  | 1 |  | 4 | 11 |
| Vernon |  | ．．．．． | 2 |  |  |  | 2 | 14 |
| Vilas ．．．． |  |  |  |  |  |  | 5 | 1 |
| W alworth ． |  |  | 7 | ．．．．． |  |  | 5 | 15 |
| Washington ． |  |  | 1 |  | 1 |  | 2 | 7 |
| Waukesha ．． |  | ．．．．．． | 3 | 1 | 1 |  | 4 | 22 |
| Waupaca |  |  | 3 | 1 |  |  | 2 | 12 |
| Waushara |  |  | 1. | 1 |  |  |  | 8 |
| Winnebago |  |  | 6 | 6 |  |  | 6 | 39 |
| Wood |  |  | 3 | 2 |  | 2 | 5 | 15 |
| Total | 9 | 11 | 161 | 103 | 16 | 27 | 268 | 1583 |

TABLE NO．20．－SHOWING OAUSES OF DEATH IN WISCONSIN FROM JAN． 1 1911，TO DEC．31，1911，ARRANGED ACCORDING TO COLOR，SEX，OONJUGAL OONDITION AND NATIVITY．

| Name of Disease． | Color． |  |  |  | Sex． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ¢ | 苍 | 号 | E B E E P | 筩 | 咸 | 这 |
| General Diseases：I． |  |  |  |  |  |  |  |
| General Diseases： <br> Typhoid fever |  |  |  |  |  |  |  |
| Typhus fever | 317 | 1 | 1 |  | 186 | 133 |  |
| Relapsing fever |  |  |  |  |  |  |  |
| Malaria ．． | 4 |  |  |  | 4 |  |  |
| Smallpox | 2 |  |  |  | 1 | 1 |  |
| Measles ．．．．． | 244 |  | $\ddot{2}$ | 2 | 125 | 123 |  |
| Scarlet fever | 224 |  |  | 1 | 104 | 121 |  |
| Whooping cough | 223 | 1 |  |  | 107 | 117 |  |
| Diphtheria and croup | 330 |  | 1 | 1 | 173 | 159 |  |
| Miliary fever | 358 2 | 1 | 1 |  | 173 2 | 187 |  |
|  |  |  |  |  |  |  |  |
| Cholera nostras | 15 |  |  |  | 4 | 11 |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Yellow fever <br> Leprosy |  |  |  |  |  |  |  |
| Erysipelas $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$ |  |  |  |  |  |  |  |
| Other epidemic diseases． | ${ }^{4}$ |  | 1 |  | 5 | 4 |  |
|  |  |  |  |  |  |  |  |
| Anthrax ． |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Tetanus Mycoses | 38 |  |  |  | 25 |  |  |
|  | 5 |  |  |  | 4 | 1 |  |

## TABLE NO．20．－SHOWING CAUSES OF DEATH IN WISCONSIN FROM JAN． 1 ， 1911，TO DEO．31，1911，ARRANGED ACCORDING TO COLOR，SEX，CONJUGAL CONDITION AND NATIVITY－Continued．

| Name of Disease． | Color． |  |  |  | Sex． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ¢ | 会 | 䔍 | E E E E | シ | 㥑 | d |
| Pellagra | 5 |  |  |  | 5 |  |  |
| Beriberi |  |  |  |  |  |  |  |
| Tuberculosis of the lungs． | 1，955 | 7 | 22 | 1 | 1,058 22 | 930 26 |  |
| Acute miliary tuberculosis． | 45 | 1 | 1 | 1 | 22 59 | 60 |  |
| Tuberculosis meningitis | 117 |  | ${ }_{2}^{2}$ |  | 59 | 68 |  |
| Abdominal tuberculosis | 134 |  | 2 | 1 | 69 | 68 |  |
|  | 16 3 |  |  |  | 6 1 | 10 |  |
| White swellings Tuberculosis of other organs．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 41 |  |  | 1 | 23 | 19 |  |
| Disseminated tuberculosis | 49 | 2 | 1 |  | 31 | 21 |  |
| Rickets | 20 |  |  |  | 13 | 7 |  |
| Syphilis | 54 | 1 |  |  | 35 | 20 |  |
| Gonococcus infection | 6 |  |  |  | 2 | 4 |  |
| Cancer of the buccal cavity．． | 37 |  |  |  | 27 | 10 |  |
| Cancer of the stomach，liver．．．．．．．．．．．．．．． | 818 | 4 |  | 2 | 470 | 354 | $\ldots$ |
| Cancer of the peritoneum，intestines，rec－ tum | 191 |  |  | 1 | 87 | 105 |  |
| Cancer of the female genital organs．．．．．．．．． | 138 | 1 | 1 |  |  | 140 |  |
| Cancer of the breast．．．．．．．．． | 97 |  | 1 | 1 | 2 | 97 |  |
| Cancer of the skin．． | 50 |  |  |  | 34 | 16 |  |
| Cancer of other organs or of organs not specifled | 280 |  |  |  | 170 | 110 |  |
| Other tumors（tumors of the female genital organs excepted） | 98 |  | 2 | 2 | 45 | 57 |  |
| Acute articular rheumatism．．．．．．．．．．．．．．．．．．． | 170 |  |  |  | 91 | 79 |  |
| Chronic rheumatism and gout． | 88 | 1 | 1 |  | 47 | 43 |  |
| Scurvy ． | 2 |  |  |  | 2 |  |  |
| Diabetes | 297 | 1 |  |  | 153 5 | 145 49 |  |
| Exophthalmic goitre Addison＇s disease ． | 53 |  | 1 |  | 5 2 | 49 5 |  |
| Leuchaemia ．．．．． | 42 |  |  |  | 22 | 20 |  |
| Anaemia，chlorosis | 153 | ．．．．． |  |  | 66 | 87 |  |
| Other general diseases． | 32 |  |  |  | 16 | 16 |  |
| Alcoholism（acute or chronic）．．．．．．．．．．．．．．． | 101 7 |  |  | 4 | 103 | 2 |  |
| Ohronic lead poisoning．．．．．．．．．．．．．．．．．．．．．．．．．．． | 7 |  |  |  | 5 | 2 |  |
| Other chronic poisonings ．．．．．．．．．．．．．．．．．．．．． | 1 |  |  |  |  | 1 |  |
| II． |  |  |  |  |  |  |  |
| Diseases of the Nervous System and of the Organs of Special Sense： |  |  |  |  |  |  |  |
| Encephalitis ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 42 |  | 1 |  | ${ }_{26}^{26}$ | 17 |  |
| Meningitis ．．．．．．．．． | 432 | 1 | 3 | 1 | －254 | 183 7 |  |
| Locomotor ataxia | 36 |  |  |  | 29 | 7 |  |
| Other diseases of the spinal cord | 114 |  |  |  | 68 | 46 |  |
| Cerebral haemorrhage，apoplexy． | 1，417 | 3 | 5 | 3 | 800 | 628 |  |
| Softening of the brain．．．．．．．．．．．． | 40 |  |  |  | 28 | 12 |  |
| Paralysis without specified cause．．．．．．．．．．． | 313 | 1 |  | 2 | 150 | 166 |  |
| General paralysis of the insane．．．．．．．．．．．．．． | 111 | 1 |  |  | 66 | 46 |  |
| Epilepsy Convulsions（no．．．．．．．．．．．．．．．．．． | 18 |  |  | 1 | 53 8 | 41 10 |  |
| Convulsions of infants．．．．． | 391 |  | 2 | 2 | 223 | 171 | 1 |
| Ohorea | 9 |  |  |  | 3 | 6 |  |
| Neuralgia and Neuritis ．．．．．．．．．．．．．．．．．．．．． | 22 |  |  |  | 14 | 8 |  |
| Other diseases of the nervous system．．．．．． | 96 | 1 |  | 1 | 59 | 40 |  |
| Diseases of the eyes and their annexa． | 8 |  |  |  | 6 | 2 |  |
| Diseases of the ears．．．． | 13 |  |  |  | 9 | 4 |  |

TABLE NO．20．－SHOWING CAUSES OF DEATH IN WISOONSIN FROM JAN． 1 ， 1911，TO DEC．31，1911，ARRANGED ACCORDING TO COLOR，SEX，CONJUGAL CONDITION AND NATIVITY－Continued．

| Name of Diseases． | Color． |  |  |  | Sex． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ¢ \＃ E |  | 菏 | 号 | $\stackrel{\text { ¢ }}{\text { ¢ }}$ | 誌 | ¢ |
| III． |  |  |  |  |  |  |  |
| Diseases of the Oirculatory System： <br> Pericarditis |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Acute endocarditis | 101 |  |  |  | 45 | 56 |  |
| Organic diseases of the heart | 1，637 | 2 | 4 | 3 | 879 | 767 |  |
| Angina pectoris ．．．．．．．．．．．．．．．．．．．．．．．．．．． | 105 |  |  |  | 66 | 39 |  |
| Diseases of the arteries，atheroma，aneu－ rysm，etc． | 366 | 1 |  |  | 238 | 129 |  |
| Embolism and thrombosis．．．．．．．．．．．．．．．．．．． | 94 |  |  |  | 47 | 47 |  |
| Diseases of the veins（varices，haemorroids， phlebitis，etc．） | 18 |  |  |  | 5 | 13 | $\ldots$ |
| Diseases of the lymphatic system（lymph－ angitis，etc．） | 7 |  |  |  | 7 | 13 |  |
| Haemorrhage；other diseases of the circula－ tory system | 18 |  |  |  | 10 | 8 |  |
| IV． |  |  |  |  |  |  |  |
| Diseases of the Respiratory System： Diseases of the nasal fossae． |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Diseases of the larynx． | 43 |  |  |  | 30 | 13 |  |
| Diseases of the thyroid body | 9 |  |  |  | 2 | 7 |  |
| Acute bronchitis ．． | 256 |  | 1 | 1 | 147 | 111 |  |
| Chronic bronchitis | 228 | 1 |  |  | 114 | 115 |  |
| Bronchopneumonia | 501 |  | 2 | 2 | 278 | 227 |  |
| Pneumonia ．．．．． | 1，701 | 4 | 10 | 7 | 987 | 735 |  |
| Pleurisy ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 78 |  |  |  | 51 | 27 |  |
| Fulmonary congestion，pulmonary apo－ plexy | 238 | 1 | 2 | 2 | 121 | 122 |  |
| Gangrene of the lung． | 6 |  |  |  | 2 | ， |  |
| Asthma ．．．．．．．．．．．．．．．．．．．． <br> Pulmonary emphysema | 100 |  |  |  | 56 | 43 | 1 |
| Pulmonary emphysema Other diseases of the respiratory system | 20 |  |  |  | 10 | 10 |  |
| （tuberculos＇s excepted）．．．．．．．．．．．．． | 48 |  |  |  | 33 | 15 |  |
| $\nabla$ ． |  |  |  |  |  |  |  |
| Diseases of the digestive system： |  |  |  |  |  |  |  |
| Diseases of the mouth and annexa． | 12 |  |  |  | 6 |  |  |
| Diseases of the pharynx | 49 |  |  |  | 25 | 24 |  |
| Diseases of the oesophagus | 9 |  |  |  | 5 | 2 |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Diarrhea and enteritis（under two years）．．． 1 | 1，224 | 2 | 2 | 5 | 659 | 573 | 1 |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Appendicitis and typhlitis． | 272 |  |  | 1 | 170 | 103 |  |
| Hernia intestinal obstruction． | 267 |  |  | 1 | 144 | 123 |  |
| Other diseases of the intestines． | 87 |  |  |  | 47 | 40 |  |
| Acute yellow atrophy of the liver | 8 |  |  |  | 2 | 6 |  |
| Hydatid tumor of the liver． | 2 |  |  |  | 2 |  |  |
| Oirrhosis of the liver． | 305 |  |  |  | 214 | 91 |  |
| Biliary calculi ．．．．．．． | 49 |  |  |  | 16 | 33 |  |
| $\mathrm{O}^{+}$ther diseases of the live | 140 |  |  |  | 75 | 65 |  |
| Diseases of the spleen．．．．．．．．．．．．．．．．．．．．．． | 6 |  |  |  | 2 | 4 |  |
| Simple peritonitis（non－puerperal）．．．．．．．．．． | 74 |  |  |  | 34 | 40 |  |
| berculosis excepted）．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 26 |  |  |  | 14 | 12 |  |

TABLE NO．20．－SHOWING CAUSES OF DEATH IN WISCONSIN FROM JAN．1， 1911，TO DEC．31，1911，ARRANGED ACCORDING TO COLOR，SEX，CONJUGAL CONDITION AND NATIVITY－Continued．

| Name of Diseases． | Color． |  |  |  | Sex． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ¢ |  | 号 | $\begin{aligned} & \text { ম } \\ & \text { B } \\ & \text { है } \\ & \text { है } \end{aligned}$ |  | 宊 | $\begin{aligned} & \dot{\tilde{B}} \\ & \text { 若 } \\ & \text { ह } \\ & \text { ロ } \end{aligned}$ |
| VI． |  |  |  |  |  |  |  |
| Nonvenereal Diseases of the Genito－Urinary System and Annexa： <br> Acute nephritis $\qquad$ 131 |  |  |  |  |  |  |  |
|  | 131 1,285 | 5 | 5 | 3 | 73 769 | 588 |  |
| Chyluria | 1 |  |  |  | 1 |  |  |
| Other diseases of the kidneys and annexa．． | 60 |  |  |  | 29 | 31 |  |
| Calculi of the urinary passages．．．．．．．．．．．．．． | 2 |  |  |  | 1 | 1 |  |
| Diseases of the bladder．．．．．．．．．．．．．．．．．．．．．．． | 101 |  | 3 | 1 | 95 | 10 | $\ldots$ |
| Diseases of the urethra，urinary，abscess， etc． | 1 |  |  |  |  | 1 |  |
| Diseases of the prostate．．．．．．．．．．．．．．．．．．．． | 100 | 1 |  |  | 101 |  |  |
| Nonvenereal diseases of the male genital or－ gans | 1 |  |  |  | 1 |  |  |
| Uterine hemorrhage（nonpuerperal）．．．．．．．．．． | 6 |  |  |  |  | 6 |  |
| Uterine tumor（noncancerous）． | 11 |  |  |  |  | 11 |  |
| Other diseases of the uterus．．． | 22 |  |  |  |  | 22 |  |
| Cysts and other tumors of the ovary．．．．．． | 15 |  |  |  |  | 15 |  |
| Salpingitis and other diseases of the female genital organs | 23 |  |  |  |  | 23 |  |
| Nonpuerperal diseases of the breast（cancer excepted） | 6 |  |  |  |  | 6 |  |
| VII |  |  |  |  |  |  |  |
| The Puerperal State： |  |  |  |  |  |  |  |
| Accidents of pregnancy | 22 |  |  |  |  | 22 |  |
| Puerperal hemorrhage | 34 |  |  |  |  | 34 |  |
| Other accidents of labor | 38 |  |  |  |  | 38 |  |
| Puerperal septicaemia ．．．．．．．．．．．．．．．．．．．．．．． | 155 | 1 | 2 |  |  | 158 |  |
| Puerperal albuminuria and convulsions．．．． | 26 |  | 1 |  |  | 27 |  |
| Puerperal phlegmasia alba dolens，embo－ lus，sudden death | 14 |  |  |  |  | 14 |  |
| Following childbirth（not otherwise defined） | 14 |  |  |  |  | 3 |  |
| Pureperal diseases of the breast VIII. |  |  |  |  |  |  |  |
| Diseases of the Skin and of the Cellular Tis－ sues： |  |  |  |  |  |  |  |
| Furuncle | 8 |  | 1 | 1 | $\stackrel{4}{6}$ | 2 |  |
| Acute abscess | 17 |  |  |  | 8 | 9 |  |
| Other diseases of the skin and annexa．．．．．． | 31 |  |  |  | 19 | 12 |  |
|  |  |  |  |  |  |  |  |
| Diseases of the Bones and of the Organs of Loccomotion： |  |  |  |  |  |  |  |
| Disearsers of the joints（tuberculosis and rhe matism excepted） | 33 |  |  |  | 18 3 | 16 |  |
| Amputations ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 7 |  |  |  | 4 | 3 |  |
| Other diseases of the organs of locomotion X | 1 |  |  |  |  | 1 |  |
| Malfor mations： <br> Consenital malformations ．．．．． | 239 |  |  |  | 135 | 104 |  |

TABLE NO. 20.-SHOWING CAUSES OF DEATH IN WISCONSIN FROM JAN. 1, 1911, TO DEC. 31, 1911, ARRANGED ACCORDING TO COLOR, SEX, CONJUGAL CONDITION AND NATIVITY-Continued.

*Stillbirths not included in total. Total $27,185$.

TABLE NO. 20.-SHOWING CAUSES OF DEATH IN WISCONSIN FIKOM JAN. 1, 1911, TO DEC. 31, 1911, ARRANGED ACCORDING TO COLOR, SEX, CONJUGAL CONDITION AND NATIVITY-Continued.

| Name of Disease. | Conjugal condition. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\stackrel{\text { ¢ }}{\stackrel{\circ}{80}}$ | \% | O | O-0 |  |
| I. |  |  |  |  |  |
| General Diseases: Typhoid fever | 175 | 127 | 11 | 2 | 4 |
| Typhus fever .. |  |  |  |  |  |
| Relapsing fever |  |  |  |  |  |
| Malaria ....... | 2 | 1 | 1 |  | ........ |
| Smallpox .......................................... | 1 | 1 |  |  |  |
|  | 237 | 10 |  | 1 | ........ |
| Scarlet fever ...................................... | 215 | 10 |  |  |  |
| Whooping cough | 222 | 1 |  |  | 1 |
| Diphtheria and croup | 316 | 14 | 1 |  | 1 |
| Influenza $\ldots$..................................... | 80 | 154 | 120 | 4 | 2 |
| Miliary fever . | 2 |  |  |  |  |
| Asiatic cholera Cholera nostras | 10 | 4 |  |  |  |
| Dysentery ...... | 30 | 20 | 19 |  | 1 |
| Plague ... |  |  |  |  |  |
| Yellow fever |  |  |  |  |  |
| Leprosy . | 1 |  |  |  |  |
| Erysipelas | 37 | 34 | 21 | 1 | 2 |
| Other epidemic diseases......... | 7 |  |  |  |  |
| Purulent infection and septicaemia | 77 | 21 | 14 | 1 | 2 |
| Glanders |  |  |  |  |  |
| Rabies . | 1 | i |  |  |  |
| Tetanus | 27 | 7 | $\underline{2}$ | 2 |  |
| Mycoses | 1 | 3 | 1 |  |  |
| Pellagra | 3 | 1 | 1 |  |  |
| Beriberi .. ................. |  |  |  |  |  |
| Tuberculosis of the lungs. | 892 | 933 | 131 | 15 | 17 |
| Acute miliary tuberculosis. | 19 | 26 | 1 | 1 | 1 |
| Tuberculous meningitis.. | 104 | 14 |  |  | 1. |
| Abdominal tuberculosis | 66 | 56 | 11 | 3 | 1 |
| Pott's disease | 6 | 7 | 3 |  |  |
| White swellings ......... | 1 | 2 |  |  |  |
| Tuberculosis of other organs. | 19 33 | 14 | 4 4 | 1 | 4 |
| Rickets ............................................ | 19 | 1 | 4 |  |  |
| Syphilis | 40 | 9 | 5 | 1 |  |
| Gonococcus infection | 2 | 3 | 1 |  |  |
| Cancer of the buccal cavity.. | 2 | 24 | 10 | 1 |  |
| Cancer of the stomach, liver.................... | 52 | 512 | 242 | 7 | 11 |
| Cancer of the peritoneum. intestines, rectum... | 24 | 113 | 53 |  | 2 |
| Cancer of the female genital organs............ | 11 | 93 | 34 | 2 | ........ |
| Cancer of the breast. <br> Cancer of the skin | 19 6 | 50 25 | 30 19 |  |  |
| Cancer of other organs or of organs not specifled | 30 | 172 | 71 | 2 | 5 |
| Other tumors (tumors of the female genital organs excepted) | 29 | 47 | 24 | 2 |  |
| Acute articular rheumatism....................... | 88 | 67 | 11 | 2 | 2 |
| Chronic rheumatism and gout. | 12 | 43 | 33 | 1 | 1 |
| Scurvey | 2 |  |  |  |  |
| Diabetes ....................................... | 79 | 155 | 61 | 2 | 1 |
| Exoohthalmic goitre | 16 | 27 | 9 | 1 | 1 |
| Addison's disease | 1 | 6 |  |  |  |
| Leuchaemia ..... | 18 | 20 | 4 |  |  |
| Anaemia, chlorosis | 36 | 86 | 28 | 2 | 1 |
| Other general diseases......................... | 20 | 8 | 4 |  |  |
| Alcoholism (acute or chronic)................... | 39 | 31 | 14 | 6 | 15 |

## TABLE NO. 20.-SHOWING CAUSES OF DEATH IN WISOONSIN FROM JAN. i, 1911, TO DEC. 31, 1911, ARRANGED ACCORDING TO COLOR, SEX, CONJUGAL CONDITION AND NATIVITY-Continued.

| Name of Diseases. | Conjugal condition. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \dot{9} \\ & \stackrel{9}{80} \\ & \stackrel{y}{v i n} \end{aligned}$ | 定 | $\begin{aligned} & \text { © } \\ & \text { B } \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ | $\begin{aligned} & \text { ®® } \\ & 0.0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |
| Chronic lead poisoning.. | 2 | 4 | 1 |  |  |
| Other chronic occupation poisonings |  |  |  |  |  |
| Other chronic poisonings............ |  | 1 |  |  |  |
| II. |  |  |  |  |  |
| Diseases of the nervous system and of organs of special sense: |  |  |  |  |  |
| Encephalitis ....... | 21 | 13 | ${ }^{6}$ | 1 | 2 |
| Meningitis | 374 | 47 | 10 | 2 | 4 |
| Locomotor ataxia |  | 27 | 7 | 1 | 1 |
| Other diseases of the spinal cord............... | 47 | 54 | 13 |  |  |
| Cerebral hemorrhage, apoplexy.................. | 157 | 743 | 498 | 10 | 20 |
| Softening of the brain.......... | 7 | 22 | 11 |  |  |
| Paralysis without specifled caus | 28 | 154 | 123 | 4 | 7 |
| General paralysis of the insane. | 29 | 51 | 23 | 6 | 3 |
| Other forms of mental alienation | 16 | 23 | 9 |  |  |
| Epilepsy... | 58 | 26 | 7 |  | 3 |
| Convulsions (nonpuerperal) | 6 | 11 | 1 |  |  |
| Convulsions of infants..... | 395 |  |  |  |  |
| Chorea | 6 | 1 | 2 |  |  |
| Neuralgia and neuritis .......... | 6 | 11 | 5 |  |  |
| Other diseases of the nervous system | 42 | 40 | 16 |  | 1 |
| Diseases of the eyes and their annexa | 7 |  | 1 |  |  |
| Diseases of the ears.. | 6 | 6 | 1 |  |  |
| III. |  |  |  |  |  |
| Diseases of the Circulatory System: . |  |  |  |  |  |
| Pericarditis | 15 | 11 | 4 |  | 1 |
| Acute endocarditis | 45 | 42 | 12 | 1 | 1 |
| Organic diseases of the heart | 268 | 784 | 552 | 21 | 21 |
| Angina pectoris ................................. |  | 61 | 35 |  | 1 |
| Diseases of the arteries, atheroma, aneurysm. etc. | 25 | 172 | 163 | 2 | 5 |
| Embolism and thrombosis. | 12 | 59 | 19 | 2 | 2 |
| Diseases of the veins (varices, hemorrhoids, phlebitis, etc. | 2 | 12 | 4 |  |  |
| Diseases of the lymphatic system (lymphangitis, etc.) | 5 | 2 |  |  |  |
|  | 12 | 6 |  |  |  |
| IV. |  |  |  |  |  |
| Diseases of the Respiratory System: <br> Diseases of the nasal fossae |  |  |  |  |  |
| Diseases of the larynx ..... | 33 | 5 | 5 |  |  |
| Diseases of the thyroid body. | 2 | 6 | 1 |  |  |
| Acute bronchitis | 162 | 49 | 42 |  | 5 |
| Chronic bronchitis | 21 | 91 | 113 | 1 | 3 |
| Bronchopneumonia | 338 | 75 | 91 | 1 |  |
| Pneumonia | 748 | 616 | 331 | 13 | 14 |
| Pleurisy ...................................... | 29 | 33 | 1.5 | 1 |  |
| Pulmonary congestion, pulmonary apoplexy.. | 62 | 93 | 86 |  | 2 |
| Fangrene of the lung.......................... | 3 8 | 3 52 5 |  | 2 | 3 |
| Pulmonary emphysema | 7 | 10 | 35 3 | 2 | 3 |
| Other diseases of the respiratory system (tuberculosis excepted) | 24 | 17 | 5 |  | 2 |

TABLE NO. 20.-SHOWING CAUSES OF DEATH IN WISCONSIN FROM JAN. 1 , 1911, TO DEC. 31, 1911, ARRANGED ACCORDING TO COLOR, SEX, CONJUGAL CONDITION AND NATIVITY--Continued.

| Name of Diseases. | Conjugal condition. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{aligned} & \text { D } \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  | E E E E |
| V. |  |  |  |  |  |
| Diseases of the Digestive System: |  |  |  |  |  |
| Diseases of the mouth and annexa............ | 10 | 1 | 1 |  |  |
| Diseases of the pharynx ........................ | 30 | 14 | 5 |  |  |
| Diseases of the oesophagus | 2 | 3 | 4 |  |  |
| Other diseases of the stomach (cancer excepted) | 12 194 | 33 | 7 |  |  |
| Diarrhea and onteritis (under two years)...... | 194 1,233 | 93 | 53 |  | 1 |
| Diarrhea and enteritis (two years and over)... | 1,233 33 |  |  |  |  |
|  |  |  |  |  |  |
| Intestinal parasites ........................... ${ }_{\text {and }}$ |  |  |  |  |  |
|  |  |  |  |  |  |
| Hernia, intestinal obstruction | 165 90 | 115 | 59 |  | ${ }_{7}^{+}$ |
| Other diseases of the intestines. | 28 | 115 38 | 19 19 | 1 | ${ }_{1}^{2}$ |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Other diseases of the digestive system (tuber-1Ot |  |  |  |  |  |
|  |  |  |  |  |  |
| VI. |  |  |  |  |  |
| Nonvenereal Diseases of the Genito-Urinary System and Annexa: |  |  |  |  |  |
| Acute nephritis | 52 | 53 | 24 | 2 |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Calculi of the urinary passages......... | 16 | 29 | 14 | 1 |  |
| Diseases of the bladder.......... |  | 51 | 1 |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Uterine haemorrhage (nonpuerperal)............ |  |  |  |  |  |
|  |  |  |  |  |  |
| Other diseases of the uterus..................... |  | 14 | 4 |  |  |
| Cysts and other tumors of the ovary..... | 4 | 14 7 | 2 4 |  | 2 |
| Salpingitis and other diseases of the female |  |  |  |  |  |
| Nonpuerperal diseases of the breast (cancer 4 17 |  |  |  |  |  |
|  | 1 | 3 | 2 |  |  |
| VII. |  |  |  |  |  |
| The Puerperal State: |  |  |  |  |  |
| Accidents of pregnancy |  | 19 |  |  |  |
| Puerperal haemorrhage | 4 | 29 | 1 | 1 |  |
| Puerperal.senticaemia . | 1 | 37 |  |  |  |
| Puerveral albuminuria and convulsions. | 10 | 146 | 1 | 1 |  |
| Pverperal phlegmasia alba dolens, embolus, sudden death |  |  |  |  |  |
| Following childbirth (not otherwise defined)........................ |  | 14 |  |  |  |
| Puerperal diseases of the breast............. |  | 2 | 1 |  |  |

TABLE NO. 20.-SHOWING CAUSES OF DEATH IN WISCONSIN FROM JAN. 1, 1911, TO DEC. 31, 1911, ARRANGED ACCORDING TO COLOR, SEX, CONJUGAL CONDITION AND NATIVITY-Continued.


TABLE NO. 20-Continued. SHOWING CAUSES OF DEATH IN WISCONSIN FROM JAN. 1, 1911, TO DEC. 31, 1911, ARRANGED ACCORDING TO COLOR, SEX, CONJUGAL CONDITION AND NATIVITY.


* Stillbirths not included in total. Total 27,185.

TABLE NO. $20-$ Continued. SHOWING CAUSES OF DEATH IN WISCONSIN FROM JAN. 1, 1911, TO DEC. 31, 1911, ARRANGED ACCORDING TO COLOR, SEX, CONJUGAL CONDITION AND NATIVITY.

|  | Nativity of deceased |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| * Name of Disease. | $\begin{aligned} & \dot{B} \\ & \underline{n} \\ & 0 \\ & 0.0 \\ & \dot{H} \end{aligned}$ |  | 或 | $\stackrel{\text { B }}{\substack{3 \\ \sim}}$ | 号 |  |
| I. |  |  |  |  |  |  |
| General Diseases: |  |  |  | 2 | 6 | 7 |
| Typhoid fever .. <br> Typhus fever | 171 | 49 | 22 | 2 | 6 | 1 |
| Relapsing fever |  |  |  |  |  |  |
| Malaria ........ | 2 | ... | 1 |  | 1 |  |
| Smallpox .. | 2 |  |  |  |  |  |
| Measles .... | 226 | 15 | 3 |  | 1 |  |
| Scarlet fever | 199 | 14 | 4 |  | 5 |  |
| Whooping cough .... | $\stackrel{210}{294}$ | 119 | 1 |  |  | 1 |
| Diphtheria and croup | 294 94 | 19 95 | 5 74 | 20 | 21 | 18 |
| Miliary fever . | 2 |  |  |  |  |  |
| Asiatic cholera |  |  |  |  |  |  |
| Cholera nostras | 5 | 3 | 3 |  |  | 3 |
| Dysentery .. | 28 | 15 | 9 | 5 | 2 | 2 |
| Plague ..... |  |  |  |  |  |  |
| Yellow fever |  |  | , |  |  |  |
| Leprosy .......... |  | 14 | 21 |  |  | 3 |
| Erysipelas ............... | 42 7 | 14 | 21 | 4 | 4 | 3 |

TABLE NO. $20-$ Continued. SHOWING CAUSES OF DEATH IN WISCONSIN FROM JAN. 1, 1911. 'TO DEC. 31, 1911, ARRANGED' ACCORDING TO COLOR, SEX, CONJUGAL CONDI'TION AND NATIVITY.

| Name of Disease. | Nativity of Deceased. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 辰 | $\stackrel{\dot{n}}{\sharp}$ |  |  |
| Purulent infection and septicaemia.. | 61 | 12 | 10 | 8 | 1 | 5 |
| Glanders ............................. |  |  |  |  |  |  |
| Anthrax |  |  |  |  |  |  |
| Rabies | 1 |  | 1 |  |  |  |
| T'etanus | 27 | 4 | 3 |  |  | 1 |
| Mycoses | 3 |  | 1 | 1 |  |  |
| Pellagra | 3 | 1 | 1 |  |  |  |
| Beriberi |  |  |  |  |  |  |
| I'uberculosis of the lungs. | 1,098 | 275 | 205 | 40 | 28 | 86 |
| Acute miliary tuberculosis.............. | 32 | 2 | 2 |  |  | 1 |
| 'Tuberculosis meningitis . | 97 | 14 | 4 |  |  |  |
| Abdominal tuberculosis | 73 | 21 | 15 | 1 | 1 | 6 |
| Pott's disease | 9 | 2 |  |  | 1 | 2 |
|  | 1 |  | 1 |  |  |  |
| Truberculosis of other organs........... Disseminated tuberculosis | 25 | ${ }^{6}$ | 4 | 1 | 1 |  |
| Disseminated tuberculosis ............. Rickets | 18 | 20 | 8 | 1 |  | 2 |
| Rickets ... Syphilis... | 17 33 | 1 8 | 1 |  |  |  |
| Syphilis. Gonococcus infection | 33 4 | 8 | 3 | 1 | 1 |  |
| Cancer of the buccal cavity | 7 | 7 | 7 | 5 | 1 | 4 |
| Cancer of the stomach, liver.......... | 156 | 113 | 316. | 38 | 29 | 55 |
| Cancer of the peritoneum, intestines, rectum | 35 | 42 | 66 | 11 | 10 | 8 |
| Cancer of the female genital organs.. | 42 | 25 | 40 | 2 | 5 | 5 |
| Cancer of the breast................... | 35 | 31 | 19 | 2 | 2 | 3 |
| Cancer of the skin...... | 5 | 11 | 17 | 6 | 2 | 3 |
| Cancer of other organs or organs not specified | © 0 | 52 | 84 | 18 | 13 | 17 |
| Other tumors (tumors of the female genital organs excepted) | 45 | 17 | 20 | 18 | 13 2 | 17 2 |
| Acute articular rheumatism.............. | 99 | 21 | 19 | 5 | 4 | 2 |
| Chronic rheumatism and gout | 16 | 14 | 17 | 7 | 8 | 9 |
| Scurvy | 1 |  | 1 |  |  |  |
| Diabetes Fx ............ | 111 | 61 | 53 | 16 | 9 | 13 |
| Exophthalmic goitre Addison's disease | 26 | 9 | 10 |  |  | 3 |
| Addison's disease | 3 |  | 1 |  |  |  |
| Leuchaemia ........ | 22 | 3 | 10 | 1 |  | 3 |
| Anaemia, chlorosis ... | 55 | 35 | 23 | 12 | 8 | 8 |
| Other general diseases ...... | 21 | 5 | 4 | 1 |  | 1 |
| Alcoholism (acute or chron | 42 | 9 | 11 | 5 | 1 | 4 |
| Other chronic occupation poisonings............... | 1 | 1 | 4 |  |  |  |
| Other chronic poisonings................ |  | 1 |  |  |  |  |
| II. |  |  |  |  |  |  |
| Diseases of the Nervous System and of the Organs of Special Sense: |  |  |  |  |  |  |
| Encephalitis ............................ | 27 | 4 | 6 | 2 | 2 | 2 |
| Meningitis | 361 | 35 | 18 | 3 | 4 | $\stackrel{\square}{2}$ |
| Locomotor ataxia | 8 | 14 | 6 | 1 | 1 |  |
| Other diseases of the spinal cord...... | 50 | 19 | 20 | 1 | 6 | 8 |
| Cerebral haemorrhage, apoplexy...... | 213 | 358 | 429 | 82 | 75 | \% 8 |
| Softening of the brain........... | 3 | 13 | 12 | 2 | 1 |  |
| Paralysis without specified cause. | 43 | 90 | 77 | 19 | 19 | 13 |
| General paralysis of the insane. | 22 | 35 | 27 | 6 | 2 | 3 |
| Other forms of mental alienation...... Epilepsy ............................. | 13 | 12 | 10 |  | 3 | 1 |
| Epilepsy ${ }_{\text {Convulsions ( }}$ (nonpuerperal) | 51 | 20 | 10 | 2 | 1 | 2 |
| Convulsions (nonpuerperal) $\ldots$.......... | 8 379 | $\begin{array}{r}1 \\ \hline\end{array}$ | 3 <br> 3 |  |  | 1 |
| Chorea ................................... | 379 5 | 7 3 | 3 |  | 1 | 1 |

TABLE NO. 20-Continued. SHOWING CAUSES OF DEATH IN WISCONSIN FROM JAN. 1, 1911, TO DEC. 31, 1911, ARRANGED ACCORDING TO COLOR, SEX, CONJUGAL CONDITION AND NATIVITY.


TABLE NO. 20-Continued. SHOWING CAUSES OF DEATH IN WISCONSIN FROM JAN. 1, 1911, TO DEC. 31, 1911, ARRANGED ACCORDING TO COLOR, SEX, CONJUGAL CONDITION AND NATIVITY.

| Name of Diseases. | Nativity of Deceased. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 管 |  |  |
| Biliary calculi | 8 | 7 | 17 | 2 |  | 2 |
| Other diseases of the liver | 37 | 37 | 34 | 10 | 5 | 4 |
| Diseases of the spleen.................... | 4 |  | 2 |  |  |  |
| Simple peritonitis (nonpuerperal)....... | 43 | 7 | 6 |  | 2 | 5 |
| Other diseases of the digestive system (tuberculosis excepted) | 10 | 5 | 3 |  | 1 | 1 |
| VI. |  |  |  |  |  |  |
| Nonvenereal Diseases of the GenitoUrinary System and Annexa: |  |  |  |  |  |  |
| Acute nephritis ........................ | 65 | 19 | 18 | 2 | 4 | 3 |
| Bright's disease . | 283 | 289 | 374 | 64 | 48 | 47 |
| Chyluria .............................. |  |  | 1 |  |  |  |
| Other diseases of the kidneys and annexa ....................................... Calculi of the urinary passages | 21 | 7 | 17 | 3 | 1 | 2 |
| Diseases of the bladder................. | 13 | 25 | 33 | 6 | 9 | 7 |
| Diseases of the urethra, urinary abscess, etc. | 1 |  |  |  |  |  |
| Diseases of the prostate.................. | 4 | 26 | 34 | 6 | 8 | 9 |
| Nonvenereal diseases of the male genital organs |  |  |  |  |  |  |
| Uterine hemorrhage (nonpuerperai).... | 3 | 2 | 1 |  |  |  |
| Uterine tumor (noncancerous). | 4 | 4 | 2 |  |  | 1 |
| Other diseases of the uterus............ | 13 |  | 5 |  |  |  |
| Cysts and other tumors of the ovary. | 7 | 4 | 2 |  |  |  |
| Salpingitis and other diseases of the female genital organs .................... | 14 | 2 | 3 | 2 |  | 1 |
| Nonpuerperal diseases of the breast (cancer excepted) | 1 |  | 3 | 1 |  |  |
| VII. |  |  |  |  |  |  |
| The Puerperal State: |  |  |  |  |  |  |
| Accidents of pregnancy................. | 12 | 4 | 2 |  | 1 |  |
| Puerperal hemorrhage .................... | 11 | 4 | 4 | i. | 1 | 1 |
| Other accidents of labor | 23 | 3 | 3 | 2 |  |  |
| Puerperal septicaemia ................. | 94 | 22 | 17 | 1 |  | 5 |
| Puerperal albuminuria and convulsions | 17 | 4 | 1 |  |  | 1 |
| Puerperal phlegmasia alba dolens, embolus, sudden death | 7 | 2 | 2 |  |  | 1 |
| Following childbirth (not otherwise defined) | 1 |  |  | 1 |  |  |
| Puerperal diseases of the breast....... |  |  |  | 1 |  |  |
| VIII. |  |  |  |  |  |  |
| Diseases of the Skin and of the Cellular tissues: <br> Gangrene |  |  |  |  |  |  |
| Gangrene ${ }_{\text {Furuncle }}$................................................... | 4 | 16 | 17 | 2 | 2 | 2 |
| Acute abscess | ${ }_{8}^{3}$ | 2 2 2 | 2 4 |  |  | 1 |
| Other diseases of the skin and annexa | 21 | 4 | 2 |  | 1 | 1. |
| IX. |  |  |  |  |  |  |
| Diseases of the Bones and the Organs of locomotion: |  |  |  |  |  |  |
| Diseases of the bones (tuberculosis excepted | 17 | 4 | 6 | 4 |  |  |

TABLE NO. 20-Contiaued. SHOWING CAUSES OF DEATH IN WISCONSIN FROM JAN. 1, 1911, TO DEC. 31, 1911, ARRANGED ACCORDING TO COLOR, SEX, CONJUGAL CONDITION AND NATIVITY.


TABLE NO．20－Continued．SHOWING CAUSES OF DEATH IN WISOONSIN NROM JAN．1，1911，TO DEC．31，1911，ARRANGED ACCORDING TO COLOR，SEX， CONJUGAL OONDITION AND NATIVITY．

| Name of Diseases． | Nativity of deceased． |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 号 |  |  | 需 | 号 |  |
| XIV． |  |  |  |  |  |  |
| Ill Defined Diseases： |  |  |  |  |  |  |
| Ill defined organic disease．．．．．．．．．．．．．．． | 2 | － 2 | 5 | 2 |  | 1 |
| Not specifled or ill defined．．．．．．．．．．．．．．．．．．． | 13 85 | 3 39 | 5 65 | 1 | $\cdots$ | 15 |
| XV． |  |  |  |  |  |  |
| StiHbirths＊．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 1，583 |  |  |  |  |  |
|  |  |  |  |  |  |  |

＊Stillbirths not included in total．Total 27，185．
＇TABLE NO．20－Continued．SHOWING CAUSES OF DEATH IN WISCONSIN FROM JAN．1，1911，TO DEC．31，1911．ARRANGED ACCORDING TO COLOR，SEX， CONJUGAL CONDITMON AND NATTIVITY．

| Name of Diseases． | Nativity of Deceased－－Continued． |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 号 | 劲 | 号 | 腎 |  |
| General Diseases：${ }^{\text {I }}$ |  |  |  |  |  |  |
| Typhoid fever | 5 | 9 | 1 | 4 | 2 | 2 |
| Typhus fever ．． |  |  |  |  |  |  |
| Relapsing fever |  |  |  |  |  |  |
| Mmallpox ．．．．．． |  |  |  |  |  |  |
| Measles ．．．．．．． |  |  |  |  |  |  |
| Scarlet fever |  | 1 |  |  |  |  |
| Whooping cough ．．． |  |  |  |  | i |  |
| Diphtheria and croup． | 1 | 1 |  |  |  |  |
| Influena ．．．．．． | 5 |  |  | 5 |  | 2 |
| Miliary fever Asiatic cholera |  |  |  |  |  |  |
| Cholera nostras | 1 |  |  |  |  |  |
| Dysentery | 2 | 2 |  |  |  |  |
| Plague ．．．．． |  |  |  |  |  |  |
| Yellow fever |  |  |  |  |  |  |
| Erysipelas ．．． | 3 | 1 |  |  |  | 1 |
| Other epidemic diseases． |  |  |  |  |  |  |
| Purulent infection and septi |  | 1 | i |  | 1 |  |
| Alanders |  |  |  |  |  |  |
| Anthrax |  |  |  |  |  |  |
| Tetanus | 1 | 1 |  |  |  |  |
| Mycoses ． |  |  |  |  |  |  |
| Pellagra |  |  |  |  |  |  |
| Beriberi |  |  |  |  |  |  |

TABLE NO. 20-Continued. SHOWING CAUSES OF DEATH IN WISCONSIN FROM JAN. 1, 1911, TO DEC. 31, 1911, ARRANGED ACCORDING TO COLOR, SEX, CONJUGAL CONDITION AND NATIVITY.


TABLE NO. 20-Continued. SHOWING CAUSES OF DEATH IN WISGONSIN FROM JAN. 1, 1911, TO DEC. 31, 1911, ARRANGED AOCORDING TO COLOR, SEX, CONJUGAL CONDITION AND NATIVITY.


TABLE NO. 20 -Continued. SHOWING OAUSES OF DEATH IN WISCONSIN FROM JAN. 1, 1911, TO DEO. 31, 1911, ARRANGED ACCORDING TO COLOR, SEX, CONJUGAL CONDITION AND NATIVITTY.


TABLE NO. 20-Continued. SHOWING C'AUSES OF DEATH IN WISCONSIN FROM. JAN. 1, 1911, TO DEC. 31, 1911, ARRANGED ACCORDING TO COLOR, SEX, CONJUGAL CONDITION AND NATIVNTY.


[^22] TABLE NO． 20 －Continued．SHOWING OAUSES OF DEATH IN WISCONSIN FROM JAN．1，1911，TO DEC．31，1911，ARRANGED ACCORDING TO COLOR，SEX， CONJUGAL CONDITION AND NATIVITY．

| Name of Diseases． | Nativity of Deceased－Continued． |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { ⿷匚 } \\ & \text { ت్ } \\ & \text { డ్ } \\ & \text { ש゙ } \end{aligned}$ |  | 号 |  | \％ | $\dot{E}$ <br> 0 <br> E <br> E |
| I． |  |  |  |  |  |  |
| General Diseases： Typhoid fever | 2 | 4 | 5 | 10 | 12 | 6 |
| Typhus fever |  |  |  |  |  |  |
| Relapsing fever |  |  |  |  |  |  |
| Malaria ．．．．．．．． |  |  |  |  |  |  |
| Smallpox ．．．． |  |  |  |  |  |  |
| Measles ．．．．．．． |  |  | 1 |  | 1 |  |
| Scarlet fever ．． |  |  | 1 |  |  | 1 |
| Whooping cough |  |  | 1 |  |  |  |
| Diphtheria and croup |  |  |  |  | 8 | 3 |
| Intluenza ．．．．．．．．．．．．． | 13 | 2 | 1 | 2 | 6 | 2 |
| Miliary fever Asiatic cholera |  |  |  |  |  |  |
| Asiatic cholera nostras ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  |  |  |  |  |
| Dysentery ．．． | 1 |  |  | 1 | 1 | 2 |
| Plague ．． |  |  |  |  |  |  |
| Yellow fever |  |  |  |  |  |  |
| Leprosy ．．．． |  |  |  |  |  |  |
| Erysipelas ．．．．．．．．．．．．． | 1 |  | 1 | 1 |  |  |
| Other epidemic diseases．．．． |  |  |  |  |  |  |
| Purulent infection and septicaemia | 2 | 3 | 1 | 4 | 1 | 4 |
| Glanders Anthrax ． |  |  |  |  |  |  |
| Rabies ．．．． |  |  |  |  |  |  |
| Tetanus ．． |  |  |  |  |  | 1 |
| Mycoses ．．．．． |  |  |  |  |  |  |
| Pellagra ．．． |  |  |  |  |  |  |
| Beriberi ．．． |  |  |  |  |  |  |
| Tuberculosis of the lungs． | 21 | 22 | 12 | 34 | 44 | 33 |
| Acute miliary tuberculosis． |  |  |  |  |  | 2 |
| ＇I＇uberculous meningitis． Adominal tuberculosis | $\dddot{i}$ |  |  | 1 |  |  |
| Agdominal tuberculosis Pott＇s disease | $\overline{1}$ | 1 | 1 | 5 | ${ }_{1}^{2}$ | 1 |
| White swellings ．．．．．．．．． |  |  |  |  | 1 | 1 |
| Tuberculosis of other organs． | 1 |  |  | 1 | 1 | 2 |
| Disseminated tuberculosis |  |  |  | 1 |  |  |
| Rickets |  |  |  |  |  | 1 |
| Syphilis |  |  | 3 |  | 1 | 5 |
| Gonococcus infection |  |  |  |  |  |  |
| Cancer of the buccal cavity． | 2 | 1 |  |  |  |  |
| Cancer of the stomach，liver．．．．．．．．．． | 15 | 8 | 8 | 4 | 20 | 9 |
| Cancer of the peritoneum，intestines， rectum | 5 |  | 2 | 2 | 2 |  |
| Cancer of the female genital organs．．． | 8 | 1 |  | 1 | 3 |  |
| Cancer of the breast．．． | 3 | 1 |  | 2 |  | 1 |
| Cancer of the skin． | 3 |  |  |  |  |  |
| Cancer of other organs or of organs not specifled | 7 | 4 |  | 2 | 11 | 3 |
| Other tumors（tumors of the female genital organs excepted）． | 1 |  |  | 1 | 5 | 2 |
| Acute articular rheumatism．．．．．．．．．．．．． | 1 | 1 | 2 | 6 | 1 |  |
| Chronic rheumatism and gout． | 2 | 1 | I | 1 | 7 |  |
| Scurvy |  |  |  |  |  |  |
| Diabetes | 6 | 5 | 2 | 2 | 8 | 2 |
| Exophthalmic goitre |  |  |  |  | 2 | 2 |
| Addison＇s disease | 1 |  |  |  | 2 | ．．．． |
| Leuchaemia ${ }^{\text {Anaemia，chlorosis }}$ | ${ }_{3}^{1}$ | 2 |  |  | 1 | 1 |
| Other general diseases |  |  |  |  |  |  |
| Alcoholism（acute or chronic）．．．．．．．．．．． | 2 |  |  | 2 | 2 | 20 |

TABLE NO. 20 -Continued. SHOWING OAUSES OF DEATH IN WISOONSIN FROM JAN. 1, 1911, TO DEC. 31, 1911, ARRANGED ACCORDING TO COLOR, SEX, CONJUGAL CONDITION AND NATIVITY.


TABLE NO. 20 -Continued. SHOWING CAUSES OF DEATH IN WISCONSIN FROM JAN. 1, 1911, TO DEO. 31, 1911, ARRANGED ACCORDING TO COLOR, SEX, CONJUGAL CONDITION AND NATIVITY.

| Name of Disease. | Nativity of deceased-Continued. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 砢 |  | 约 |  |
| . V . |  |  |  |  |  |  |
| Diseases of the Digestive System: <br> Diseases of the mouth and annexa... |  |  |  |  |  |  |
| Diseases of the pharynx................ |  |  |  |  |  |  |
| Ulcer of the stomach................... |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Hernia, intestinal obstruction.........He.Hen |  |  |  |  |  |  |
| Other diseases of the intestines......... | 1 |  | 1 | 1 | 3 | 2 |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Biliary calculi ........ |  | 2 | 1 | 1 |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Simple peritonitis (nonpuerperal)...... |  |  |  |  |  |  |
| Other diseases of the digestive system (tuberculosis excepted) | 1 |  |  | 1 | 1 | 1 |
|  |  |  |  |  |  |  |
| Nonvenereal Diseases of the GenitoUrinary System and Annexa: |  |  |  |  |  |  |
| Acute nephritis ......................... | ${ }^{7}$ |  | 1 |  | 3 3 |  |
| Bright's disease ........................ | 28 | 14 | 7 | 6 | 39 | 25 |
| Chyluria |  |  |  |  |  |  |
| Other diseases of the kidneys and annexa | 1 |  |  | 1 | 2 |  |
| Calculi of the urinary passages........ |  |  |  |  |  |  |
| Diseases of the urethra, urinary abscess, etc. |  |  |  |  |  |  |
| Diseases of the prostate................. | 3 |  |  |  | 3 | ........ |
| Nonveneral diseases of the male genital organs |  |  |  |  |  |  |
| Uterine haemorrhage (nonpuerperal)... |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Salpingitis and other diseases of the female genital organs. |  |  |  |  |  |  |
| Nonpuerperal diseases of the breast (cancer excepted) |  |  |  |  |  |  |
| VII. |  |  |  |  |  |  |
| The Puerperal State: |  |  |  |  |  |  |
| Accidents of pregnancy.. |  |  |  |  | 1 | 1 |
| Puerperal haemorrhage ................ | 1 |  |  |  | ${ }^{1}$ |  |
| Puerperal albuminuria and convul- | 2 |  |  |  |  | 1 |
|  |  |  |  |  | 1 |  |

18-B. H.

TABLE NO. 20-Continued. SHOWING CAUSES OF DEATH IN WISCONSIN FROM JAN. 1, 1911, TO DEC. 31, 1911, ARRANGED ACCORDING TO COLOR, SEX, CONJUGAL CONDITION AND NATIVITY.


TABLE NO. 20-Continued. SHOWING CAUSES OF DEATH IN WISCONSIN FROM JAN. 1, 1911, TO DEC. 31, 1911, ARRANGED ACCORDING TO COLOR, SEX, CONJUGAL CONDITION AND NATIVITY.

| Name of Diseases. | Nativity of deceased-Continued. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 号 |  |
| Traumatism by cutting or piercing instruments |  |  |  |  |  | 1 |
| Traumatism by fall ...................... | 1 | 5 | 1 | 1 | 10 | 10 |
| Traumatism in mines and quarries.... |  |  | 1 |  | 1 | 1 |
| Traumatism by other crushing......... | 9 | 4 | 7 | 14 | 18 | 55 |
| Injuries by animals .................... | 1 |  |  |  | 1 | ........ |
| Excessive cold |  |  | 1 |  | 1 | 2 |
| Effects of heat | 1 | 3 |  |  | 1 | 3 |
| Lightning ... |  |  |  | 1 | 1 |  |
| Electricity (rightning excepted) |  | 1 |  |  | 1 |  |
| Fracture (cause not specified).......... | 3 | 2 | 1 | 2 | 4 | 8 |
| Other external violence. | 1 |  |  | 2 | 3 | 5 |
| Homicide by flrearms $\qquad$ |  | 1 |  |  | 1 | 1 |
| Homicide by cutting or piercing instruments <br> Homicide by other means | 1 |  |  |  | 2 | 2 |
| XIV. |  |  |  |  |  |  |
| Ill Defined Diseases: |  |  |  |  |  |  |
| Ill defined organic disease.. | 1 | 1 |  |  | 1 |  |
| Sudden death Not specifled or ill defined................. | 10 | 2 | 1 2 | 2 | $\cdots$ | 12 |
| XV. |  |  |  |  |  |  |
| Still Births* |  |  |  |  |  |  |

[^23]TABLE NO. $20-$ Continued. SHOWING CAUSES OF DEATH IN WISCONSIN FROM JAN. 1, 1911, TO DEC. 31, 1911, ARRANGED ACCORDING TO COLOR, SEX, CONJUGAL CONDITION AND NATTVITY.

| Name of Disease. | Birthplace of father. |  |  |  | Birthplace of mother. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \dot{B} \\ & \dot{n} \\ & \text { H. } \\ & \text { n } \end{aligned}$ |  |  | $\dot{E}$ B E E b |  |  |  | 家 |
| I. |  |  |  |  |  |  |  |  |
| General Diseases: Typhoid fever | 42 | 27 | 227 | 23 | 52 | 33 | 210 | 24 |
| Typhus fever .. |  |  |  |  |  | 33 | 210 | 24 |
| Relapsing fever |  |  |  |  |  |  |  |  |
| Malaria |  |  | 3 | 1 |  |  | 3 | 1 |
| Smallpox ... |  |  | 2 |  | 1 |  | 1 |  |
| Measles ..... | 120 | 34 | 93 | 1 | 134 | 32 | 81 | 1 |
| Scarlet fever | 109 | 28 | 87 | 1 | 126 | 21 | 73 | 5 |
| Whooping cough ..... | 104 | ${ }_{33}^{25}$ | 87 | 8 | 119 | 30 | 70 143 | 12 |
| Diphtheria and croup... | 124 | 33 | 167 | 8 | 144 | 33 | 143 | 12 |

'TABLE NO. 20-Continued. SHOWING CAUSES OF DEATH IN WISCONSIN FKOM JAN. 1, 1911. TO DEC. 31, 1911, ARRANGED AOCORDING TO COLOR, SEX, CONJUGAL CONDITION AND NATIVITY.

| Name of Disease. | Birthplace of father. |  |  |  | Birthplace of mother. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | - | g B है ह |  |  | cis | 最 E है |
| Influenza | 39 | 78 | 208 | 35 | 45 | 75 | 193 | 47 |
| Miliary fever | 2 |  |  |  | 2 |  |  |  |
| Asiatic cholera |  |  |  |  |  |  |  |  |
| Oholera nostras | 2 | 5 10 | 7 39 | 1 | 3 15 | 3 12 | 7 3 | 2 10 |
| Yellow fever |  |  |  |  |  |  |  |  |
| Leprosy |  |  | 1 |  |  |  | 1 |  |
| Erysipelas | 14 | 16 | 52 | 13 | 17 | 17 | 50 | 11 |
| Other epidemic diseases... | 3 | 2 | 1 | 1 | 4 | 1 | 1 | 1 |
| Purulent infection and septicaemia.. | 23 | 10 | 71 | 11 | 28 | 14 | 61 | 12 |
| Glanders |  |  |  |  |  |  |  |  |
| Anthrax |  |  |  |  |  |  |  |  |
| Rabies | 8 |  | 1 |  | 1 |  | 1 |  |
| Tetanus | 8 | 5 | 22 | 3 | 11 | 2 | 23 | 2 |
| Mycoses |  | 1 | 4 |  |  | 1 | 4 |  |
| Pellagra |  | 2 | 2 | 1 |  | 2 | 2 | 1 |
| Beriberi |  |  |  |  |  |  |  |  |
| Tuberculosis of the lungs. | 231 | 212 | 1,386 | 159 | 310 | 197 | 1,311 | 150 |
| Acute miliary tuberculosis | 12. | 6 | 27 | 3 | 12 | 5 | 27 | 4 |
| Tuberculous meningitis | 48 | 16 | 51 | 4 | 61 | 11 | 43 | 4 |
| Abdominal tuberculosis | 25 | 12 | 87 | 13 | 31 | 15 | 78 | 13 |
| Pott's disease | 2 | 1 | 12 | 1 | 5 | 1 | 9 | 1 |
| White swellings | 1 |  | 2 |  | 1 |  | 2 |  |
| Tuberculosis of other orga | 8 | 7 | 23 | 4 | 1 | 7 | 26 | 5 |
| Disseminated tuberculosis | 9 | 4 | 29 | 10 | 7 | 3 | 33 | 9 |
| Rickets | 5 | 4 | 9 | 2 | 9 | 2 | 7 | 2 |
| Syphilis | 6 | 7 | 27 | 15 | 11 | 6 | 28 | 10 |
| Gonococcus infection | 2 |  | 4 |  | 1 | 1 | 4 |  |
| Cancer of the buccal cavity. |  | 6 | 31 |  |  | 3 | 32 | 2 |
| Cancer of the stomach, liver.......... | 4 | 99 | 652 | 69 | 6 | 85 | 634 | 93 |
| Cancer of the peritoneum, intestines, rectum |  | 38 | 145 | 9 | 3 | 33 | 138 | 18 |
| Cancer of the female genital organs.. | 4 | 25 | 99 | 12 | 6 | 21 | 96 | 17 |
| Cancer of the breast. | 3 | 25 | 63 | 8 | 1 | 27 | 64 | 7 |
| Cancer of the skin..... |  | 10 | 38 | 2 | 1 | 11 | 33 | 5 |
| Cancer of other organs or of organs not specified | 3 | 40 | 210 | 27 | 5 | 42 | 200 | 33 |
| Other tumors (tumors of the female genital organs excepted) $\qquad$ | 9 | 15 | 75 | 3 | 13 | 17 | 68 | 4 |
| Acute articular rheumatism........... | 31 | 24 | 113 | 2 | 37 | 24 | 107 | , |
| Chronic rheumatism and gout. | 3 | 8 | 70 | 9 | 2 | 11 | 66 | 11. |
| Scurvy |  |  | 2 |  |  |  | 2 |  |
| Diabetes | 23 | 54 | 208 | 13 | 30 | 60 | 189 | 19 |
| Exophthalmic goitre | 6 | 11 | 35 | 2 | 11 | 11 | 29 | 3 |
| Addison's disease ... | 1 |  | 5 | 1 | 2 |  | 4 | 1 |
| Leuchaemia ..... | 8 | 6 | 26 | 2 | 7 | 7 | 26 | , |
| Anaemia, chlorosiz | 7 | 29 | 107 | 10 | 6 | 27 | 103 | 17 |
| Other general diseases | 9 | 4 | 17 | 2 | 7 | 5 | 19 | 1 |
| Alcoholism (acute or chronic). | 2 | 10 | 66 | 27 | 6 | 9 | 60 | 1 |
| Chronic lead poisoning... |  | 1. | 6 |  |  | 1 | 6 |  |
| Other chronic occupation poisonings.. |  |  |  |  |  |  |  |  |
| Other chronic poisonings.............. |  | 1 |  |  |  | 1 |  |  |
| II. |  |  |  |  |  |  |  |  |
| Diseases of the Nervous System and of the Organs of Special Sense: |  |  |  |  |  |  |  |  |
| Encephalitis ........................... | 6 | 3 | 32 | 2 | 10 | 3 | 27 | 3 |
| Meningitis | 178 | 58 | 183 | 18 | 215 | 50 | 167 | 5 |
| Locomotor ataxia |  | 11 | 19 | 6 |  | 11 | 19 | 6 |
| Other diseases of the spinal cord. | 18 | 23 | 68 | 5 | 20 | 21 | 66 | 7 |
| Cerebral haemorrhage, apoplexy..... | 20 | 266 | 990 | 152 | 40 | 250 | 960 | 178 |

TABLE NO. 20-Continued. SHOWING CAUSES OF DEATH IN WISCONSIN FROM JAN. 1, 1911, TO DEO. 31, 1911, ARRANGED ACCORDING TO COLOR, SEX, CONJUGAL CONDITION AND NATIVITY.

| Name of Diseases. | Birthplace of father. |  |  |  | Birthplace of mother. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \dot{ヨ} \\ & \text { 足 } \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  | $\begin{aligned} & \text { g } \\ & \text { O } \\ & \text { E } \\ & \text { B } \end{aligned}$ |  |  | cin |  |
|  | 3 | 7 | 24 | 6 | 2 | 7 | 23 | 8 |
| Softening of the brain ................. | 3 3 | 68 | 200 | 6 45 | 3 | 69 | 193 | 51 |
| Paralysis without specified cause.... | 3 | 68 7 | 200 89 | 16 | 3 2 | 8 | 85 | 17 |
| General paralysis of the insane...... |  | 9 | 89 30 | 16 9 |  | 8 | 29 | 11 |
| Other forms of mental alienation... | 1.7 | $\stackrel{9}{15}$ | 47 | 16 | 19 | 15 | 42 | 18 |
| Epilepsy ................................. | 16 | 15 | 47 12 | 16 | 19 | 1 | 11 | 1 |
| Convulsions (nonpuerperal) .......... | 4 207 | 26 | 157 | 5 | 341 | 17 | 35 | 2 |
| Convulsions of infants................. | 207 | 16 1 | 157 | 5 2 | 34 4 | 17 | 3 | 2 |
| Chorea .................................. | 1 | 6 | - 14 | 2 | 2 | 8 | 11 | 1 |
| Neuralgia and neuritis ............... | 12 | 6 18 | 64 | $\ddot{5}$ | 13 | 18 | 61 | 7 |
| Other diseases of the nervous system | 12 | 18 1 | 64 3 | 5 | 13 3 | 18 1 | 61 4 | 7 |
| Diseases of the eyes and their annexa Diseases of the ears. | 4 | 1 | 9 |  | 4 | 1 | 8 | ..... |
| III. |  |  |  |  |  |  |  |  |
| Diseases of the Circulatory System: |  |  | 24 | 2 | 6 | 3 | 19 | 3 |
| Pericarditis ............................. | 2 15 | +383 | 64 | 12 | 20 | 14 | 55 | 12 |
| Acute endocarditis ................. | 50 | 258 | 1,169 | 169 | 68 | 243 | 1,127 | 208 |
| Organic diseases of the heart......... | 50 2 | 258 | 1,169 66 | 169 12 | - 2 | 25 | 1,125 | 1: |
| Diseases of the arteries, atheroma, aneurysm, etc. | 1 | 58 | 260 | 48 | 5 | 66 15 | 247 65 | 54 9 |
| Embolism, thrombosis . ............. | 4 | 14 | 69 | 7 | 5 | 15 | 65 | 9 |
| Diseases of the veins (varices, haemorrhoids, phlebitis, etc.)............... |  | 1 | 17 |  | 1 | 2 | 15 | $\ldots$ |
| Diseases of the lymphatic system (lymphangitis, etc.) | 3 |  | 3 | 1 | 3 | 1 | 3 |  |
| Haemorrhage; other diseases of the circulatory system | 5 | 3 | 9 | 1 | 5 | 2 | 9 | 2 |
| IV, |  |  |  |  |  |  |  |  |
| Diseases of the Respiratory System: <br> Diseases of the nasal fossae........... |  |  |  |  |  |  |  |  |
| Diseases of the nasal fossae........... | 15 | 7 | 20 | 1 | 15 | 8 | 18 | 2 |
| Diseases of the larynx..... | 10 | 3 | 5 |  |  | 3 | 6 |  |
| Acute bronchitis ........ | 74 | 21 | 149 | 14 | 93 | 17 | 133 | 15 |
| Chronic bronchitis | 3 | 29 | 183 | 14 | 7 | 23 | 179 | 20 |
| Bronchopneumonia | 144 | 62 | 277 | 22 | 171 | - 41 | 259 | 34 |
| Pneumonia ........ | 292 | 221. | 1,040 | 169 | 351 | 222 | 980 | 169 |
| Pleurisy | 8 | 7 | 60 | 3 | 10 | 5 | 58 | 5 |
| Pulmonary congestion, pulmonary <br> apoplexy ................................. | 33 | 41 | 145 | 24 | 34 | 40 | 142 | 27 |
| Gangrene of the lung.................. | 2 | 1 | 2 | 1 | 1 |  | 4 | 1 |
| Asthma . . . . . . . . . . . . . . . . . . . . . . . . . . | 2 | 12 | 80 | 6 | 1 | 11 | 79 | 9 |
| Pulmonary emphysema ............. | 2 | 2 | 16 |  | 3 | 3 | 13 | 1 |
| Other diseases of the respiratory system (tuberculosis excepted).......... | 12 | 4 | 30 | 2 | 13 | 4 | 28 | 3 |
| V. |  |  |  |  |  |  |  |  |
| Diseases of the Digestive System: |  |  |  |  | 5 |  | 6 |  |
| Diseases of the mouth and annexa.. | 5 | 1 | 68 |  | $\stackrel{5}{16}$ | 7 | 25 | 1 |
| Diseases of the pharynx............... | 12 | 9 2 | 28 | $\ddot{2}$ | 16 | 3 | 25 5 | 1 |
| Diseases of the oesophagus............ |  | 2 | 5 | 7 |  | 7 | 34 | 8 |
| Ulcer of the stomach................. |  | 6 | 37 | 7 | 3 | 7 | 34 | 8 |
| Other diseases of the stomach (cancer excepted) | . 74 | 51 | 199 | 17 | 90 | 51 | 177 | 23 |
| Diarrhea and enteritis (under two years) | . 485 | 113 | 559 | 76 | 586 | 133 | 481 | 33 |
| Diarrhea and enteritis (two years and over) | - 9 | 19 | 116 | 11 | 12 | 19 | 108 | -16 |
| Ankylostomiasis ...................... |  | . $\cdot$ |  |  |  |  |  |  |

TABLE NO. 20 Continued. SHOWING CAUSES OF DEATH IN WISGONSIN FROM JAN. 1, 1911, TO DEC. 31, 1911, ARRANGED ACCORDING TO COLOR, SEX, CONJUGAL CONDITION AND NATIVITY.

| Name of Diseases. | Birthplace of father. |  |  |  | Birthplace of mother. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{aligned} & \text { d } \\ & \text { B } \\ & \text { E } \\ & \hline \end{aligned}$ |  | [ | 它 | 号 |
| Intestinal parasites |  | 2 | 4 |  | 1 | 2 | 3 |  |
| Appendicitis and typhilitis............. | 72 | 36 | 153 | 12 | 90 | 29 | 138 | 16 |
| Hernia, intestinal obstruction....... | 47 | 31 | 172 | 17 | 49 | 31 | 168 | 19 |
| Other diseases of the intestines...... | 10 1 | 14 | 54 | 9 | 13 | 10 | 53 | 11 |
| Hydatid tumor of the liver.......... | 1 | 1 | 6 |  | 1 | 1 | 6 |  |
| Cirrhosis of the liver.. | $\ddot{2}$ | 28 | 243 | 32 | 6 | 30 | 229 | 49 |
| Biliary calculi |  | 5 | 43 | 32 | 1 | 30 | 42 | 40 3 |
| Other diseases of the liver.............. | 12 | 23 | 92 | 13 | 14 | ${ }_{24}^{3}$ | 88 | 14 |
| Diseases of the spleen.................... <br> Simple peritonitis (nonpuerperal) | 11 | 10 | 5 45 | $\begin{array}{r}18 \\ 8 \\ \hline\end{array}$ | 2 | 2 | 4 | 14 |
| Other diseases of the digestive system (tuberculosis excepted) | 11 | 10 | 45 14 | 8 | 11 3 | 5 | 47 14 | 10 |
| VI. |  |  |  |  |  |  |  |  |
| Nonveneral Diseases of the Gienito-Urinary System and Annexa: |  |  |  |  |  |  |  |  |
| Acute nephritis | 20 | 15 | 89 | 7 | 24 | 20 | 80 | 7 |
| Bright's disease Chyluria | 41 | 207 | 905 | 145 | 66 | 199 | 866 | 167 |
| Other diseases of the kidneys and annexa |  |  | 1 |  |  |  | 1 |  |
| Calculi of the urinary passages......... | 3 | 1 | 44 1 | 8 | 5 | 4 1 | 41 | 10 |
| Diseases of the bladder................ | 1 | 21 | 71 | 12 | 2 | 13 | 72 | 18 |
| Diseases of the urethra, urinary abscess, etc. |  | 21 | 7 | 12 | 2 | 13 | 72 | 18 |
| Diseases of the prostate. |  | 18 | 72 | 11 | 1 |  |  |  |
| Nonvenereal diseases of the male gen ital organs |  | 18 | 72 | 11 |  | 14 | 72 | 15 |
| Uterine hemorrhage (nonpuerperal)... |  | 1 | 5 |  | 1 |  | 5 |  |
| Uterine tumor (noncancerous) |  | 5 | 6 |  | 1 | 1 | 7 | 2 |
| Other diseases of the uterus........... | 3 | 3 | 16 |  | ${ }_{6}$ | 2 | 13 | 1 |
| Cysts and other tumors of the ovary. | 1 | 2 | 11 | 1 | 1 | 3 | 10 | 1 |
| Salpingitis and other diseases of the female genital organs.................. | 4 | 2 | 13 | 1 | 2 | - | 15 | 1 |
| Nonvuerperal diseases of the breast (cancer excepted) | 4 | 2 | 13 6 | 4 | 2 | 2 . | 15 6 | 4 |
| VII. |  |  |  |  |  |  |  |  |
| The Puerperal State: |  |  |  |  |  |  |  |  |
| Accidents of pregnancy. | 3 | 3 |  |  |  | 2 | 12 | 5 |
| Puerperal hemorrhage |  | 2 | 28 | 3 | 1 | 1 | 26 | 6 |
| Other accidents of labo | 4 | 8 | 26 |  | 4 | 6 | 25 | 6 |
| Puerperal septicaemia P............... | 21 | 25 | 105 | 7 | 28 | 25 | 98 | 7 |
| Puerperal albuminuria and convulsions | 6 |  | 18 | 1 | 8 | 25 | 14 | 3 |
| Puerperal phlegmasia alba dolens, embolus, sudden death. | 6 | 1 | 18 | 1 | 8 | 2 1 | 14 11 | 3 1 |
| Following childbirth (not otherwise defined) |  | 1 | 11 |  |  | 1 |  |  |
| Puerperal diseases of the breast...... |  |  | 2 |  |  | 1 | 2 | 1 |
| VII. |  |  |  |  |  |  |  |  |
| Diseases of the Skin and of the Cellular Tissues: <br> Gangrene |  |  |  |  |  |  |  |  |
| Furuncle |  | 10 | ${ }^{36}$ | 13 |  | 10 | 35 | 14 |
| Acute abscess | 1 | 3 | 6 13 | 2 | $\stackrel{2}{3}$ |  | 4 | 2 |
| Other diseases of the skin and annexa | 6 | 4 | 17 | 4 | 10 | ${ }_{2}^{2}$ | 15 |  |

TABLE NO. $20-$ Continued. SHOWING CAUSES OF DEATH IN WISCONSIN FROM JAN. 1, 1911, TO DEC. 31, 1911, ARRANGED ACCORDING TO COLOR, SEX, CONJUGAL CONDITION AND NATIVITY.


TABLE NO. $20-$ Continued. SHOWING CAUSES OF DEATH IN WISCONSIN FROM JAN. 1, 1911, TO DEC. 31, 1911, ARRANGED ACCORDING TO COLOR, SEX, CONJUGAL CONDITION AND NATIVITY.

| Name of Diseases. | Birthplace of father. |  |  |  | Birthplace of mother. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 号 | 寺 |  | ¢ | E E E E E |
| Homicide by flrearms.. | 4 | 2 | 15 | 3 | 5 | 2 | 14 | 3 |
| Homicide by cutting or piercing instruments |  |  | 5 | 4 |  | 1 | 4 | 4 |
| Homicide by other means.............. | 2 | .... | 6 | 3 | 2 | 1 | 6 | ; |
| XIV. |  |  |  |  |  |  |  |  |
| Ill Defined Diseases: |  |  |  |  |  |  |  |  |
| Ill deflned organic disease............. |  | 1 | 15 |  |  | 1 | 15 |  |
| Sudden death .......... | 2 | 4 | 19 | 2 | 1 | 3 | 18 | 5 |
| Not specified or ill defined.............. | 24 | 38 | 167 | 39 | 36 | 37 | 151 | 44 |
| xV. |  |  |  |  |  |  |  |  |
| *Stillbirths .............................. | 760 | 169 | 594 | 60 | 881 | 167 | 507 | 28 |

[^24]TABLE NO 21-SHOWING TOTAL DEATHS FROM THE VARIOUS DISEASES, CLASSIFIED BY OCCUPATION FOR THE CALENDAR YEAR OF 1911.

| Name of Occupation. | $\begin{aligned} & \text { To } \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 04 \\ & \text { Hi } \end{aligned}$ | $$ |  |  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & 3 \\ & 0.8 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ | ¢ <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 <br> 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Professional Service: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. Clergymen .............. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. Ergineers and surveyors. | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4. Journalists . ......................................... |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ... |
| 5. Lawyers .............................................. |  |  |  |  |  |  |  |  |  | 2 | ...... |  |  |  |  |  |  |
| 6. Musicians and teachers of music. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7. Physicians and surgeons........................ | 1 |  |  |  |  |  |  |  |  | 2 | ...... |  |  |  |  |  |  |
| 8. Teachers (school) .................................. | 2 | . |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9. Others of this class ............................... | 3 | . |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clerical and Official: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10. Bookkeepers, clerks and copyists. | 5 |  |  |  |  |  |  |  |  | 1 |  |  |  | 1 |  |  |  |
| 11. Bankers, brokers and officials of companies | 2 | ...... |  |  |  |  |  |  |  |  |  |  |  |  |  |  | . . ${ }^{\text {a }}$ |
| 12. Collectors, auctioneers and agents. | 1 |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |
| 13. Others of this class | 3 |  |  |  |  |  |  |  | 1 | 2 |  |  |  |  |  |  |  |
| Mercantile and Trading: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 14. Apothecaries, pharmacists, etc. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15. Commercial travelers |  |  |  |  |  |  |  |  | 1 | 1 |  |  |  |  |  |  |  |
| 16. Merchants and dealers | 3 |  |  |  |  |  |  |  |  | 4 |  |  |  |  |  |  |  |
| 17. Hucksters and peddlers. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 18. Others of this class ............................. | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Public Entertainment: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 19. Hotel and boarding house keepers............. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20. Saloon keepers, liquor dealers, bar tenders and reataurant keepers | 2 |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |

TABLE NO, 21-Continued. SHOWING TOTAL DEATHS FROM THE VARIOUS DISEASES, CLASSIFIED BY OCCUPATION FOR THE CAL-

43. Leather makers
44. Leather workers
45. Machinists
46. Marble and stone cutters
47. Masons (stone and brick)
48. Mill and factory operators (textiles)
49. Millers (flour and grist)
50. Painters, glaziers and varnishers
51. Plasterers and whitewashers
52. Plumbers and gas and steam fitters.
53. Tailors
54. Tinners and tinware makers.
55. Others of this class.

| .. | 2 |
| :---: | ---: |
| .. | 5 |
| .. | $\cdots$ |
| .. | 1 |
| .. | 1 |
| .. | 1 |
| .. | 1 |
| .. | $\cdots$ |
| .. | $\ldots$ |

Agricultural, Transportation and Other Outdoor:
56. Boatmen and canal men
57. Draymen, hackmen, teamsters
58. Farmers, planters and farm laborers
59. Gardners, florists, nurserymen and vine growers
60. Livery stable keepers and hostlers.
61. Lumbermen and raftsmen
2. Miners and quarrymen
63. Sailors, pilots, fishermen and oystermen
64. Steam-railroad employees
65. Stock raisers, herders and drovers
66. Others of this class
67. All other occupations

Occupations for Females:

1. Musicians and teachers of music.
2. Teachers in schools
3. Stenographers and typewriter
4. Bookkeepers, clerks and copyists
5. Hotel and boarding house keepers
6. Laundresses
7. Nurses and midwives
8. Servants
9. Artificial flower and paper box makers
10. Cigar makers and tobacco workers.
$\ldots$
2
5
$\ldots 1$
1
1
1
1
$\cdots \ldots$
2
$\ldots$
10


TABLE NO. 21-Continued. SHOWING TOTAL DEATHS FROM THE VARIOUS DISEASES, CLASEIFIED BY OCCUPATION FOR THE
CALENDAR YEAR UF 1911.


TABLE NO. 21-Continued. SHOWING TOTAL DEATHS FROM THE VARIOUS DISEASES, CLASSIFIED BY OCCUPATION FOR THE CAL-

TABLE NO. 21-Continued. SHOWING TOTAL DEATHS FROM ENDAR YEAR OF 1911.

Professional Service:

1. Architects, artists, etc.
2. Clergymen
3. Engineers and surveyors
4. Journalists
5. Lawyers
6. Musicians and teachers of mus: c.............................
7. Physicians and surgeons
8. Teachers (school)
9. Others of this class.

Clerical and Official:
10. Bookkeepers, clerks and copyists
11. Bankers, brokers and officials of companies.
12. Collectors, auctioneers and agents
13. Others of this class.

Mercantile and Trading:
14. Apothecaries, pharmacists, etc.
15. Commercial travelers
16. Merchants and dealers
17. Hucksters and peddlers
18. Others of this class

Public Entertainment:
19. Hotel and boarding house keepers
20. Saloon keepers, liquor dealers, bar tenders
20. Saloon keepers, liquor dealers, bar tenders


## Name of Occupation.


$\square$



TABLE NO. 21-Continued. SHOWING TOTAL DEATHS FROM THE VARIOUS DISEASES, CLASSIFIED BY OCCUPATION FOR THE CALENDAR YEAR OF 1911.

| Name of Occupation. |  |  |  |  |  |  |  | $\begin{aligned} & \dot{\sim} \\ & \dot{U} \\ & 0 \\ & 0 \\ & \underset{X}{0} \end{aligned}$ |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Personal Service, Police and Military: * |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 21. Barbers and hair dressers...... | 1 |  |  |  |  |  |  |  |  |  | 8 |  |  |  |  |  |  |
| 22. Janitors and sextons.... |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  |
| 23. Policemen, watchmen and detectives. | 1 |  |  |  |  |  |  |  |  |  | 2 |  |  |  |  |  |  |
| 24. Soldiers, sailors and marines (U. S.) |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  |
| 25. Others of this class.................... |  |  |  |  |  |  |  |  |  |  | 8 | 1 |  |  |  |  |  |
| Laboring and Servants: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 26. Laborers (not agricultural)..................... | 9 |  | 11 |  |  |  | 4 |  | 1 |  | 260 | 1 | 5 | 9 | 2 |  |  |
| 27. Servants ........... |  |  |  |  |  |  |  |  |  |  | 8 |  |  |  |  |  |  |
| Manufacturing and Mechanical Industry: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 28. Bakers and confectioners ........... |  |  |  |  |  |  |  |  |  |  | 4 |  | 1 |  |  |  |  |
| 29. Blacksmiths ......... |  |  | 1 |  |  |  |  |  |  |  | 6 |  | 1 | 1 |  |  | . |
| 30. Boot and shoemakers.... | 1 |  |  |  |  |  |  |  |  |  | 5 | 1 |  |  |  |  |  |
| 31. Brewers, distillers and rectifiers |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  | -1 |
| 32. Butchers ............................ |  |  | . |  |  |  |  |  |  |  | 3 |  |  |  |  |  | 1 |
| 33. Clabinet makers and upholsterers.. |  |  | 1 |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  |
| 34. Carpenters and joiners........................... | 1 |  | 3 |  |  |  |  |  |  |  | 31 |  |  | 1. |  |  |  |
| 35. Cigar makers and tobacco workers........... |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  | 1 |
| 36. Clock and watch repairers, jewelers, etc. |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  | 1 |
| 37. Compositors, printers and pressmen.......... |  |  |  |  |  |  |  |  |  |  | 7. |  |  |  |  |  |  |
| 38. Engineers and firemen (not locomotive)................................... | 1 | . . . . . |  | ...... |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 40. Glass blowers and glass workers........... |  |  |  |  |  |  |  |  |  |  | 10 | ...... |  |  |  |  |  |
| 41. Hat and cap makers... |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |
| 42. Iron and steel workers. |  |  |  |  |  |  |  |  |  |  | 11 | S. | 1 |  |  |  | 1 |
| 43. Leather makers |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 44. Leather workers |  |  |  |  |  |  |  |  |  |  | 4 |  |  |  |  |  |  |
| 45. Machinists | 1 |  |  |  |  |  |  |  |  |  | 17 |  | 1 | 1 |  |  | 1 |

46. Marble and stone cutters
47. Masons (stone and brick)
48. Mill and factory operators (textiles
49. Millers (flour and grist).
50. Painters, glaziers and varnishers
51. Plasterers and whitewashers.
52. Plumbers and gas and steam fitters
53. Tailors
54. Tinners and tinware makers
55. Others of this class.

Agricultural, Transportation and Other Outdoor
56. Boatmen and canal men
57. Draymen, hackmen and teamsters
58. Farmers, planters and farm laborers
59. Gardners, florists, nurserymen and vine growers
60. Liverystable keepers and hostlers.
61. Lumbermen and raftsmen
62. Miners and quarrymen.
63. Sailors, pilots, fishermen and oystermen
64. Steam-railroad employees
65. Stock raisers, herders and drovers
66. Others of this class.
67. All other occupations

Occupations for Females:

1. Musicians and teachers of music
2. Teachers in schools
3. Stenographers and
4. Bookkeepers, and typewriters.
5. Bookkeepers, clerks and copyists
6. Hōtel and boarding house keepers.
7. Laundresses
8. Nurses and midwives
9. Servants
10. Artificial flower and paper box makers
11. 'Oigar makers and tobacco workers.
12. Mill and factory operatives (textile)
13. Milliners
14. Dressmakers and seamstresses
15. Telegraph and telephone operators
16. All other occupations



| Name of Occupation. |  |  | $\begin{aligned} & \dot{3} \\ & \frac{1}{2} \\ & 0 \end{aligned}$ |  |  |  |  |  ०\%炰 ت゙ |  |  |  |  |  |  | 3 3 3 3 0 0 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Professional Service: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Architects, artists, etc. .......................... |  |  | 1 |  |  | 4 |  |  |  |  | 1 |  |  |  |  |  |  |
| 2. Clergymen ........................................ |  |  |  |  |  |  | 1 |  |  |  | 2 |  |  |  |  | 3 |  |
| 3. Engineers and surveyors. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4. Journalists ............... |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5. Lawyers . ................ |  |  |  |  |  |  | 1 |  |  |  | 1 | 1 |  |  |  |  | ..... |
| 6. Musicians and teachers of music |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |
| 7. Physicians and surgeons . |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  | 1 |  |
| 8. Teachers (school) ...... |  |  |  |  |  | 1 |  |  |  |  |  |  |  | 1 |  |  |  |
| 9. Others of this class ... | 1 |  |  |  |  | 1 | 2 |  |  |  | 2 |  |  |  |  | 2 | - |
| Clerical and Official: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10. Bookkeepers, clerks and copyists.................. | 1 |  | 2 |  | 1 | 5 |  |  |  |  | 3 | 1 | 2 | ...... |  | 2 | ...... |
| 11. Bankers, brokers, and officials of companies. |  |  |  |  |  |  |  |  |  |  | 2 |  |  |  |  |  |  |
| 12. Collectors, autioneers and agents............. |  |  |  |  |  | 2 | 1 |  |  |  | 1 |  | 1 | 1 |  | 2 |  |
| 13. Others of this class ............................. | 1 |  |  | 1 |  | 4 | 3 |  |  |  | 1 |  | 1 |  |  |  |  |
| Mercantile and Trading: |  |  |  |  |  |  |  |  |  | - |  |  |  |  |  |  |  |
| 14. Apothecaries, pharmacists, etc. |  |  |  |  |  |  |  |  |  |  | 1 1 |  |  |  |  | 3 |  |
| 15. Commercial travelers | 1 |  |  |  |  | 3 | $\ddot{2}$ |  |  |  | 3 |  |  | 1 |  | 3 | ...... |
| 16. Merchants and dealers. |  |  |  |  |  | 8 | 2 |  |  |  | 3 | 2 | 2 | 2 |  | 4 |  |
| 17. Hucksters and peddlers ......................... |  |  |  |  |  | 1 | $\cdots \cdots$ |  |  |  |  |  | 1 |  |  |  |  |
| 18. Others of this class ............................... |  |  |  |  |  | 1 | 1 |  |  |  | 1 |  |  |  |  | 1 |  |
| Public Entertainment: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 19. Hotel and boarding house keepers. |  |  |  |  | - 1 |  | 1 |  |  |  | 1 |  | 1 |  |  | 1 |  |
| 20. Saloonkeepers, liquor dealers, bartenders and restaurant keepers |  |  |  |  |  | 2 |  |  |  |  |  |  |  |  |  | 3 |  |

Personal Service, Police and Military:
21. Barbers and hairdressers
20. Janitors and sextons
23. Policemen, watchmen and detectives.
24. Sodiers, sailors and marines (U. S.)
25. Others of this class

## $\stackrel{-}{\circ}$ Laboring and Servant:

26. Laborers (not agricultural)

IT Manufacturing and Mechanical Industry: 28. Bakers and confectioners
29. Blacksmiths
30. Boot and shoemakers
31. Brewers, disthlers and rectifiers
32. Butchers
33. Cabinet makers and upholsterers
34. Carpenters and joiners
35. Cigar makers and tobacco workers
36. Clock and watch repairers, jewelers
37. Compositors, printers and pressmen
38. Coopers
39. Engineers and firemen (not locomotive)
40. Glass blowers and glass workers
41. Hat and cap makers
42. Iron and steel workers
43. Leather makers
44. Leather makers
45. Machinists
46. Marble and stone........................
47. Masons (stone and brick)
48. Mill and factory operative
48. Millers (flour
50. Mainters, glaziers grist)
50. Painters, glaziers and varnishers
51. Plasterers and whitewashers
53. Plumbers and gas and steam fitters
54. Tinners
55. Others and tinware makers

Agricultural, Transportation and Other Outdoor: 56. Boatmen and canalmen
7. Draymen, hackmen, teamsters
58. Farmers, planters, farm laborers




TABLE NO. 21-Continued. SHOWING TOTAL DEATHS FROM THE VARIOUS DISEASES, CLASSIFIED BY OCCUPATION FOR THE CAL-


TABLE NO. 21-Continued. SHOWING TOTAL DEATHS FROM THE VARİOUS DISEASES, CLASSIFIÉD BY OCCUPATION FOR THE CALENDAR YEAR OF 1911.

| Name of Occupation. |  |  |  |  |  |  |  | $\begin{aligned} & \dot{3} \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & \text { an } \\ & 0 \end{aligned}$ |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Professional Service: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Architects, artists, etc.......................... |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| 2. Engineers and surveyors .................................. |  |  |  |  |  |  |  |  |  |  |  |  | 6 |  |  |  |  |
| 4. Journalists .............. |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |
| 5. Lawyers ... |  |  |  | 1 |  |  |  |  |  |  | .... |  | 6 |  | $\ldots$ |  | 9 |
| 6. Musicians and teachers of music |  |  |  | 1 |  |  |  |  |  |  |  |  | 6 |  |  |  | 2 |
| 7. Physicians and surgeons....... |  |  | 1 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| 8. Teachers (school) ....... |  |  | 1 |  | 1 |  |  |  | 1 | 1 |  |  | 3 2 |  | 3 | 1 |  |
| 9. Others of this class. |  |  |  |  | 2 |  |  |  | 1 | 1 |  |  | 2 3 | 2 | 1 | 1 |  |
| Clerical and Official: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10. Bookkeepers, clerks and copyists.............. |  | 1 | 2 |  | 3 |  |  |  |  | 1 | 2 | 1 | 6 |  |  | 2 | 1 |
| 11. Bankers, brokers and officials of companies. |  | 1 | 1 | .... | 3 | ........ | …... |  |  | 1 | 1 | 1 | 2 | 1 |  | 2 | 1 |
| 12. Collectors, auctioneers and agents............. <br> 13. Others of this class. |  | 1 | 2 |  |  |  |  |  |  |  | 2 |  | 8 |  | 2 |  |  |
| 13. Others of this class.................................... |  |  | 2 |  | 1 |  |  |  | 1 |  |  | 1 | 9 |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15. Commercial travelers.. |  | 1 | 2 |  |  |  |  |  | 1 | 1 | 3 | 1 | 4 |  | 1 | 1. | 1 |
| 16. Merchants and dealers. |  | 1 | 2 | 1 |  |  |  |  | 1 | 1 | 2 | 2 | 30 | 1 | 1 | 1 | 1 |
| 17. Hucksters and peddlers. |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  |
| 18. Others of this class.. |  |  |  |  | 1 |  |  |  | 1 | 1 | 1 |  | 5 |  | 2 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20. Saloon keepers, liquor dealers, bartenders and restaurant keepers |  |  | 2 |  | 7 |  |  |  |  | 3 |  |  | 3 |  |  | 1 |  |
| Personal Service, Police and Military: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 21, Barbers and hair dressers........ |  |  | 1 |  |  |  |  |  |  |  |  |  | 2 |  |  | 7 |  |

iTABLE NO. 21-COhtinued. SHOWING TOTAL DEATHS FROM THE VARIOUS DISEASES, CLASSIFIED BY OCCUPATION FOR THE CAL ENDAR YEAR OE 1911.
22. Janitors and sextons
23. Policemen, watchmen and detectives
24. Soldiers, sailors and marines (U. S.)
25. Others of this class.

Laboring and Servant:
26. Laborers (not agricuitural)
27. Servants

Manufacturing and Mechanical Industry:
28. Bakers and confectioners.
29. Blacksmiths .............
31. Brewers, distillers and rectifiers.
32. Butchers
33. Cabinet makers and upholsterers
34. Oarpenters and joiners.
35. Cigar makers and tobacco workers
36. Clock and watch repairers, jewelers, etc.
37. Compositors, printers and pressmen
38. Coopers
39. Engineers and firemen (not locomotive)
40. Glass blowers and glass workers.
41. Hat and capmakers.
42. Iron and steel workers.
43. Leather makers
44. Leather workers
45. Machinists
46. Marble and stone cutters.
40. Marons (stone and brick)
47. Masons (stone and brick)...............
48, Mill and factory operatives (textiles) -

|  | 析 |
| :---: | :---: |

## $\ldots$. <br> 




49. Millers (flour and grist)..
50. Painters, glaziers and varnishers
51. Plasterers and whitewashers.
52. Plumbers and gas and steam fitters
54. Tinners and tinware makers.
55. Others of this class..

Agricultural Transporation and Other Outdoor: 56. Boatmen and canalmen.
57. Draymen hackmen teamsters.
58. Farmers, planters farm labor.
59. Gardeners, florists, nurserymen and vine growers
6). Livery stable keepers and hostlers.
61. Lumbermen and raftsmen
62. Miners and quarrymen
63. Sailors, pilots, fishermen and oystermen.
64. Steam railroad omployees
65. Stock raisers, herders and drovers
66. Others of this class
67. All other occupations

Occupations for females:

1. Musicians and teachers of music.
2. Teachers in school
3. Stenographers and typewriters.
4. Bookkeepers, clerks and copyists.
5. Hotel and boarding house keepers.
6. J, aundresses
7. Nurses and midwives.
8. Servants
9. Artificial fiower and naner box makers
10. Cigar makers and tobaceo workers.
11. Mill and factory operatives (textile)
12. Mill'ners
13. Dressmakers and seamstresses.
14. Telegraph and telephone operators.
15. All other occupations


TABLE NO．21－Continued．SHOWING TOTAL DEATḢS FṘOM THE VAR̈IOUUS DISEASĖS，ÖLASSIF̀IED BY OCCUPATION FOR THE CAL－ ENDAR YEAR OF 1911.

| Name of Occupation． |  |  |  | $\begin{aligned} & \text { Ð் } \\ & 0 . \\ & 0 \\ & 0 \end{aligned}$ |  |  |  |  |  |  | $\begin{aligned} & \text { " } \\ & \text { n } \\ & 2 \\ & 0 \\ & \tilde{0} \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Professional Service： |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1．Arehitects，artists，etc． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2．Clergyman $\ldots . . . . . . . . .$. |  |  |  |  | 1 | ．．．．． |  |  |  |  | 6 | ．．．．．． |  |  |
| 3．Engineers and surveyors ．．．．．．．．．．．．．．．．．．．．． |  |  |  |  |  | ．．．．． |  |  |  |  | 1 |  |  | 1 |
|  |  |  |  |  |  | ． |  |  |  |  | 4 |  |  |  |
| 6．Musicians and teachers of music |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |
| 7．Physicians and surgeons ．．．．．．．． |  | ．．．．． | ．．．．． |  | ， |  |  |  | 1 | 1 | 5 | 1 | 2 | ．．．．．． |
| 8．Teachers（school）．．．．． 9．Others of this class．．． |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  |
| 9．Others of this class．．．． |  |  |  |  |  | 3 |  |  |  |  | 4 | 1 | ．．．．．．． | I |
| Clerical and Official： |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10．Bookkeepers，clerks and copyists．．．．．．．．．．．． | 2 | 1 |  |  |  |  |  |  |  | 1 | ， | 1 | 3 | 1 |
| 11．Bankers，brokers and officials of companies．． |  | 1 |  |  |  | 1 |  |  |  | 1 | 2 |  |  |  |
| 12．Oollectors，auctioneers and agents．．．．．．．．．．． |  |  |  |  |  |  |  |  |  | 1 | 11 |  | 2 |  |
| 13．Others of this class．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  |  |  | 1 | $\ldots$ |  |  | 1 |  | 11 |  | 1 | $\ldots$ |
| Mercantile and Trading： |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 14．Apothecaries，pharmacists，etc． |  |  |  |  |  |  |  |  |  |  | $\stackrel{2}{8}$ |  | ， | $\ldots$ |
| 15．Commercial travelers ．．．．．．．．．．．．． |  |  |  |  |  | 1 | ．．．．．． |  |  |  | 8 |  | 2 | 1 |
| 16．Merchants and dealers |  |  |  |  | 1 |  |  |  |  | 1 | $\stackrel{21}{2}$ | 4 | 6 | 3 |
| 17．Hucksters and peddlers． |  |  |  |  |  |  |  |  |  |  | ＋ |  |  |  |
| 18．Others of this class．．．．．． |  |  |  |  |  |  |  |  |  | 1 | 4 |  | 1 | ．．．．．．． |
| Public Entertainment： |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

20. Saloon keepers, liquor dealers, bartenders and restaurant keepers
Personal Service Police and Military:
21. Barbers and hair dressers
22. Jani.ors and sextons
23. Policemen, watchmen and detectives
24. Soldiers, sailors and marines (U. S.)
25. Others of this class.

Laboring and Servant:
26. Laborers (not agricultural)
27. Servants

Manufacturing and Mechanical Industry:
28. Bakers and confectioners
29. Blacksmiths
30. Boot and shoemakers
31. Brewers, distillers and rectifiers
32. Butchers
33. Cabinet makers and upholsterers
34. Carpenters and joiners
35. Cigar makers and tobacco workers
36. Clock and watch repairers, jewelers, ete
37. Compositors, printers and pressmen.
38. Coopers
39. Engineers and firemen (not locomotive)
40. Glass blowers and glass workers.
41. Hat and cap makers.
42. Iron and steel workers
43. Leather makers
44. Leather workers
45. Machinists
46. Marble and stone cutters
46. Marble and stone cutters.
47. Masons (stone and brick)...............
49. Millers (flour and grist).
50. Painters, glaziers and varnishers
51. Plasterers and whitewashers
52. Plumbers and gas and steam fitters.
53. Tailors
54. Tinners and tinware makers.
55. Others of this class.

Agricultural, Transportation and Other Outdoor:
56. Boatment and canalmen ......
57. Draymen, hackmen, teamsters


TABLE NO. 21-Continued. SHOWING TOTAL DEATHS FROM THE VARIOUS DISEASES, CLASSIFIED BY OCCUPATION FOR THE CAL ENDAR YEAR OF 1911.

| Name of Occupation. |  |  | *Squeju! jo suoṭs[nauoo |  | 荡 | 荡 |  | Diseases of the ears. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 58. Farmers, planters, farm laborers............... |  | 6 |  | 1 | 5 | 20 | 1 | 1 | 3 | 6 | 331 | 22 | 102 | 14 |
| 59. Gardeners, florists, nurserymen and vine growers | 15 |  |  |  |  |  |  | 1 |  |  | 3 |  | 2 |  |
| 60. Liverystable keepers and hostlers................. | ..... | ....... |  |  |  | $\ldots$ | ........... | 1 |  |  | 3 2 | 1 | 2 |  |
| 61. Lumbermen and raftsmen .......................... | ...... |  |  |  |  | . $\cdot$ | $\cdots$ | ........ |  | ........ | 3 |  | 1 | 2 |
| 62. Miners and quarrymen ..................... 63. Sailors, pilots, fishermen and oystermen..... | 1 |  |  |  |  | . | ........ |  |  | $\cdots$ | 2 |  | 1 | ........ |
| 63. Sailors, pilots, fishermen and oystermen...... 64. Steam railroad employees.................... | 1 | …… | - |  | i | .... | - |  |  |  | 6 | ........... | 2 | ......... |
| 64. Steam railroad employees........................ |  |  |  |  | 1 | ...... | ........ |  |  | 1 | 2 |  | 4 |  |
| 66. Others of this class....... |  |  |  |  |  |  |  |  |  |  | 1 | 1 |  | 1 |
| 67. All other occupations |  |  |  | $\cdots$ | ...... | - | - |  |  |  | 1 | 1 |  | 1 |
| Occupations for Females: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Musicians and teachers of music. . |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. Teachers in schools ........... |  |  |  |  |  | 2 |  |  |  | 1 | 3 |  | 1 |  |
| 3. Stenographers and typewriters .... |  |  |  |  |  |  | ....... |  |  |  |  |  | 1 | ........ |
| 4. Bookkeepers, clerks and conyists.............. 5. Hotel and boarding house keepers.......... |  | 1 |  |  |  | 1 |  |  |  |  | 3 |  |  |  |
| 5. Hotel and boarding house keepers.............. 6. Laundresses |  | ...... |  |  |  |  | 1 |  |  |  | 1 |  |  | ........ |
| 7. Nurses and midwives |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |
| 8. Servants ............ |  | 1 |  |  |  |  |  |  | $\cdots \cdots \cdots$ | 1 | 12 | 1 | 2 | 1 |
| 9. Artificial flower and paper box makers |  |  |  |  |  |  |  |  |  |  |  |  | - |  |
| 10. Cigar makers and tobacco workers... |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11. Mil land factory operatives (textile). |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12. Milliners ............................. |  |  |  |  |  | . |  |  |  |  |  |  |  |  |
| 13. Dressmakers and seamstresses...... |  |  |  |  |  | . |  |  |  | 1 | 2 |  |  | 1 |
| 14. Telegraph and telephone operators.............. | 16 | 4 |  | 3 | 4 | 23 | 1 | 3 | $\cdots$ | 29 | 472 | 27 | 66 | $\cdots{ }^{\text {a }}$ |

TABLE NO. 21-Continued. SHOWING TOTAL DEATHS FROM THE VARIOUS DISEASES, OLASSIFIED BY OCCUPATION FOR THE CAL.


TABLE NO. 21-Continued. SHOWING TOTAL DEATHS FROM THE VARIOUS DISEASES, OLASSIFIED BY OCCUPAIION FOR THE CAL-

42. Iron and steel workers
43. Leather makers
45. Machinists
46. Marble and stone cutters
47. Masons (stone and brick)
48. Mill and factory oneratives (textile)
49. Millers (flour and grist)
50. Painters, glaziers and varnishers
51. Plasterers and whitewashers
52. Plumbers and gas and steam fitters
53. Tailors
54. Tinners and tinware makers.
55. Others of this class

Agricultural. Fransportation and Other Out door:
56. Boatmen and canalmen
57. Draymen, hackmen, teamsters
58. Farmers, planters, farm laborers
59. Gardeners, florists, nurserymen and vine Growers
60. Liverystable keepers and hostlers
61. Lumbermen and raftsmen
69. Miners and quarrymen
63. Sailors; pilots. fishermen and oystermen.
64. Steam railroad employees
64. Stock. raisers, herders and drovers
66. Others of this class.
67. All other occupations

Occupations for Females:
Musicians and teachers of music.
. Teachers in schools
Stenographers and typewriters
4. Bookkeepers, clerks and copyists
5. Hotel and boarding house keepers.
6. Laundresses
. Nurses and midwives
Servants
9. Artificial flower and paper box makers
10. Cigar makers and tobacco workers
11. Mill and factory operatives (textile).
12. Milliners
13. Dressmakers and seamstresses
14. Telegraph and telephone operators.
15. All other occupations


TABLE NÖ．21－COntinued．SHOWING TOTAL DEATHS FROM THE VARIOÚS DISEASES，OLASSIFIED BY OCCUPATION FOR THE OAL－ ENDAR YEAR OF 1911.

| Name of Occupation． |  |  | 宽号 © H gig <br> 解家家 <br>  |  |  |  |  |  |  | Diarrhoea and enteritis． （2 y ears and over）． |  |  |  |  |  | $\stackrel{\square}{\circ}$ <br> 侖 <br>  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Professional Service： |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1．Architects，artists，etc．． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3．Engiceers and surveyors |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4．Jourtalists ．．．．．．．．．．．．．． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5．Lawyers ．． |  |  |  |  |  |  |  |  |  |  |  |  | 1 | 1 |  |  |
| 6．Musicians and teachers of music |  |  |  |  |  |  |  |  |  |  |  |  | 1 | 1. |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8．Teachers（school）．．．．．．．．． |  |  | 1 |  |  |  |  |  |  |  |  |  | 1 | 1 |  |  |
| 9．Others of this class．．．．．． |  |  |  |  |  | ．．．．．． | $\cdots$ | 1 | ．．．．．． | 1 |  |  | 4 |  |  |  |
| Clerical and Official： <br> 10．Bookkeepers，clerks and copyists． |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  | 1 |  |
| 10．Bookkeepers，clerks and copyists． <br> 11．Bankers，brokers and officials of companies |  |  |  |  |  |  |  |  |  |  |  |  | 1 | 1 | 1 |  |
| 12．Collectors，auctioneers and agents．．．．．．．．．． |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |
| 13．Others of this class．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  | 1 |  |  |  | 1 | 1 |  | 2 |  |  | 2 | 1 | 1 | ．．．．．． |
| Mercantile and Trading： |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 14．Apothecaries，pharmacists，etc．．．．．．．．．．．．．． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | 1 |  |  |  |  | 2 |  |  |  |  | 2 | 3 | 2 |  |
| 17．Hucksters and peddlers．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |  |
| 18．Others of this class．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  |  |  |  |  | ．．．．． | 2 | ．．．．．． |  |  |  | 2 | 1 | ．．．．． |  |
| Public Entertainment： |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 19．Hotel and boarding house keepers．．．．．．．．． |  |  |  |  | 1 |  |  | 1 | ．．．．． |  |  |  |  |  |  |  |
| 20．Saloon keepers，liquor dealers，bartenders <br> and rentaurant keepers |  |  |  |  |  |  |  | 2 |  | 1 |  |  |  | 1 | 1 |  |

Personal Service, Police and Military: 21. Barbers and hairdressers
22. Janitors and sextons
23. Policemen, watchmen and detectives 24. Soldiers, sailors and marines (U. S.) 25. Others of this class.

Laboring and Servant:
26. Laborers (not agricultural)
27. Servants

Manufacturing and Mechanical Industry:
28. Bakers and confectioners
29. Blacksmiths
30. Boot and shoe makers
31. Brewers, distillers and rectifiers
32. Butchers
33. Cabinet makers and upholsterers
34. Carpenters and joiners
35. Cigar makers and tobacco workers
36. Clock and watch repairers, jewelers, etc.
37. Compositors, printers and pressmen.
38. Coopers
39. Engineers and firemeu (not locomotive)
40. Glass blowers and glass workers.
41. Hat and can makers.
42. Iron and steel worker
43. Teather makers
44. Leather workers
45. Machinists
46. Marble and stone citters
47. Masons (stone and brick)
48. Mi'l and factory operatives (textile)
49. Millers (flour and grist)
50. Painters, glaziers and varnishers
51. Plosterers and whitewashers
51. Plasterers and whitewashers .........
52. Plumbers, and gas and steam fitters
53. Tailors
54. Tinners and tinware makers.
55. Others of this class

Agriniltrre. Transnortation and Other Outdoor 56. Rnatmen and canalmen
57. Draymen, hackmen. teamsters. etc 58, Farmers; planters and farm laborers.


TABLE NO． 2 Continued．SHOWING TOTAJ DEATHS FROM THE VARIODS DISEASES，CLASSIFIED BY OCCUPATION FOR THE CAL－CO

| Name of Occupation． |  |  |  |  | - xufaryd əप jo səseə |  |  |  |  |  |  |  | $\frac{1}{2}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 59．Gardeners，florists，nurserymen and vine growers | 1 |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |
| 60．Livery stable keepers and hostlers．．．．．．．．． <br> 61．Lumbermen and raftsmen |  | 1 |  |  |  |  |  |  |  | 1 |  |  | 1 | 1 |  |  |
| 62．Miners and quarrymen ．．． |  |  |  |  |  |  | 1 | 2 |  |  |  |  | 1 |  |  |  |
| 63．Saîlors，pilots，fishermen and oyst |  |  | 1 |  |  |  | 1 | 1 |  |  |  |  | 1 | 1 |  |  |
| 64．Steam railroad employes ．．．．．．．．． |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 65．Stock raisers，herders and drovers |  |  |  |  |  |  |  | 4 |  |  |  |  |  |  | 1 |  |
| 66．Others of this class．．．．． <br> 67．All other occupations ．． | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Occupations for Females： |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1．Musicians and teachers of music． <br> 2．Teachers in school |  |  |  |  |  |  | 1 |  |  |  |  |  | 2 | 1 |  | ．．．．．． |
| 3．Stenographers and typewriters．．． <br> 4．Bookkeepers，clerks and copyists |  |  |  |  |  |  |  |  |  |  |  |  | 2 |  |  |  |
| 4．Bookkeepers，clerks and copyists．．． <br> 5．Hotel and boarding house keepers． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6．Laundresses ．．．．．．．． |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  | 1 |  |
| 7．Nurses and midwives |  | 1 |  |  |  |  |  | 1 |  |  |  |  |  | 2 | 1 |  |
| 8．Servants ．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9．Artificial flower and paper box maker |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11．Mill and factory operatives（textile）． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12．Milliners ．．．．．．．．．．．．．．．．．．． |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 14．Telegraph and telephone operators 15．All other occupations． $\qquad$ | 29 | 8 | 8 |  |  | 3 | 6 | 55 |  | 36 |  | 1 | 34 | 65 | 23 | 5 |

TABLE NO. 21-Contínued. SHOWING TOTAL DEATHS FROM THE VARIOUS DISEASES, CLASSIFIED BY OCCUPATION FOR THE CAI

| Name of Occupation. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Professional Service: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Architects, artists, etc. |  |  |  |  |  |  |  |  | 4 |  |  |  |  |  |  |  |
| 2. Olergymen .............. |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. Engineers and surveyors |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4. Journalists . |  | 2 |  |  |  |  |  |  | 2 |  |  |  |  |  | 1 |  |
| 5. Lawyers . Muscians and teachers o |  | 2 |  | 1 |  |  |  |  | 1. |  |  |  |  |  |  |  |
| 6. Mus.cians and teachers of |  |  |  | 1 |  |  |  |  | 5 |  |  |  |  |  |  |  |
| 7. Physicians and surgeons |  | 1 |  |  |  |  | 1 |  | 1 9 |  | 1 |  | 1 |  | 1 |  |
| 9. Others of this class.......................... |  | 3 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |
| Cl rical and Official: |  |  |  |  |  |  |  |  |  |  |  |  | 2 |  |  |  |
| 10. Bookkeepers, clerks and copyists.............. |  | 4 | 1 |  |  | - 2 |  | 2 | 3 |  |  |  |  |  | 3 |  |
| 11. Bankers, brokers and officials of companies... |  |  |  |  |  |  |  |  | 9 |  |  |  |  |  |  |  |
| 12. Collectors, auctioneers and agents. |  | 2 | 1 | 1 |  |  |  | 1 | 10 |  |  |  | 2 |  |  |  |
| Mercantile and Trading: <br> 14. Apothecaries, pharmacists, etc. <br> 15. Commercial travelers <br> 16. Merchants and dealers $\qquad$ <br> 16. Merchants and dealers $\qquad$ <br> 17. Hucksters and peddiers $\qquad$ <br> Public Entertainment: <br> 19. Hotel and boarding house keepers <br> 20. Saloon keepers, liquor dealers, bartenders and restaurant keepers |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | 2 | $\ldots$ | $\ldots$ |  |  |  |  |  |
|  |  |  |  | 1 |  |  |  | 1 | 10 |  |  |  |  |  |  |  |
|  | $\cdots$ | 7 |  | 4 | 1 |  |  | 2 1 1 | 22 1 |  | 1 |  | 2 |  | 5 1 |  |
|  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |
|  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | 5 |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | 1 | 2 |  |  | 1 | 3 | 14 |  |  |  |  |  |  |  |

TABLE NO. 21-Continued. SHOWING TOTAL DEATHS FROM THE VARIOUS DISEASES, CLASSIFIED BY OCCUPATION FOR THE CALENDAR YEAR OF 1911.

44. Leather workers
45. Machinists
46. Marble and stone cutters
47. Masons (stone and brick)
48. Mill and factory operatives (textile)
48. Mill and factory operativ
50. Painters, glaziers and varnishers
51. Plastrrers and whitewashers

53. Tailors
54. Tinner sand tinware makers.

Agriculture, Transportation and Other Outdoor:
56. Boatmen and canalmen
57. Draymen, hackmen, teamsters. etc.
58. Farmers, planters and farm laborers
59. Gardeners, florists, nurserymen and vine growers
Livery stable keepers and hostlers
61. Lumbermen and raftsmen
62. Min${ }^{\circ}$ s and quarrvmen
63. Sailors, pilots. fishermen and oystermen
64. Steam railroad employes
65. Stock raisers, herders and drovers
66. Others of this class.
67. All other occupations

Occupations for Females:

1. Musicians and teachers of music.
. Teachers in school
2. Stenographers and typewriters
3. Ronkkeepers. clerks and convists
4. Hotel and boarding house keepers
. Laundresces
5. Nurses and midwives
6. Servants
7. Artificial flower and paper box makers
8. Cigar makers and tob?ceo workers
9. Mill and factory operatives (textile)
10. Milliners
11. Dressmakers and seamstress ${ }^{\circ}$ s
12. Telegraph and telephone operators.
13. All other occupations.



TABLE NO. 21-Continued. SHOWING TOTAL DEȦTḢS FROM THEE VARIOU̇S DISAEASES, CLASSIFIED BY OCCUPÁTION FOR THE OAL ENDAR YEAR OF. 1911.

Professional Service:

1. Architects, artists, etc.
2. Clergymen
. Engineers and surveyors
3. Journalist
4. Lawyers ................................
5. Musicians and teachers
6. Physicians and su
7. Teachers (school).
8. 

Clerical and Official:
10. Bookkeepers, clerks and copyists
11. Bankers, brokers and officials of compa nies
12. Collectors, auctioneers and agents
13. Others of this class.

Mercantile and Trading:
14. Apothecaries, pharmacists, etc
15. Commercial travelers
16. Merchants and dealers
17. Hucksters and peddlers
18. Others of this class.

Public Entertainment:
19. Hotel and boarding house keepers.
20. Saloon keepers, liquor dealers, bartenders

Personal Service, Police and Military:




22. Janitors and sextons
23. Policemen watchmen and detectives 24. Soldiers, sailors and marines (U. S.) 25. Others of this class Laboring and Servant:
26. Laborers (not agricultural)
27. Servants

Manufacturers and Mechanical Industry
28. Bakers and confectioners
29. Blacksmiths
30. Boot and shoe maker
31. Brewers, distiller sand rectifiers
32. Butchers
33. Cabinet makers and upholsterers
34. Carpenters and joiners
34. Cigar makers and tobacco workers
36. Clock and watch repairers, jewelers, etc
37. Compositors, printers and pressmen.
38. Coopers
39. Engineers and firemen (not locomotive)
40. Glass blowers and glass workers
41. Hat and cap makers
42. Iron and steel workers
43. Leather makers
44. Leather workers
45. Machinists
46. Marble and stone cutters
47. Masons (stone and brick)
48. Mill and factory operatives (textile)
49. Millers (flour and grist)
50. Painters, glaziers and varnishers
51. Plasterers and whitewashers
52. Plumbers and gas and steam fitters.
53. Tailors
54. Tinners and tinware makers
55. Others of this class

Agriculture, Transportation and Other Out door:
56. Boatmen and canalmen
57. Draymen, hackmen, teamsters, ete.
58. Farmers, planters and farm laborers
59. Gardeners, florists, nurserymen and vine growers


TABLE NO. 21-Continued. SHOWING TOTAL DEATHS FROM THE VARIOUS DISEASES, CLASSIFIED BY OCCUPATION FOR THE CAL-

| Names of Occupation : |  |  |  |  |  |  | 1 0 0 0 0 4 <br>  |  |  | $\begin{gathered} 1 \\ \cdots \\ \cdots \\ 0 \\ 0 \\ 0 \\ n \\ \text { T } \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 2 \\ 0 \end{gathered}$ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 60. Livery stable keepers and hostlers. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 61. Lumbermen and raftsmen ......... |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 62. Miners and quarrymen .......... |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 63. Sailors, pilots, fishermen and oystc |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 64. Steam railroad employes .......... |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 65. Stock raisers, herders and drovers |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 66. Others of this class............... |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 67. All other occupations . |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Occupations for Females: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Musicians and teachers of music. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. Teachers in schools |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | . |
| 3. Stenographers and typewriters |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4. Bookkeepers, clerks and copyists. |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5. Hotel and boarding house keepers |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6. Laundresses ...................... |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7. Nurses and midwives <br> 8. Servants |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8. Servants <br> 9. Artificial flower and paper box mak |  |  |  | 1 |  | 1 | 1 |  |  | 2. |  |  |  |  |  |  | 1 |
| 10. Cigar makers and tobacco workers |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11. Mill and factory operatives (textile) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12. Milliners ................................ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13. Dressmakers and seamstresses..... |  |  |  |  | 1 |  |  |  | 1 |  |  |  |  |  |  |  |  |
| 14. Telegraph and telephone operators |  |  |  |  | ...... |  |  |  |  | 1 |  |  |  |  |  |  |  |
| 15. All other occupations ........ | 4 | 8 | 7 | 9 | ${ }^{16}$ | ${ }_{4}$ | 718 | 30 | 34 | 142 | 24 | 14 | 2 |  | 12 |  | 1 |

TABLE NO. 21-Continued. SHOWING TOTAL DEATHS FROM THE VARIOUS DISEASES, CLASSIFIED BY OCCUPATION FOR THE OAL


TABLE NO. 21-Continued. SHOWING TOTAL DEATHS FROM THE VARIOUS DISEASES, CLASSIFIED BY OCCUPATION FOR THE CALENDAR YEAR OF 1911.



Personal Service, Police and Military:
21. Barbers and hairdressers
22. Janitors and sextons
23. Policemen, watchmen and detectives.
24. Soldiers, sailors and marines (U. S.)
25. Others of this class.

Laboring and Servant:
26. Laborers (not agricultural)
27. Servants

Manufacturers and Mechanical Industry: 28. Bakers and confectioners
29. Blacksmiths
30. Boot and shoe makers
31. Brewers, distillers and rectifiers
32. Butchers
33. Cabinet makers and upholsterers
34. Carpenters and joiners
35. Cigar makers and tobacco workers
36. Clock and watch repairers, jewelers, etc
37. Compositors, printers and pressmen
38. Coopers
39. Engineers and firemen (not locomotive)
40. Glass blowers and glass workers
41. Hat and cap makers.
42. Iron and steel workers.
43. Leather makers
44. Leather workers
45. Machinists
46. Marble and stone cutters
47. Masons (stone and brick)
48. Mill and factory operati
49. Millers (flour and grist)
Other diseases pe-
culiar to early in-
fancy.
(
(

| $\begin{aligned} & \dot{0} \\ & \text { on } \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & \text { on } \end{aligned}$ |  |  |  |
| :---: | :---: | :---: | :---: |


50. Painters, glaziers and varnishers 51. Plasterers and whitewashers
52. Plumbers and gas and steam fitters
53. Tailors
54. Tinners and tinware makers.
55. Others of this class.

Agriculture, Transportation and Other Out door:
6. Boatmen and canalmen
7. Draymen, hackmen, teamsters, etc
8. Farmers, planters and farm laborers
59. Gardeners, florists, nurserymen and vine growers
60. Livery stable keepers and hostle..........................
61. Lumbermen and raftsmen
62. Miners and quarrymen
63. Sailors, pilots, fishermen and oystermen
64. Steam railroad employes
65. Stock raisers, herders and drovers
66. Others of this class.
67. All other occupations

Occupations for females:

1. Musicians and teachers of music
2. Teachers in schools
3. Stenographers and typewriters
4. Bookkeepers, clerks and copyist
5. Hotel and boarding house keepers
6. Laundresse
7. Nurses and midwives
8. Servants
9. Artificial flower and paper box makers
10. Cigar makers and tobacco workers
11. Cigar makers and tobacco workers.
12. Milliners ............................... 13. Dressmakers and seamstresses...............................
13. Telegraph and telephone operators.
14. All other occupations


|  |  |  |  | 2 |  | 1 |  | 2 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| . | ..... | ....... | 3 |  |  |  | ....... |  | ${ }^{\cdots} 1$ |  |
|  |  |  |  | 1 | 1 |  |  | 1 |  |  |
|  |  |  | 2 |  |  |  |  |  |  |  |
| . $\quad . . .$. |  |  | ㄱ..11 | -•••• |  |  |  | $\cdots$ |  |  |
|  |  |  | 1 |  |  |  |  |  |  |  |
| . ...... |  |  | $\begin{array}{r}4 \\ \hline\end{array}$ | 5... |  |  |  |  | $\cdots$ |  |
| . |  |  | 270 | 5 | 2 | 26 | 5 |  | 5 | . |
| …… |  |  | 1 |  |  |  |  | 1 |  |  |
| ....... |  |  | 2 | . |  | "... |  |  |  |  |
| - |  |  | 1 |  |  |  |  | 1 |  |  |
| . |  |  | 1 |  |  |  |  | 1 |  |  |
| . |  |  | 2 |  |  | . . . . | ...... | 1 |  |  |
| . |  |  | 1 |  |  |  |  |  |  |  |
| ...... |  |  | 2 |  |  |  | 1 | 1 |  |  |
| ...... |  |  | 3 |  |  | 1 |  |  |  |  |
|  |  |  | 1 |  |  |  |  |  |  |  |
| ....... |  |  |  |  |  |  | 1 |  |  |  |
|  |  |  |  | ....... |  | $\cdots{ }^{1}$ |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  | ...... | ...... | ...... | . ..... | - | ...... | . |  |  |
|  |  |  | 6 | 2 |  |  |  |  |  |  |
|  |  |  | 1 |  |  |  |  |  |  |  |
|  |  |  | ...... |  |  | . | ..... | . |  |  |
|  |  |  |  |  | . | - |  | . ..... |  |  |
|  |  |  | $1{ }^{1}$ | 1 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| ...... |  |  | 363 | 13 | 2 | 8 | 7 | 3 |  |  |

TABLE NO. 21-Continucd. SHOWING TOTAL DEATHS FROM THE VARIOUS DISEASES, CLASSIFIED BY OCCUPATION FOR THE CAL ENDAR YEAR OF 1911.

| Names of Occupations. |  |  | 8. \% 合 80 0.0 0 0 0 |  |  | 范 |  |  |  |  |  |  |  |  <br> $\stackrel{\theta}{\circ}$ <br>  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Professional Service:1. Architects, artists, etc. ............ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. Engineers and surveyors |  |  |  |  |  |  |  | 1 |  |  | 1 |  |  | 1 |
| 4. Journalists ............... |  |  |  |  |  |  |  |  | 1 |  | 1 |  |  |  |
| 5. Lawyers ...................................... |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6. Musicians and teachers of music................ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | ..... |  | 1 | .... |  |  |  |  | 1 |
| 8. Teachers (school) $\ldots . . . . . . . . . . . . . . . . . . . . . . . . . . ~$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9. Others of this class.. | ... |  |  | .... | .... | ..... | 1 |  |  |  | 1 |  |  | 2 |
| Clerical and Official: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10. Bookkeepers, clerks and copyists.............. |  |  |  |  |  | ...... |  |  | 2 |  |  |  |  | 1 |
| 11. Bankers, brokers and officials of companies.. |  |  |  |  |  |  |  | 3 | 2 |  |  |  | 1 | 1 |
| 12. Collectors, auctioneers and agents............ |  |  |  | . |  |  |  | 1 |  |  | 1 |  | 1 |  |
| 13. Others of this class............................. |  | 1 |  |  |  | 1 |  | 6 | i |  | 1 |  | 1 | 3 |
| Mercantile and Trading:14. Apothecaries, pharmacists, etc. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15. Commercial travelers <br> 16. Merchants and dealers |  |  |  |  |  |  |  | 1 | 1 |  | 1 |  |  | 2 |
| 17. Hucksters and peddlers.. |  | 1 |  |  |  |  | 1 |  |  |  |  |  |  | 2 |
| 18. Others of this class...... |  |  |  | 1 |  |  |  |  |  |  |  |  |  | 3 |
| Public Entertainment: <br> 19. Hotel and boarding house keepers. |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |

20. Saloon keepers, liquor dealers, bartenders and restaurant keepers

Personal Service, Police and Military
21. Barbers and hairdressers
21. Janitors and sextons
23. Policemen, watchmen and detectives
24. Soldiers, sailors and marines (U. S.).
25. Others of this class

Laboring and Servant:
26. Laborers (not agricultural) 27. Servants

Manufacturing and Mechanical Industry:
28. Bakers and confectioners
29. Blacksmiths
30. Boot and shoe makers
31. Brewers, distillers and rectifiers
32. Butchers
33. Cabinet makers and upholsterers
34. Carpenters and joiners.
35. Cigar makers and tobacco workers.
36. Clock and watch repairers, jewelers
37. Compositors, printers and pressmen
38. Coopers
39. Engineers and firemen (not locomotive)
40. Glass blowers and glass workers
41. Hat and cap makers.
42. Iron and steel workers
43. Leather makers
44. Leather workers
45. Machinists
46. Marble and stone cutters
7. Masons (stone and brick)
48. Mill and factory operatives (textile)
49. Millers (flour and grist).
50. Painters, glaziers and varnishers
51. Plasterers and whitewashers
52. Plumbers and gas and steam fitters
53. Tailors
54. Tinners and tinware makers.
65. Others of this class.



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TABLE NO. 21-Continued. SHOWING TOTAL DEȦTHS FROM THE VARIOUS DISEASES, CLASSIFIED BY OCCUPATION FOR THE OAL ENDAR YEAR OF 1911.

Names of Occupations.

Agriculture, Transportation and. Outdoor: 56. Boatmen and canalmen
57. Draymen, hackmen, teamsters, etc.
58. Farmers, planters and farm laborers
59. Gardeners, florists, nurserymen and vine grow ers
60. Livery stable keepers and hostlers.
61. Lumbermen and raftsmen
62. Miners and quarrymen
63. Sailors, pilots, fishermen and oystermen
64. Steam railroad employes
65. Stock raisers, herders and drovers.
66. Others of this class.
67. All other occupations

Occupations for Females:

1. Musicians and teachers of music.
2. Teachers in schools
3. Stenographers and typewriters.
4. Bookkeepers, clerks and copyists
5. Bookkeepers, clerks and copyists
6. Laundresses
7. Nurses and midwives
8. Servants
9. Artificial flower and paper box makers
10. Cigar makers and tobacco workers.
11. Mill and factory operatives (textile)
12. Milliners
13. Dressmakers and seamstresses.
14. Telegraph and telephone operators
15. All other occupations.

- 

|  |  |  | Other acute poisonings. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |


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TABLE NO. 21-Continued. SHOWING TÓTAL DEATHS FROM THE VARIOUS DISEASES, CLASSIFIED BY OCCUPATION FOR THE OAL

Professional Service:

1. Architects, artists, etc
2. Clergymen
3. Engineers and surveyors
4. Engineers
5. Journalis
6. Physicians and surgeons
7. Thysicians (school)
8. Others of this class

Clerical and Official:
13. Others of this class

Mercantile and Trading:
15. Commercial travelers
16. Merchants and dealers
17. Hucksters and peddlers
18. Others of this class.

Public Entertainment:
21. Barbers and hairdressers
22. Janitors and sextons

ENDAR YEAR OF 1911.
6. Musicians and teachers of music
10. Bookkeepers, clerks and copyists
11. Bankers, brokers and officials of companies
12. Collectors, auctioneers and agents
14. Apothecaries, pharmacists, etc.
19. Hotel and boarding house keepers.
20. Saloon keepers, liquor dealers, bartenders and resaurant keepers

Personal Service, Police and Military:
Names of Occupations.


47. Masons (stone and brick)
48. Mill and factory operatives (textile) 49. Millers (flour and grist)
50. Painters, glaziers and varnishers
51. Plasterers and whitewashers
52. Plumbers and $g$ as and steam fitters
53. Tailors
54. Tinners and tinware makers
55. Others
55. Others Transporta
agriculture, Transportation and Outdoor
56. Boatmen and canalmen
57. Draymen, hacm, teamsters, etc.
58. Farmers, planters and farm laborers
59. Gardeners, florists, nurserymen and vine growers
69. Livery stable keepers and hostlers
61. Lumbermen and raftsmen
62. Miners and quarrymen
63. Sailors, pilots, fishermen and oystermen
64. Steam railroad employes
65. Stock raisers, herders and drovers
66. Others of this class
67. All other occupations

## Occupations for Females:

1. Musicians and teachers of music.
2. Teachers in schools
. Stenographers and typewriters.
3. Bookkeepers, clerks and copyists
4. Hotel and boarding house keepers.
5. Laundresses
6. Nurses and midwives
7. Servants
8. Artificial fiower and paper box makers
9. Cigar makers and tobacco workers
10. Mill and factory operatives (textile)
11. Milliners
12. Dressmakers and seamstresses
13. Telegraph and telephone operators.
14. All other occupations


# REPORT OF THE STATE LABORATORY OF HYGIENE 

From JANUARY 1, 1911, to DECEMBER 31, 1911.

> M. P. Ravenel, M. D., Director. Karl Smith, Bacteriologist.
> E. J. Tully, Chemist.

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# REPORT OF THE STATE HYGIENIC LABORATORY. 

Tabulation of the diseases as examined at the State Laboratory of Hygiene by counties does not show anything striking in regard to diphtheria, tuberculosis, or typhoid, the reason for this being that the use of the Laboratory by physicians is very uneven, some men sending every suspicious case in for Laboratory diagnosis while others rarely use the facilities extended to them. Further than this, in some of the largest cities of the state, like Milwaukee, Kenosha, Superior, La Crosse, many of these examinations are made at home, the Laboratory receiving no report of them. In still other places, private physicians are doing a certain amount of this work.

The large number of examinations done in Dane county is to be attributed largely to Madison physicians, the Laboratory being located in Madison and easy of access to the physicians. Naturally also the physicians in the neighborhood of the Laboratory have become more educated to its use.

The general tabulation, however, is gratifying in showing that practically every portion of the state is making use of the Laboratory, and the total number of cases for the year shows a decided increase over the reports for 1909 and 1910, the rate of increase being approximately two thousand cases for the year.

The Director of the Laboratory has taken every opportunity of attending county medical societies, and speaking of the work of the Laboratory. Where these talks have been given, an increase is almost invariably noticeable in the number of cases sent from that locality for diagnosis. It would seem that this should hardly be necessary after the years that the Laboratory has been in existence, and considering the fact that the rules for the use of the Laboratory, explaining explicitly the work done and giving directions for the proper sending of specimens, have been distributed to every physician in the state whose name could be found in Polk's Medical Register. Yet it is a common ex-
perience to find physicians who are still under the impression that a charge is made for the examination of diphtheria, sputum, blood for the Widal reaction, and so forth.

In regard to rabies, the figures show something more;-that the disease has been principally distributed according to population, being more prevalent where the human population is greater, and where naturally the dog population is also greater. It reveals also the fact that rabies during this year was widely distributed in the state.

The tabulation by months shows what has been pointed out for other years, namely, that diphtheria is preëminently a disease of the winter months, the increase in cases beginning with the opening of the schools in September and increasing up to January, when a slight decrease is noticed for the remaining winter months. Further than this, the disproportion between positives and negatives becomes extremely marked as soon as the spring approaches. For most of the winter months, approximately one out of every two and one-half examinations is positive. During the four months from April to August inlcusive, the proportion is tremendously changed, the number of negative examinations running as high as sixteen times the number of positive. August gives the smallest number of examinations for throat troubles of any kind, the positives being about equal to the negative examinations.

The cases of tuberculosis are fairly evenly distributed throughout the year, but there is a curious increase in the examinations beginning with the Spring months, which is not plainly accounted for.

Typhoid fever is preëminently a disease of the Summer and Fall months. A great increase is noted in the month of June, which continues until November, when a sudden drop is noticed. These figures accord fairly accurately with examinations made elsewhere.

The number of water examinations is in close accord with the typhoid fever cases, this being due largely to the fact that health officers who have cases of typhoid fever reported to them frequently ask for examinations of the water supply in their community. Wherever a great excess of water examinations is noted, it is probably due to research work being done on the water supply of that particular community.

It will be noticed that the distribution of rabies is fairly even throughout the year. The experience here is in entire accord with that elsewhere. The prevalent notion that rabies is a disease of the warm months has been amply disproven wherever careful observation has been made. Generally, there is a slight increase in the number of cases during the warm months as compared to the cold months; for example, from April to November as compared to the rest of the year. This is fairly well shown in the figures given here, although there is a marked increase for the number of cases in December. Curiously

## Repokt of the Stath Hiygheitic Labokatoizy. 323

enough, these figures are in close accord with those given by Dr. Sallmon in tabulating 14,066 cases, in which series there was also a marked increase in the month of December. The reason for this is not evident. It is made certain, however, by these figures as well as others that the season and climate have nothing to do with rabies. The slight increase during the warm months is due to the fact that the animals as well as human beings are not housed so closely, but spend more of their time out of doors and abroad. In this way the opportunity for infection is greater.

TABLE NO. 22.-LABORATORY REPORT FOR THE TWELVE MONTHS ENDING DECEMBER 31, 1911.


TABLE NO. 22-Continued. LABORATORY REPORT FOR THE TWELVE MONTHS ENDING DECEMBER 31. 1911.

| County. | Diphtheria. |  | Tuberculous sputum. |  | Typhoid. |  | Water. |  | Rabies. |  | Miscellaneous. |  | $\mathrm{T}_{\mathrm{T},-} \text { tal. }$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $+$ | - | + | - | + | - | + | - | + | - | + | - |  |
| Washington | 10 | 14 | 9 | 7 | 3 | 15 | 1 | 3 |  | 1 |  | 3 | 66 |
| Waukesha .... | 14 | 15 | 9 | 34 | .. | 5 | 2 | 12 | $\ldots$ | 3 | $\ldots$ | 4 | 98 |
| Waupaca ..... | 6 | 8 | 13 | 41 | $\ldots$ | 4 | 2 | 10 | 3 |  |  | 6 | 93 |
| Waushara .... | 5 | 5 |  |  |  | 2 |  | 15 | 4 | 2 | … | 2 | 35 |
| Winnebago : | 25 | 58 |  | 1 | 2 | 9 | 6 | 5 | 4 | 3 |  |  | 113 |
| Wood .... |  | 1 | 3 | 23 |  | 3 |  |  | 1 | 2 |  | 10 | 43 |
| Total | 285 | 762 | 35\% | 988 | 146 | 516 | 272 | 627 | 88 | 81 | 15 | 288 | 4423 |

TABLE NO. 23-SHOWING SPECIMENS EXAMINED AT THE LABORATORY BY MONTHS DURING THE CALENDAR YEAR OF 1911.

| Month. | Diphtheria. |  | Tuberculosus sputum. |  | Tsphoid. |  | Water. |  | Rabies. |  | Miscellaneous |  | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $+$ | - | $+$ | $\cdots$ | + | - | $+$ | - | $+$ | - | + | - |  |
| J anuary | 34 | 78 | 20 | 81 | 6 | 42 | 7 | 25 | 6 | 3 | 2 | 27 | 331 |
| February | 18 | 61 | 14 | 85 | 8 | 24 | 6 | 39 | 10 | 3 |  | 26 | 294 |
| March | 32 | 47 | 29 | 120 | 2 | 44 | 7 | 26 | 8 | 5 | 1 | 16 | 337 |
| April . | 4 | 68 | 35 | 101 | 7 | 39 | 6 | 35 | 9 | 9 | 1 | 30 | 344 |
| May | 4 | 36 | 45 | 120 | 5 | 53 | 19 | 50 | 4 | - 15 | 1 | 30 | 382 |
| June | 6 | 17 | 41 | 87 | 14 | 42 | 24 | 54 | 7 | 13 | 3 | 13 | 321 |
| July | 2 | 32 | 38 | 63 | 11 | 49 | 62 | 83 | 9 | 5 |  | 23 | 377 |
| August | 7 | 6 | 19 | 45 | 14 | 37 | 30 | 72 | 8 | 4 |  | 17 | 259 |
| September | 36 | 33 | 37 | 60 | 27 | 47 | 47 | 78 | 5 | 4 | 3 | 29 | 406 |
| October | 40 | 94 | 27 | 61 | 25 | 48 | 32 | 64 | 5 | 8 |  | 16 | 420 |
| November | 50 | 119 | $\stackrel{27}{27}$ | 64 | 18 | 46 | 16 | 49 52 | 4 13 | 8 | 1 3 | 23 38 | 531 |
| December | 52 | 171 | 23 | 101 | 9 | 45 | 16 | 52 | 13 | 8 | 3 | 38 | 531 |
| Tota | 285 | 762 | 355 | 988 | 146 | 516 | 272 | 627 | 88 | 81 | 15 | 288 | 4423 |

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## PROCEEDINGS

## TENTH ANNUAL CONVENTION

OF THE

# Association of Trustees and Superintendents of County Asylums for the Insane 

OF WISCONSIN

Public printing authorized by Chapter 332, Laws of 1903, as amended by Chapter 2\%1, Laws of 1905


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## OFFICERS, 1912.

J. E. Coffland, Pres., Richland Center, Wis.
A. J. Whiffin, Vice Pres., Sheboygan, Wis.

Geo. H. Seely, Treas., Menomonie, Wis.
F. M. Smith, Secy., Osseo, Wis.

## TENTH ANNUAL CONVENTION

OF THE

## Association of Trustees and Superintendents of County Asylums for Insane in Wisconsin

PROGRAM. TUESDAY EVENING.

June 13, 8 P. M.
Music.
Address of Welcome-Hon. John J. Spangler, Mayor of Jefferson,
Dr. W. W. Reed.
Response-Hon. J. E. Coffland, Pres. of the Association.
Paper-Existing and Needed Provisions for the Defectives of Wisconsin. Mr. Geo. W. Mayhew, Milwaukee.
Music.

> WEDNESDAY.

June 14, 9 A. M.
Paper-My First Year as Asylum Superintendent, Supt. H. A. Arpke, Sheboygan.
Address-Legal Proceedings in Insanity Cases, Judge Chas. Rogers, Jefferson.
Paper-Dental Care of the Insane, Mr. Henry Wernecke, Manitowoc.
Paper-Cold Storage for County Institutions, Supt. R. M. Smith, Peshtigo.
1:30 Р. М.

As guests of Supt. and Mrs. Voigt and the management of the Jefferson County Asylum, members of the Association and others in attendance at the convention will spend the afternoon visiting the Jefferson oounty asylum and oher points of interest in and about the city.

$$
8 \text { P. M. }
$$

Music.
Illustrated Lecture-The Farming and Live Stock of Scotland, Dr. A. S. Alexander, of the Wisconsin College of Agriculture, Madison.

## THURSDAY.

June 15, 8:30 A. M.
Business Session.
Reports of Officers and Committees.
Election of Officers.
Miscellaneous Business.
Paper-After Care of the Insane-Dr. Adin Sherman, Superintendent Northern Hospital, Oshkosh.
Paper-Home Making for the Insane-Mr. L. J. Pinkerton, Neenah.
1:30 Р. М.

Paper-The use of the Continuous Hot Water Bath for the Disturbed Insane-Dr. M. K. Green, Mendota.
Paper-The Ideal Superintendent-Mrs. Minnie McKivergin, Matron Trempealeau County Asylum.
Paper-State Provision for the Epileptics-Dr. Wm. F. Wegge, Milwaukee.

## PROCEEDINGS

OF THE

Tenth Annual Meeting of the Trustees and Superintendents
of County Asylums of Wisconemen of County Asylums of Wisconsin.

Held at Jefferson, Wis., June 13-14-15, 1911.

Tuesday evening, June 13th, convention called to order by Hon. J. E. Coffland, of Richland Center, President of the Association.

## ADDRESS OF WELCOME

By Hon. John J. Spangler, Mayor of Jefferson

Mr. President, Members of the Association of Trustees and Superintendents of County Asylums, Ladies and Gentlemen :As chief executive of the city of Jefferson, I desire on behalf of its officials and citizens to extend to you an assurance of the keen pleasure we feel in welcoming you to our city.

We are pleased with your selection of Jefferson for this, your 10th annual convention. We want you to become acquainted with Jefferson and with its citizens, I believe you will like both. You will find our citizens to be Germans of the best type-sturdy, honest, conservative, prosperous and hospitable. You will find all these qualities reflected in our manufacturing and mercantile enterprises.

And as for our city, I believe you will agree with me when I say that Jefferson is blessed with more natural advantages and beauty than any city of its size in the state.

Nor are we lacking in man-made advantages. We have municipal light and water, a complete system of sewerage, cement walks
throughout the city, and brick pavement on our business streets. Our public and semi-public buildings are beautifully and substantially built, and I especially call your attention to the splendid grounds upon which our high school is located. All these things are yours to enjoy to the utmost.

Your visit to our asylum will tell you that we ought to consider ourselves fortunate in securing the services of Mr. and Mrs. W. E. Voigt, who under the tutelage and guidance of Jefferson's Grand Old Man, Dr. W. W. Reed, have made themselves indispensible to our county.

I trust gentlemen that your session here will prove not only instructive and profitable but pleasant as well, and to make it so I bespeak for you the hearty co-operation of all our citizens.

Following the mayor came Dr. W. W. Reed of Jefferson who, in words timely and well chosen, also welcomed the members of the Association to Jefferson.

Dr. Reed is perhaps entitled to more credit than any other living man for the establishment of Wisconsin's system of "county care for the insane."

## ADDRESS OF WELCOME

By Dr. W. W. Reed

Mr. President, Trustees, Superintendents and Matrons of Wisconsin County Asylums for the Chronic Insane:-I believe I need hardly say, to this distinguished presence, that I esteem it an honor and rare privilege, to join the mayor and our people, in extending a most cordial welcome, to these our guests-the men and women, who have administered our county asylums for the chronic insane, so efficiently, economically and humanely as to make them the frugal sanitary homes for our chronic insane that suggested their initiative and that prompts their continuance.

The men and women who, on our invitation, have assembled here in annual conference, as representatives of Wisconsin's thirty-five admirable county asylums for the chronic insane, or emulating units, with equal opportunity, vying each other in the accomplishment of their purpose. We not only accord you delegates a hearty welcome, but assure you of our grateful appre-
ciation of your selection of our little city in which to hold your annual conference.

We are only a small folk, but inspired by the character of the work in which you are engaged, it will be our pleasure and cheerful endeavor to leave nothing undone, which we have reason to believe will contribute to your comfort or the consummation of your purpose.

I regard regular attendance on these annual conferences important to asylum officials, if not a necessity to the highest and most efficient performance of their manifold duties; it affords opportunity for interchange of opinions, experiences and methods in asylum affairs, to discuss and hear discussion on subjects of mutual concern. In this way each may make something of a study of subjects considered and return to their respective asylums with the essentials of the conference. No one who does not attend these conferences, can be well up in the best asylum methods.

I know, in my own profession, the physician who does not attend and take part in the meetings of the medical society is hardly in touch with the best thought in any branch of his profession.

Thirty years experience in caring for the chronic insane in these county asylums has developed nothing against, and everything except prejudice and tradition in favor of, their continuance. If there is anything in "The survival of the fittest" as applied to institutional life, this system will last as long as lunacy, as it easily is the best system of care for the chronic insane known to our civilization.

Again allow me to express our gratitude and pleasure for your attendance here at this time and the hope that your session with us may be one of interest, profit and pleasure to yourselves and that when your Jefferson conference is a thing of the past, there will be left pleasant memories for all of us.

## RESPONSE

By Hon. J. E. Coffland, Pres. of the Association

Mr. Mayor:-The Association of Superintendents, Matrons, and Trustees of County Asylums has for its main purpose the betterment of over 4,900 afflicted and mentally ill citizens of the state of Wisconsin. The mission of these men and women assembled here is certainly one of great responsibility and one which is continually encountering discouraging conditions. The general public has but little knowledge of the trying times that these superintendents and matrons have and the many disheartening trials that they have with those entrusted to their care.

The public are too free to dismiss these thoughts from their minds and leave it entirely to the judgment of those whom they elect to carry out this work. Under our system they in a way step from under the care and worry which is encountered by the members of this organization.

County boards have existed in Wisconsin that complained bitterly when the superintendent and trustees failed to show a large net profit at the close of the fiscal year. Boards of trustees have existed that had for their main object the financial showing at the end of the year. It is encouraging that this kind of county boards and boards of trustees are getting less numerous each year and the public are awakening to the very important fact that the first thing to consider is the welfare of the unfortunates entrusted to them irrespective of the financial showing at the close of the year. The members of this Association feel that they have had an influence in this awakening. It has been their custom to hold these annual conventions in counties all over the state where county asylums were maintained. The papers and discussions become matters of public knowledge and the public are demanding each year better care and attention for these wards.

With these purposes uppermost in our minds Mr. Mayor, we have come to your city to hold this, our tenth annual convention. We wish to thank you for the courtesies extended and to assure you that we appreciate the same. In our three days session in your city many valuable papers and discussions will be presented and we wish through you to extend an invitation to your citizens
to attend these meetings. Ask your citizens to assist us in the upbuilding of this work by their presence and encouragement. To you, Dr. Reed, I wish to extend the congratulations of this association for your ability to be with us at this meeting. To you, sir, great credit should be given for the forethought and management of the old state board of charities and reform which was in existence at the time the first asylum was built for the care of the chronic insane in this state. The work of this board has resulted in a system of caring for chronic insane, different entirely from other states and by us held up to be the best system in existence. False steps at the start might have made this system of caring for the chronic insane unpopular. We congratulate you as the only living member, upon the judgment displayed by this board. Your early work made this system popular, so much so that we have today built and being erected 35 asylums for the care of the chronic insane of this state. Over half of the inmates in these institutions look upon them as their homes. In state institutions, the population is so large that personal attention and personal contact with those in charge of the management becomes impossible. Your reward has never been great for the strict adherence to this work, but the time will come, we believe, when a reward richer and greater than lies in the power of man to extend, will be yours.

It must be a great pleasure to you to have seen the marvelous growth of this system and the increasing popularity and interest shown in other states. It is the wish of this Association that you still be permitted to see further growth of this system. We can assure you that it is a pleasure to meet with you in your home city and have the opportunity to visit your home county institution to which you have given so much service.

We hope to have the pleasure of your attendance at many more of the annual conventions.

May your interest and zeal in this work still continue active is our earnest desire. We thank each of you, gentlemen, for the welcome extended.

# EXISTING AND NEEDED PROVISIONS FOR THE DEFECTIVE CLASSES OF WISCONSIN 

By Geo. W. Mayhew, Milwaukee, Wisconsin

It is generally admitted that the Wisconsin County Asylum System is the best in existence. Some were incredulous and thought that as soon as the new was worn off and with the abolishment (in 1891) of the Wisconsin State Board of Charities and Reform and the creation of a new State Board of Control, the county asylum system would go into a decline. But, the State Board of Control'in its reports and publications declared "that the efficiency of the county asylum system was in no whit diminished and the plan has maintained the general confidence and good will of the people of the state." The fact is, the "Fathers" must have been somewhat surprised themselves to think they had struck this question so fairly and well, with beneficial results to the insane of the state. "They builded better than they knew." We have something that is worthy of the great state of Wisconsin. Sometimes we may have thought that Wisconsin had been somewhat parsimonious with her money, but she has on the whole been generous and responded fairly well to the needs of her dependents. She has made great strides so far as wealth is concerned and is gaining yearly. Let me illustrate: This great state whose property valuation, both real and personal, as tabulated by the state officials for the last decade, 1901 to 1910 , both inclusive, is as follows: In 1901 the valuation was $\$ 1,436,284,000$, -in 1910 it was $\$ 2,743,180,404$, a gain of $\$ 1,306,896,404$, or, in other words, a gain of a fraction less than 91 per cent. A steady growth each year. Soon she will be "rich enough to buy us all a farm." Such an increase can hardly be comprehended by the human mind. Men of capital are as a rule timid under a great many circumstances, and in case of a visit from an assessor are poor indeed and have hardly a place to lay their heads. Tax commissioners and assessors have unearthed fabulous amounts of wealth and still large amounts are hidden beyond the ken of humanity.

At the present session of the legislature a bill (No. 267 S .) was introduced by Senator Hoyt asking for an appropriation of one
hundred and fifty thousand dollars for a site to consist of not to exceed one thousand acres of land for an additional home for the feeble-minded. Also a bill (No. 281 S.) was introduced by SenaBurke asking for an appropriation of two hundred and fifty thousand dollars for the erection of three cottages; heating and lighting power plant; grading equipment of buildings; farm machinery, stock, etc., for an additional home for the feeble-minded. Both bills were recommended for passage by the committee on education and public welfare and re-referred to the finance committee, where the bills now are, May 1, 1911. Let us all hope and pray that these two bills may pass through both houses of the legislature with a spontaneity unparalleled and receive the signature of the governor. It is a matter of history that the board of control have been looking at sites suitable for such an institution at Watertown, Fond du Lac, Grafton, Oconomowoc, Waukesha, Jefferson Junction, Calhoun, (2 sites) Milwaukee, Racine and some other places.

The plans for the new hospital for the criminal and violent insane, which was to have been erected at Winnebago, were completed and bids for its completion were received. The bids proved to be too high for the money appropriated, and the board of control introduced in the present legislature a bill for the additional sum of fifty thousand dollars. It is feared by some, that an attempt will be made to do away with the whole thing to save money. I sincerely hope this may not become true, as an institution of this kind is a necessity in the state and we would all be glad to be rid of this class of patients, and have them all together where they properly belong. It would be a great blessing to all concerned. It is my contention that we cught to have another home for the feeble-minded in the southern part of the state, where friends would have cheaper and easier access to the patients. The distance, for instance, from Milwaukee to Chippewa Falls is 274 miles by the Northwestern road, which is, I understand, the shortest route. Parents, as a general rule, have more affection for their offspring who are afflicted with deformities, mentally or otherwise, than for those unafflicted. It certainly is a hardship for many of them on account of the cost necessary to visit their children when confined so far from home.
I am very much pleased to know and I believe the movement as suggested is the right thing to do for the acute insane of the state, and this is the only excuse I have to offer for quoting largely.
from the fourteenth biennial report of the Wisconsin State Hospital for the Insane at Mendota. The superintendent, Dr. Charles Gorst, makes the following recommendations to the state board of control, which will interest every practitioner in the state and a good many others who have no profession. His efforts are commendable: "To establish a laboratory in science hall at the university, where there is now sufficient room, in connection with the medical department for research work in mental disease. The placing of a neuropathologist in the university has been decided favorably by the state board of control, the dean of the medical college and President Van Hise. It is expected that when the next school year opens such a man will be located in the medical department of the university in the interests of the institutions of the state, provided they can find the right man. We feel and many of the physicians consulted concerning this proposition have said, that if the above recommendations were put into execution Wisconsin would lead in progressive work for the insane. Statistics show that a much larger per cent of mental troubles recover if treatment be obtained in the early stages of development. Statistics also show that it costs on an average of two thousand dollars to care for a patient who becomes dependent. If these statements be true should not the state be anxious, both from a humanitarian and financial standpoint, to provide for its less fortunate citizens the same opportunity for treatment and recovery in the early stages of mental diseases that the private sanitarium offers to the rich? This whole problem belongs to the people of the state, not to the medical profession. As in so many other matters, the need of action manifests itself to us before it is appreciated by the general public. Let us do all in our power to aid in carrying out this excellent suggestion." We all understand that the cure for the insane is largely brought about in the very early stages of the disease. Then is the time to do heroic work. The cures among the chronics are comparatively few. "The annual cost of the care of the insane in Wisconsin is counted in hundreds of thousands of dollars. Would it not be wise to try to cut off some of this expense at its very root? And how can this be done more effectively than by encouraging a careful study of insanity and the causes leading to its development while at the same time training a generation of medical men to reorganize and properly care for these conditions in their incipiency?"

The medical profession who have the care of all these dependents ought to have a fair chance and it seems to me that the environments, in the first place, should be as complete as possible so there may be no obstacles in the way of good ground work to build upon. A complete separation of the different classes should be made and this classification kept inviolate, then the physician will know what he can depend upon. The acute, the chronic and the feeble-minded patients must be kept entirely isolated, quite as much as those afflicted with that most dreaded disease,Tuberculosis. Who would think of having our insane confined with them? If we provide suitable homes for all the vast army of sufferers in the state, where everything is finely adapted to their needs and whert they can be treated successfully, we will have done our full duty. Some might say, that all these things are good and very fine, but it would cost too much money. Let us remember that all good and useful things come high, for in-stance,-our liberty and independence cost worlds of wealth, much suffering and the lives of many of the good and true. Yet, with all the cost, we hang tenaciously to our inheritance and appreciate all we have and thank the creator for all these benefactions which we enjoy. Let us go ahead and do the best we can for the suffering dependents of the state in which we live and love.

There is a constant growing feeling with the medical profession and the laity as well, not only in this state, but in nearly all the states in the union, that the epileptics ought to be in a colony by themselves, where they could have proper care and where they would not be detrimental to the insane or others. They must be cared for by the best pathologist obtainable, so that in course of time a cause and cure may be discovered for this terrible disease. A large tract of land should be secured, well adapted in all its ratifications for the different wants of an institution of this kind, and where buildings erected should be constructed on the plan of an entire separation of the sane epileptics in one section from the insane epileptics in another section. This division will be proper and "have this class all in one institution under one management and have them sufficiently apart not to commingle and yet near enough to make transfers easy." There are seven or more of these institutions which have recently been constructed and still more in contemplation for the special benefit of the epileptics. To my mind there is no question but what in the
near future the profession will find a cure for epilepsy. In fact, one gentleman has declared that he had found a cure, but give him a little more time to make sure of his contention. With another institution for the feeble-minded and a colony for the epileptics we will be fully equipped with all the paraphernalia necessary for about all diseases of which poor human nature is afflicted. We will have a place for everything and everything in its proper place, each patient being placed where he properly belongs, where he will get the most good. This we can obtain with a constant intelligent effort on the part of those who know that it is the proper thing to do. And still we have not quite reached perfection. We have, however, attained that altitude where we can see a glimmer of its beautiful reflection. This work is not all done, quite distant from a finish, and perhaps it is well, for there is somehow an inherent feeling that there is something just a little beyond which we would like to grasp. Let us be constantly in a receptive mood and take all the good we can get with thankful hearts.

The fresh air treatment is very highly appreciated by all of our professional men and by our asylums generally. "In fact, all see the importance of admitting the outer air to sleeping and living apartments. But "when cold winds do blow" comes the test which separates the sheep from the goats-the "fair weather" fresh air people from the genuine fresh air people. The individual whose circulation is sluggish in an inadequately ventilated apartment, and who, by reason of his blood moving slowly, feels chilly, who dreads to admit fresh air for fear of reducing the temperature, is hard to convince that the opening of a window would make him feel more comfortable. With plenty of oxygen his circulation would improve and he would feel warm even if the thermometer showed a lower temperature in the room. But it is hard to make him believe it. It is difficult to get him to try the experiment and be governed thereafter by the result." Dr. William A. Evans, the able, energetic ex-Health Commissioner of Chicago, is trying to enlighten the population of that city on the subject of fresh air, and raises the slogan that "too much fresh air is just enough." As a matter" of fact it is difficult to conceive the possibility of too much fresh air, and the doctor knows this as well as anyone else. Doctor Evans declares that the biggest bedroom in the world is not big enough to sleep in if the windows are shut. It is said that he has literally
driven hundreds of citizens of Chicago from steam-heated bedrooms to s'eeping quarters on the porch. In our asylum at Wauwatosa, the superintendent, Doctor Beutler, is a strong advocate of this system and keeps the patients in the open air as much as possible. In October I invited a friend to visit our institution. He did so, and in passing through the female wards not a patient could be found-they had all gone to the beautiful woods to breathe in the bracing, spicy air on that faultless autumn day. In colder weather wraps may be necessary, if so, on they go, still the custom is prolonged indefinitely, or, so long as it is possible for comfort. In all kinds of weather the windows of our sleeping apartments go up, the warmth of the body should, of course, be looked after with care, but let us all, rich or poor, bond or free, have plenty of the free atmosphere for the inflation of the lungs, fresh as the morning dew. "In such ways as these the most permanent kind of preventive work is being done which will eventually not only help to prevent tuberculosis, but prevent other diseases and raise the general level of health and vitality." It has been demonstrated over and over again that keeping the patient in the open air is the means of promoting his physical vigor, sleep, appetite and digestion, and has the effect of doing away in a great part with the sedatives which have always been given more or less.

Do we ever consider the amount of social work being done in our country? In the last ten or fifteen years tremendous strides have been made, and the end is not yet. This country of ours, with its millions of warm throbbing hearts, is ever ready to pour out its wealth to those who are needy and in distress. In all great calamities, from whatever source, they come to the rescue with their whole souls. We are proud of such a people and it is good to live in such an age which is the best of all. Lillian Brandt says: "In our own country the last ten years or so have seen a very remarkable development of the social spirit. It cannot be denied, to be sure, that 'in business and politics we are still individualists,' but there is much evidence that even in these fields concern for the common welfare is coming to be a determining influence, while in the field of 'social work,' which means merely the organization of the social spirit for effective expression, there has been such expansion and deepening as scarcely has a precedent." "Discovery of the tubercle bacillus in 1882 and demonstrations of the possibility of cure in the early
stages of the disease, had furnished the necessary foundation for social action long before it was effectively taken. When the Committee on the Prevention of Tuberculosis of the New York Charity Organization society was organized in 1902 there were a few hospitals for advanced cases, which owed their existence to humanitarian impulse; sanitarium care for early cases, even the well-to-do was only beginning to be provided; a few societies existed here and there which issued educational leaflets ; the value of adminstrative control had been demonstrated by the New York Department of Health, but it was stili a novel idea; physiciains and officers of charitable societies were, each from their own angle, coming to realiize that tukerculosis was a great social problem. The new committee was spoken of, prophetically, as 'a movement which may prove to be of more importance than any other in which the society has participated in recent years. Local organizations sprang up rapidly in other places. In 1904 the National Association for the Study and Prevention of Tuberculosis was formed, to stimulate and assist in the development of the movement. In 1908 the International Tuberculosis Congress met in America for the first time, and for the first time devoted a conspicuous part of its proceedings to the social aspects of the disease. Provision for treatment is still,-except in a few placespitifully inadequate to the needs. It has, however, increased at a rate unparalleled in institution building. There are five times as many hospitals and sanatoria in operation in the United States as there were ten years ago, and the three hundred special dispensaries, "the day-camps, night-camps, outdoor schools and other specialized forms of treatment have practically all come into existence within the decade. The state of New York is looking forward courageously to 'no uncared for tuberculosis in 1915.' Provision has been made for early cases more rapidly than for advanced cases, and at present it is recognized that the greater need-from the point of view of prevention as well as for the mitigation of present suffering-is the erection of many hospitals or houses of rest, for those who cannot be received in the sanatoria. Thus, scientific consideration of the problem has come back to the place which the philanthropic impulse instinctively started, to fortify it a thousandfold.'

As most of you know, Miss Lillian Brandt is assistant to the general secretary of the Charity Organization Society of the City of New York. Her article on Characteristics of Social Work
in the United States should be read by all. Miss Brandt took an A. B. and A. M. from Wellesley and writes beautifully.

You may have observed that I am thoroughly optimistic in my notions. I believe that now, today, is the best ever, with a certainty of still better conditions in the future. The pessimists have my most profound commiseration.
> "'The difference between the optimist ${ }^{\text {© }}$
> And the pessimist is quite droll;
> The Optimist sees the doughnut,
> And the Pessimist the hole."

"Bad as the world may be it was never as good as it is today," said Mr. Browne. "The saints of one hundred years ago would not be tolerated. They were drunkards in many cases, and many were in the slave trade. It took thirty-five barrels of cider to get one minister's family through the winter."

I find by this morning's Free Press that last night the appropriations for the State, Penal and Charitable Institutions, by the joint committee of the legislature, reported the first big appropriation bills for carrying on the penal and charitable institutions to July 1st, 1913, the total appropriation under the bill being $\$ 1,973,600$ for the two years. Hospital for Criminal Insane at Waupun-new institution provided for in 1909 is made possible, the governor's approval being required. An additional appropriation is made of $\$ 20,000$. Home for Feeble-minded at Chippewa Falls. For current expenses, new contagious hospital, new cottages, etc., $\$ 254,000$. It looks like a defeat, with a big D , for the feeble-minded plant in the southern part of the state, and a greater mistake of locating the hospital at Waupun under such auspices. Let us keep sweet and hope for the best. .

Morning Session, Wednesday June 14.

## MY FIRST YEAR AS ASYLUM SUPERINTENDENT

By Mr. Arpke

It was in 1882 cr 29 years ago that our county asylum was built and at that.time Mr. Whiffin was in charge of the asylum and he remained in charge up to a few years ago. He served twentyeight years to the satisfaction of all concerned, and then on account of some little difference he resigned, his resignation taking' effect on the first of March, 1910, and as I was his successor, it was necessary for me, of course, to begin my work on that day when he left. When I was appointed to that position, I did not know, of course, very much about what a superintendent of an asylum had to do and it was my first thing to do to find out what a superintendent really is for. So I asked Mr. Whiffin and he gave me some instructions and he was kind enough to tell me to come up and that he would give me all the help he could, so my wife and I, we went up there, and he showed us around and explained in detail all that he could. Of course that is the same in every kind of work. But when I began the practical work, I found it somewhat different than theory. In theory I had it all, but in practice I was somewhat short. Mr. Whiffin was very kind indeed and he helped me all he could. He introduced me to the entire force and we called in one after another and they' all promised to stay with the exception of one female attendant and one working on the farm. All the rest stayed and after we moved in we tried to get acquainted with the help -with the entire force-and this did not take very long. That part went along smooth, but when we got in there, of course, we must get acquainted with the inmates. I think this is where a great many of us fall short, but it is pretty hard. I think in order to get the confidence of the inmates you must know how to speak their language-I think it is almost necessary to talk their language. Of course after you have been with them every day and see them every day, they finally get to know you and you get their confidence, because if they don't see anything to the
contrary, the actions will speak louder than words, but it is pretty difficult to get their confidence if you cannot talk to them -if you cannot speak their language. Before I was the superintendent I was the sheriff of Sheboygan county, and at that time I had a man with me with whom I could not talk. I wanted him to come along with me and it was very hard to handle him. He resisted and I could not talk to him and I had an awful time trying to handle him and I had to have three or four men to come to help me and that is the way it will go. Of course, I don't know of anything except a few of my observations during the first year, but I think that in order to run an institution successfully, and to have it run nice and smoothly, it requires that all the attendants and all the employes work in harmony, because if that is not the case, everything will go wrong and it is very hard to work. There are lots of them who will try to give you all kinds of information. But that is true in all institutions. They will say that the superintendent can't keep any help, that the patients are very disturbed and very restless, but the conclusion I have come to is that at least $95 \%$ of them will leave everybody alone provided that they are left alone.

## LEGAL PROCEDURE IN INSANITY CASES

By Charlés B. Rogers

This paper is in part a reproduction of one which I read before the physicians of Jefferson county two years ago, at one of their county meetings. It was originally intended for the doctors and its purpose was to inform them of the procedure as followed in insane cases in this county. My good friend, Dr. Reed, several months ago, insisted that I read the paper, or a similar one, before your association; and whatever of inappropriateness to the occasion you may find in it therefore, I shall ask you to lay on his shoulders. I am willing to be interrupted at any time with questions, or to answer them in a discussion follwing, if such is your custom.

I think I appreciate, as much as anyone who has not actually experienced it, the self-sacrificing life of a country physician. Professional men who settle in the country, by country I mean our smaller villages and cities as well; must as a rule give up all
hope of wealth or fame, and live a life of service. The country lawyer, for instance, must put into his practice brains which if devoted to dry goods or farming, would enable him to retire between fifty and sixty upon a modest competence, with the expectation of living up practically all he earns, leaving possibly a life insurance to his family. Many times he will suffer more mental anxiety over a single case, than the ordinary country merchant would experience in a year. If this be true of the lawyer, how much stronger might it be stated of the doctor. The lawyer may at least protect himself as to his clients and his fees. If he worry, it is at most only over money matters and if he lose, even by his own mistake, he may appeal; and even if then not successful, it is only his clients' wealth he has jeopardized. The doctor on the contrary, as his books will show, is at the beck and call of everyone ; he may not consider his fee or the probability of getting it. His worries are over the health and life of his patients, his mistakes may not be corrected on appeal; if he lose, death wins against him. Even his night's rest he cannot have, as do other men ; no road so bad, but he must drive it ; no night so dark or cold, and no storm so bitter but he must brave it; no home so far but he must reach it.

Not only that, but, and this is true of both the doctor and the lawyer, he must expect to experience in a year more abuse than other men receive in a lifetime. No matter how honestly he strive, his motives will be questioned, his honesty impugned, his character attacked. And for his regard he will be made the butt of every cheap wit who entertains his street corner coterie.

It is to the credit of human nature, that in spite of all this, the country doctor usually lives a long, happy and cheerful life, albeit one of service and self-sacrifice.

To the doctor the question of insanity is a physical and a medical one. The physical good of his patient, with him, outweighs all other consideration. Whatever course will quickest and best result in an improvement in his patient's condition seems to him advisable.

To the lawyer, on the other hand, the question is a legal one, and he looks at the results of the proceeding from a legal standpoint. The judgment of insanity, so often passed with slight formality, with little investigation, with no opportunity on the part of the patient to be heard, is in its legal consequence one of the most awful that can be pronounced in a court of law. At
a blow it robs the one adjudged insane of his property and his liberty, deprives him of family and friends, transports him to a place far distant from his own home, and there immures him among strangers; to whom his most violent protestations of sanity seem but to confirm his condition. Following as a matter of course, guardianship proceedings soon deprive him of the control of his property, while the adjudication of insanity makes it impossible for him by will to dispose of it after death; and, as an eminent judge has said, death itself "does not so surely and so speedily banish him from the hearts of his friends and his family.'"* Nor do the consequences stop there. The judgment of insanity renders it next to impossible for him and all his children ever to obtain life insurance for the protection of their families.

If such be the fate of one actually insane (and many such have a vivid realization of all these things, in spite of their condition) how much more awful the fate of one mistakenly so adjudged! Surely this is no light judgment to pass, and the utmost care and caution should be exercised both on the part of the committing magistrate and the examining physicians.

I know there are physicians who insist that the judge, not being learned in medicine, should commit as a matter of course, upon the report of the physicians. I know there are judges who have become so prejudiced because of expert testimony given before them, that they would attach little weight to the report of the physicians. I agree with neither. In most cases I should consider the report of the physicians, especially if one be the attending physician, as conclusive. Nevertheless, upon the judge and not upon the examining physicians, rests the burden of adjudging the patient sane or insane. Both as a matter of common justice and under the constitution of our state, and of the United States, I consider the one accused entitled to a hearing before the magistrate who commits him, to notice of the nature of the proceedings, to an opportunity for defense if he so desire. The Constitution of the United States guarantees that no one shall be deprived of life, liberty or property, without due process of law. Speaking not of insane procedure, but of another matter, the Supreme Court of this state has said, "Due process of

[^25]law as applied to judicial proceedings includes a charge before some judicial tribunal, and notice to the party in some form, either actual or constructive, and an opportunity to appear and produce evidence in his defense and be heard by himself or counsel.-To proceed to adjudicate in the absence of notice to the party would be contrary to the first principle of the social compact.-Until notice is given the court has no jurisdiction-in any case, to proceed to judgment, whatever its authority may be." Schultz vs. Roenitz, 86 Wis., 40, 41.

The sections of the Wisconsin Statutes bearing directly upon this commitment of insane persons, are as follows:-I have abbreviated somewhat in one or two places.

Section 585. On receipt of such application the judge to whom it is: directed shall appoint physicians. . . . Said judge may cause the person named in such application to be brought before him and such physicians shall in the presence of the judge if he so desires, by personal examination of such person and inquiry satisfy themselves fully as to his mental condition, and report the result of said examination to said judge.

Such physicians shall, before making such examination give noticeto the persion under examination that application has been made for an inquiry into his mental condition, withholding the names of the applicants if they shall deem it wise, and that he can be heard in respect to the same, or if in the judgment of such phycisians such notice would be injurious to such person or of no advantage to him, they may withhold such notice and shall set forth at length their reasons for so doing. in their report to the judge by whom they were appointed.

Section 585a. If it appears from the report of the examining physicians that the notice hereinbefore provided for was not given by them to the person supposed to be insane the judge may appoint a time and place for hearing the application, and shall cause notice thereof to be served upon such person by some person appointed to make such service, and a copy of such notice to be left with some member of the family of the person supposed to be insane, or with some person with whom he has his abode, if there be such person found in the county, which notice shall state that application has been made for an examination into the mental condition of such supposed insane person, withholding however, the names of the applicants, and that such application will be heard at time and place named in such notice; provided, that if it shall be made to appear to the satisfaction of said judge, by the report of such physicians or otherwise, that such hearing and the ser'vice of such notice thereof on such supposed insane person would be injurious or without advantage to him by reason of his mental condition, it shall not be necessary to serve such notice upon him; if such be ordered by the judge and served upon either of the persons hereinbefore mentioned, and no jury trial awarded, the judge may proceed at the time and place specified in such notice, or if no such notice is ordered, then after receiving the report of the phys:cians, he may proceed summarily to make such further investigation of the case as may seem to him to be necessary and proper; and if he shall be satisfied thereby, or by the report of such physicians, that said person is insane, he may make and enter his order of commitment of such person to the hespital or asylum for the insane of the district to which the county belongs, stating in such order that the same was made without personal notice to the per-
son adjudged insane and the reasons, in brief, for failure to require such notice. In any such proceeding, whether at its commencement or in any stage thereof, the county judge may, if he thinks the best interest of the person alleged to be insane requires it, appoint a guardian ad litem for such person, the expenses thereof and such reasonable compensation of the guardian as may be allowed by the county judge to be paid by the county in which the proceedings were had.

Amended in 1907, in minor matters nct important here.
Section 586. On the receipt by any such judge of the application or of the report of the physicians provided for by section 585 , such judge may, if in his opinion the public safety requires it, deliver to the sheriff a written order requiring him forthwith to take and confine the alleged insane person in some specified place until the further proceedings provided for by said section can be had or until further order is made by the judge. The judge may also order the detention of any person whose sanity is being investigated by him, during the investigation and for such reasonable time thereafter as he may deem necessary for the proper medical observation of such person to afford sufficient opportunity to determine the necessity of committing him to a hospital for the insane; provided, that no such person shall be confined in a jail or lockup or other prison for the confinement of criminals or in any poorhouse unless it shall appear to the judge that confinement therein is essential to the safety of such persons or some other person or persons or to the maintenance of the public peace and safety; and provided further that the period of confinement under this section shall not exceēd ten days unless otherwise ordered by the judge. The county board of any county is hereby authorized to erect, purchase or in some other manner provide and maintain suitable buildings for the purpose of such temporary detention of the alleged insane.

Now, if the statutes of our state provide, as some seem to think and as may be very plausibly argued, that without notice even of the filing of an application, much less of any examination pending or judgment rendered; with no opportunity to be heard, with no day in court, one may be adjudged insane, arrested, taken from his home to a distant city, placed there in close confinement, and deprived of the control of his property, then very grave questions arise as to the constitutionality of such a statute; questions which I shall not attempt to discuss, and upon which it would be improper for me to give an opinion. Suffice it to say that in my opinion the least the judge can do is to see to it that the one supposed to be insane be fully notified of the nature of the proceeding and of his rights, by. means of an actual hearing in person.

There can be no question, however, that these statutes make it the duty of the physician, and if not performed by him, of the judge, to notify the person under examination of the nature of the proceedings and of his right to a hearing, (at which he may under a section following demand a jury trial) except in those cases where it would be injurious to the patient or of no
advantage to him. For over four years now I have required the attendance in person of those to be examined, passing upon 104 cases in that time and I have yet to find one in which the physicians reported notice to the patient to be injurious, although it often happens that the physician does not deem it advisable to give the notice himself, before the arrest of the patient. Whether the physician give the notice or leave it to the judge to do so, is a matter left by the statute in the physicians' discretion.

One hundred and two applications were filed with me in 1907-$8-9-10$ and 11. In twenty-four of these cases, one-fourth of the total number, the patients were adjudged sane, and of the twenty-four but two have again come before me. In both of these cases the doctors reported the patient sane. In the first, he made no further trouble for two years, when he was again arrested and committed. In the second, the patient deceived both the court and physicians, and was found sane and discharged, although the neighbors and family, none of whom were present to testify, knew him to be insane. Three weeks later he was again arrested and showed himself violently insane in the court room.

In six of the twenty-four cases the physicians both reported the patient insane; in two they were undecided. In several of the cases the patient was simply drunk when the application was filed; in some either entering or already afflicted with delerium tremens. In one case the patient admitted that he thought it would be a cheap way to get treatment for a nervous trouble; in another the husband filed the application against his wife out of spite. In four years, but one jury trial has been asked for.

It might be thought that the requirement of the personal appearance of the patient before the judge causes too much delay, with added danger to the patient and the community. There is no reason why this should be so. If the case is urgent or the patient violent, the statute authorizes the issue of a preliminary order of arrest, either before or after the report of the physicians. The applicants should of course notify the judge if the case is deemed urgent. As we have no padded cell in the enonty jail the county board at a recent session passed a resolution authorizing the use of the county asylum for temporary detention purposes, and we find this arrangement very satis-
factory. In all cases of doubt, either on my part or that of the doctors, I find that a temporary commitment to the county asylum, with additional testimony by the county physician and the superintendent, usually solves the doubt without trouble. By stretching a little both the law and the resolution of the county board, we have been able without any permanent commitment or adjudication of insanity, to hold in detention a number of cases of alchoholism and in several instances, have effected what seem to be permanent cures. The majority of the twenty-four cases found sane in this county in the last four years were cases of alchoholism detained in our county asylum either pending or after the physician's examination. In three cases to my knowledge patients who were physical and moral wrecks have permanently reformed and become upright and respected citizens, due, in the main to the start they got right here in this asylum.

I wish to thank you, gentlemen, for listening with such patience to this tedious discussion of matters which do not perhaps directly concern you. I suppose it was Dr. Reed's idea, however, that if our practice in some of these matters could be brought before you and discussed it might lead to something of value.

In closing let me say a word of appreciation of you and of your work, and particularly of the superintendents and their wives. What I said a while back of county doctors might be said of you in still larger measure. You are not overpaid for what you do, for county boards are not usually prone to extravagance. You are in daily contact with those at the mere thought of whom the average person shudders, and in daily danger as well. You work without the stimulus that comes from the hope of effecting any great or permanent benefit to those under your charge. You can only reach down into their narrow and stunted lives and make them a little more comfortable, a little more contented with their lot. You are men (and your wives are women) on whom a great trust has been placed and on whom a great responsibility has been laid; and there are few anxious to praise you and many ready to blame. So much the more should you prove faithful to your great opportunities and realize your reward in that satisfaction which comes from duty well performed.

# BETTER DENTAL CARE OF THE INSANE 

By Henry Wernecke

The question of better dental care of the patients in our insane asylums has interested me ever since I have been connected with asylum work and I have mentioned the subject to our worthy secretary sometime ago, suggesting that this subject be presented by some dentist or physician, but for some reason he has insisted on my presenting this subject, so I have consented to write this paper, but from the standpoint of a layman and as the matter appeared to me, so as to make us all observe more closely the necessity of more dental care of our patients.
In passing through the wards I have often been approached by patients complaining of a toothache and it occurred to me that those patients who are unable to express their pain to the attendants must be in great agony at times, and I believe that a great many of the hysterical conditions we find our patients in are due to a great extent to dental disturbances.

We all know that the majority of inmates have a foul breath which I judge is mostly due to defective teeth, either through the decay of the teeth or from the stomach caused by imperfect mastication of the food. This condition alone must have a detrimental effect upon the better and more healthful patients to be housed in the same room with the majority of such affected inmates.

I think it is generally conceded that in many cases of insane persons the nervous system acts just the opposite to that of a healthy person, so that such patients will not even twitch their eve while an operation is performed upon them, where in ordinary cases anaesthetics would have to be given. In mentioning these conditions to a dentist he handed me an article written he Henry S. Upson, M. D. of Cleveland, Ohio, Professor of Neurology in a medical school and consulting neurologist to the Lakeside hospital. This doctor claims that by investigations made the past three years, that melancholia, mania and dementia are due to irritations of the sensory nervous system, often painless, and that the teeth and jaws are a common seat of irritation. This professor writes that of fifty-eight cases in
the Cleveland and Columbus hospitals, investigated by him by X-rays, thirty-two of these cases showed impaction. Many of these cases were entirely painless and not in a single case was the pain confined to the region of the impaction. Of these fifty-eight cases of dementia, nine cases were operated upon dentally, six have recovered, two cases improved and one remained unimproved.

The professor names twelve distinct and different cases all attributable to dental diseases which are very interesting and I shall repeat a few only, for all of them would take up too much of our valuable time, but if this convention desires, Doctor Upson's entire article might be included in our annual report and I assure you that you will be very much interested in his writing.
"Case I. The observation which led me to the investigation of impaction and other dental lesions was made in a case of severe toothache due to pericementitis in a tooth with a large filling and a dead pulp. The patient was melancholy and sleepless, but chiefly so when the pain was not severe, and these two symptoms were obviously independent of the pain, and set up directly by the lesion. Recovery followed extraction of the tooth.

Case II. A patient was then encountered suffering from the same symptoms, but even more sleepless and depressed, and with the restlessness which is typical of toothache and melancholia alike, but with no pain anywhere, and no history of a preceding toothache for many years. The case was one of typical simple melancholia. The patient recovered promptly after the filling of a cavity which extended into the pulp-chamber.

Case III. The next patient in the series suffered from the samé mental symptoms, but of longer duration, two years, and there were profound delusions of sins committed and of hopeless disease of the brain, from which she thought that she would never recover. There was in her case no caries, but an impacted upper third molar. Its extraction almost three years ago was followed by steady recovery, and the patient remains well, mentally and physically. I saw this patient with Dr. W. H. Humiston, and later with Dr. J. F. Stephan and the house staff of the Lakeside Hospital.

Case IV. The patient was a woman, twenty-seven years of age. She had been married about two years, was perfectly well,
although not of robust build, and of unusual intelligence and lively perceptions, was well educated and of happy disposition. One day, about the middle of May in this year, it was noticed that she was somewhat incoherent in her talk. Her mother, who was with her, became alarmed and took her home, where I saw her a week later. The progress of the disease had been so rapid that after even this short interval her mental aberration was very marked. She had been sleepless night after night, only sleeping when given hypnotics. During the day she was excited, talked incessantly, and broke down and cried frequently. She put her hand often to the left side of her head, but denied that she had any pain anywhere. On questioningher parents I found that she had never had a toothache, and had not been subject to headaches. During the next two weeks her condition remained the same, except that the restlessness and voluble talking were if anything rather more marked. Three weeks after the onset of the disease the patient was talking incessantly, with entire incoherence, and with very dramatic gestures. She cried frequently, without reference to what she happened to be talking about, and spent the greater part of the time walking about her bed, and at times crouching on it on all fours. After her recovery the room below had to be replastered. She had also to be continually watched to keep her from leaping from the window. Constant activity and refusal to take adequate nourishment caused her to lose flesh rapidly and her color was correspondingly bad. Examination revealed no physical condition of any of the internal organs which could account for her mental condition, except that some of her teeth were badly decayed. Skiagraphic examination showed no impaction. There was no evidence of abcess at the roots of any of the teeth, but simply decay and one or two large fillings somewhat near the pulp. As these conditions were obviously capable of causing a good deal of irritation, on June 6th, 1909, the lower right first, second, and third molars, the upper right second molar and second bicuspid and the lower right third molar and upper left first molar were extracted.

On examining these teeth after their removal it was discovered that under a large amalgam filling in the upper left first molar decay had occurred in contact with a living pulp. The lower right third molar was badly decayed into the pulp. The pulp chamber of the upper right second molar was filled with
pulp nodules. In the lower right second and third molars there were large fillings near the pulp chamber. The remaining teeth which were extracted were more or less decayed.

These lesions were obviously profoundly irritating, tinough their seriousness was not entirely apparent in the skiagraphs. Especially in the upper left first molar the skiagraph showed only the presence of a large filling, which did not seem to be near the pulp-chamber. This serious lesion might easily have been overlooked, and in fact the tooth was only extracted with the idea of being absolutely sure to remove all irritation in an unusually serious and important case. If this had not been done I am satisfied that the patient would have remained unrelieved of the irritation, and that her mental condition would have remained the same or grown worse.

Within two or three days after the teeth were removed, the patient was somewhat quieter. She began to take nourishment more readily, and day by day improved in strength, and within a week was much quieter and at times more coherent. Sleep, however, was still a good deal disturbed, and she had to continue taking hypnotics for several weeks. Within a month after the operation improvement had become so marked that the patient was out-of-doors, able to play croquet, was eating and sleeping well, and her conversation was in the main rational, although she would occasionally drift off into incoherence. Within a week or two after this, six weeks after the operation, conversation was quite coherent, and the patient has since made a full recovery. She has regained both bodily and mental health."

Doctor Upson gives eight more like these but each case different, certainly demonstrating that the many irregularities of the human teeth are the causes of different diseases unknown to us, and including the agony and the de-arrangement of the digestive organs as I mentioned before, I think we should pay close attention to the dental care of our insane.

Following Mr. Wernecke's paper Dr. Gorst spoke as follows:
There is no question but that there is considerable truth in the statements in the paper just read by Mr. Wernecke. I believe that there ought to be some arrangement by which every institution, both state and county, can have a dentist visit the patients and make an examination of their teeth. There is no such arrangement in our institution. We have a doctor who
pulls teeth when necessary and sometimes when unnecessary, and sometimes we send patients over to the city to the dentist if they have the means to go there, but we have not understood as yet that we have the authority to use money from the general fund for the purpose of sending our patients to the city to have their teeth attended to. This matter has been talked more or less with the Board of Control for some time. At the Northern Hospital for some years they have a dentist go from Oshkosh on Sunday morning and go back at noon. They pay him $\$ 50.00$. I was authorized by the Board to get some one, but I have been unable to. There should be some provision made that the superintendent has a right to charge the county with a reasonable dentist bill just the same as we dofor clothing, or there should be an order that we can have the teeth of the patients repaired when it is considered necessary. There is no question that many of the patients are suffering a great deal with their teeth and something should be done to relieve them.

## COLD STORAGE

By R. M. Smith

Mr. President, Ladies and Gentlemen : I was requested, sometime ago, by the secretary of this association to present a paper on refrigeration before this convention.

Refrigeration is a large subject, and although I have used the refrigerator commercially and otherwise for more than a quarter of a century, and have constructed several different types for my own use, and instructed other people in the construction of refrigerators, still I am frank to acknowledge that I am incompetent to present this subject as it should be.

During the past few years the public has been enlightened considerably upon the question of refrigeration or cold storage. During the time that Dr. Wiley and other eminent scientists were condemning the cold storage fowl, egg, etc., it was significant and a very peculiar coincidence that another body of scientists should sit down to a banquet of baked mastodon, which had been
in cold storage for a period of time estimated to have been 100,000 years.

Whatever the abuses in relation to the cold storage business as developed in this country may have been, the fact nevertheless remains that the cold storage is an absolute necessity.

There are many types and forms of refrigeration, from the crude refrigerator, which the careful sportsman prepares and includes in his camping outfit when in quest of fish or game. This is nothing more than a square dry-goods box with a few inches of clean sawdust spread over the bottom, on top of which is placed a block of ice, preferably of such dimensions as will fill the box within a very few inches of each side. Again sawdust is used, filling this space between the ice and the box, continuing until the ice is covered with several inches, leaving about a foot of space, if possible, between this and the cover. Upon arriving at his destination he digs a hole of suitable dimensions in the earth preferably on the north side of a clump of evergreens, in which he places the box, banking it up well on the sides, and covering the top with a few boughs or some hay, he has a refrigerator which will keep his fish or game admirably for a week or ten days.

It is a fact that a single block of ice two feet square and eighteen or more inches thick handled in this manner will furnish refrigeration for more than two weeks.

There are so many methods of refrigeration that it would be useless for me to go into detail regarding the construction of the various buildings, which vary all the way from the simple arrangement outlined above to the most modern chemical plant, they all giving more or less satisfaction in accordance with their proficiency. Some construct a room in their ice house, filling the space around this room, and for several feet above, and while a great many people get along with this kind of an arrangement, it is a long ways from perfect.

A better arrangement than this is an insulated room with the ice in a rack in the center. This necessitates replenishing with ice every week or two.

Another arrangement, especially where ground space is of no consequence is where your refrigerating room is connected with the side of your ice house. In this case the ice house has to be substantial and well built with the proper insulation, air chambers, and other connections.

There is also the chemical plant, which, no doubt, is the most proficient cold storage arrangement there is at the present time. There are several kinds.

Two systems in particular are in general use. One known as the ammonia system, and the other the brine system. In both cases it is necessary to have power of some kind to operate these plants, consequently they are very much more expensive to operate than where the ice method is used. A chemical cold storage has this advantage, that the refrigerating room can be kept at any temperature desired, even below zero, and where any article of food, which is not seriously injured by freezing can be kept for an indefinite period of time. While plants of this kind are almost universally used in large commercial centers, and where a square foot of ground has a high value, at the same time they are scarcely ever used in the smaller cities, especially in any latitude where there is sure to be an ice crop. This, of course, depends somewhat upon circumstances, where power and water can be secured at a very reasonable rate. These being necessary, it is practical to operate a plant of this kind even in a small commercial way, providing its needs warrant the operating expenses.

As I am before a body of Wisconsin people nearly all of whom are in the same line of business, it would, perhaps, be well for me to say something about the kind of refrigeration and refrigerators that I deem the most practical under the circumstances.

A great many times when a person is in need of a refrigerator he builds one according to his own idea, the same as if he needed a corncrib, hog house or barn. These are things that are frequently done without consulting an architect. In the case of building a refrigerator I believe this is a mistake, but it seems to be natural for us to believe that this is money thrown away. This is the reason why a great many in building a refrigerator make a sad mistake. There are three important things, ventilation; circulation, and refrigeration.

Almost invariably a person inexperienced becomes confused as to the difference between ventilation and circulation when constructing a refrigerator. This is natural as especially of late years we have had ventilation drummed into us very strongly. We must have everything ventilated. The buildings we live in, and the stables and barns that our stock is housed in, consequently we are apt, when we start out to build a refrigerator, to
believe that it has to be ventilated. This, however, is not the case. A refrigerator must contain ventilators, but these do not connect with the outside air. They are simply for the purpose of circulation, circulating the air within the walls of the building. Where human beings or animals live, ventilation is necessary for they are continually burning up the oxygen that is in the air which they breath, and if pure fresh air contanning oxygen could not reach them, they would scon die after burning up all the oxygen in the air which they are breathing over and over again, but with refrigeration it is directly the opposite. There is nothing in your cold storage that is burning the oxygen out of the air necessitating a change of same. Therefore refrigeration is simply a system of circulating cooled air, and the kind we are now considering is the one where the air is cooled by circulating over and through a body of ice, and the article stored, whatever it may be, absorbs the chill from the air, thereby warming it. This air returns to the ice chamber, where it is again chilled to its former temperature, and continues on in this manner indefinitely, doing its work. Some people believe ventilation, or at least fresh air in refrigerators is necessary, and build them with the door from the refrigerating room opening to the outside air. In addition to that, they are a little bit careless about closing the door, knowing that they had very little or no ventilation and believed fresh air was necessary, and then wonder why their refrigerator is not a success.

Any refrigerating room will not do its work properly without an anteroom closed vestibu'e between it and the open air. The anteroom door and that of the refrigerating room should never both be open at the same time, especially in warm weather. The hot outside air will rush into the room driving out the cold air and effecting the temperature of the room to a degree according to the length of time the door is open, and the conditions of the weather.

I believe that the ice harvest is a sure crop anywhere in the state of Wisconsin, and my opinion is that an ice cooling refrigerator is the proper thing in most cases. One of the overhead systems I believe to be the best. That is where the ice is over the refrigerating or chilled room. It appears to me that the best and most economical plant of this kind is one that holds enough ice to run the year around, that is, one that can be filled at the time of the ice harvest and needs no further attention
until a year has elapsed, when it is necessary to fill it again. This is the kind of cold storage that I would recommend for county institutions. It is quite a little item of expense to construct a good cold storage, consequently a great many peopie have to get along with makeshifts of various kinds, but the many needs of a county institution for a good cold storage certainly warrant the expense. I would be in favor, were.I building a cold storage for a county asylum, of having a basement cooling room. The additional expense is not so great, and would perhaps be no larger, for the dimensions of the building could be cut some, where there are two cooling rooms instead of one. The lower story or basement, if connected with a sewer is the proper place to store all leaky or liquid goods such as salt pork, corn beef, pickles, sauerkraut, etc., and with this arrangement you have the upper floor for the variety of other stuff that is consumed in an institution, goods which are dry and not mussy. With a cold storage you are able to put down corn beef, salt pork, ham, bacon, etc., any month in the year with no fear of losing them.

The many needs of a cold storage at a county institution certainly warrant the expenditure necessary to obtain a good cold storage plant. The first cost, that of building, is all the expense, and with the kind recommended it needs attention but once a year, and that at a season when we can best afford the time, and the co!d storage question is layed by for the year.

I thank you.

Wednesday, June 14, $1: 30 \mathrm{P}$. M.
The reputation for hospitality which Jefferson people enjoy was amply justified by their generous entertainment of the members of the Association for the afternoon. Automobiles were provided to carry all who desired to go out to the Jefferson County Asylum.

After an hour of inspection around the buildings and grounds which by the way speak exceedingly well for Superintendent and Mrs. Voight-the visitors gathered in the spacious assembly room and were splendidly entertained by some of Jefferson's young people.
wednesday evening session, June 14, 8 P. M.
Dr. A. S. Alexander of the Wisconsin College of Agriculture gave his very entertaining and instructive illustrated leature on "The Farming and Live Stock of Scotland."

In moving to extend to the doctor the thanks of the association for his lecture Secy. F. M. Smith expressed the feelings of all present when he said: "I have felt as we have sat here thrilled and inspired by the doctor's fine descriptions of home life among the Scottish hills we shall all go from here with greater reverence for God and greater love for our fellow men."

Judge Grimm of Jefferson, being present, was called upon and responded as follows:

I have no speech to make to you, but I am glad to be called upon as it gives me an opportunity to say a few words which I would like to say.

You are engaged in a great work-a work which strongly appeals to me-that of working for your fellow men and that class of your fellow men who are the most unfortunate-the most in need of your help-and when you are working for others and doing good for others, the effect of it upon you cannot be otherwise than gnod. I have seen people get very old, yet they are so extremely happy, because they were engaged all the while in doing good to their fellow men, and the good work which we do has a tendency to give us strength and to buoy us up and keep us young.

Look at Dr. Reed. There is a man somewhere between eighty and one hundred years old and yet he is as young as most of us are now. For a half a century his life has been devoted to the uplifting of those who are in need of help and doing good. I have heard him called the "Grand Old Man of Jefferson" but I would like to change that a little, and call him "The Grand Young, Old Man of Jefferson." I want to tell you what he. told me last summer one time. We were attending a funeral and we were standing side by side and I said to him, "Well, Doctor, I think you will be attending funerals for many years yet'", and he turned to me and said, "Well, I am going to attend your funeral. I attended you when you were born and I am going to attend your funeral." Well I assure you he im
welcome, but I also assure you that he will have to wait a long time before he will attend mine. But the work he has done for the uplifting of humanity is very commendable and there is not a man I like to talk with or visit with better than he.

I want to say a word about our State Board of Control. I know considerable about them because their line of work deals with criminals as well as with the unfortunate insane, and I have noticed that in the last fifteen or twenty years the exter of their authority and the field of their power has been steadily broadening until they exercise a wonderful power of control. It is not really control because I believe that word is a misnomer when applied to the Board. They are friends. They are helpers, and the work of the Board in our penal institutions with the criminals that we poor judges have to send there, is something magnificent. They will pick out by careful watching and careful observation those who show a true spirit of reformation, and if they do show a spirit of reformation the Board lets them out on parole. During the last ten years the laws relating to the criminals have undergone a wonderful change and it is owing to the fact that the people of the state and its legislators have confidence in the ability, integrity and earnest working of our State Board of Control. You can verify that in your line I know.

I can say no more tonight, but so far as I am concerned, the whole city is yours.

## thursday morning session, June 15

## BUSINESS SESSION

On motion the chair appointed the following committees:
Finance-Messrs. Langworthy, Burns and Mooney. Resolutions-Messrs. R. M. Smith, Ward and Lewis.

## TREASURER'S REPORT.

To the association of Trustees and Superintendents of county asylums for the chronic insane of the State of Wisconsin.
Your Treasurer submits his report to June 15th, 1911 which is as follows:
To balance on hand at last meeting, Green Bay.............. \$. 98
quay 2d, 1911. Recd from Sheboygan county 1910 dues... $\mathbf{5 . 0 0}$
May 27th, 1911. Recd from Grant county, 1910 dues........ $\quad 5.0$
Brown
Columbia
5.00

Dane ................................................ . . 5.0
Dodge ................................................. . . . 5.00
Douglas
Dunn ................................................. 5.00
Eau Claire
Chippewa
Fond du Lac
Grant
Green
Iowa .................................................. 15.00
Jefferson ............................................ . . . . 10.00
La Crosse
Marinette ............................................. 5.00
Monroe ................................................. . . ${ }^{5} .00$

Marathon .......................................................... 5.0
Outagamie ................................................. 5.0
Richland .............................................. 5.00
Racine ............................................... 5.0
Rock .................................................... 5.0
Sheboygan ............................................. . . 5.00
Sauk
St. Croix
Trempealeau :........................................... $\quad$. 00
Winnebago .......................................... 5.0
Washington ........................................... . . 5.00
Waupaca ................................................... 5.0
Waukesha
Walworth
Wood ........................................................... 5.00
Expense bills, audited by Finance Committee................ $\begin{aligned} & \$ 130.98 \\ & 118.89\end{aligned}$
Balance on hand.............................................. . . $\$ 12.09$

We the undersigned, your finance committee, having examined the bills and accounts of the secretary and treasurer find same to be correct as reported by the treasurer, Mr. Geo. Seeley. C. E. Langworthy, F. J. Mooney.

Officers elected for ensuing year:
President, J. E. Coffland.
Vice President, A. J. Whiffin.
Treasurer, Geo. H. Seeley.
Secretary, F. M. Smith.
By ballot Marshfield was agreed upon as place for holding next annual convention.

The committee on resolutions presented the following resolutions which were unanimously adopted:
"Whereas: It has pleased our Heavenly Father to call from his earthly labors, Mr. Truman R. Spooner of Whitewater, a Trustee of the Walworth County Asylum, for more than nine years, and a member of the "Association of Trustees and Superintendents of County Asylums of Wisconsin."

Resolved: That we hereby express our appreciation of his valued labors and extend our sympathies to his bereaved family.

Resolved: That this resolution be spread on the records, and published in the proceedings of the Association, and that a copy be sent to his wife.

> R. M. Smith, H. W. Lewis, Geo. L. Ward.

## By Mr. Mayhew

It becomes my sorrowful duty to announce to this Association the fact of the death of M. J. Haisler, one of the Trustees of the Milwaukee County Asylum, which occurred on the 7th of June, 1911.

His sickness was of about three months duration. Mr. HaisIer had been a member of the Board of Trustees for nearly fourteen years.
He was a grand associate, always ready to do his full duty for the sole benefit of the poor suffering patients under our eharge.

I think my colleagues will bear me out when I say that in the long term he has served as Trustee, he endeared himse.f to us all, with his genial manner, and his kind heart, which made his service most valuable. His loss we shall deeply feel.

The Association of Trustees, Superintendents and Matrons of the County Asylums of Wisconsin, assembled in yearly convention, at Jefferson, Wis., do hereby extend the hearty thanks of this association and each and every member thereof for the welcome and entertainment accorded this convention by The Mayor, County and City Officials, The Promotion Club of the City of Jefferson, The citizens at large and Mr. and Mrs. W. E. Voigt, superintendent and matron of the Jefferson County Asylum, and Dr. Reed, the grand old man of Jefferson, who by their labor and generosity have made this meeting one that will not be forgotten by the members of this Association.

Resolved: That a copy of this resolution be spread upon the records of this Association and printed in the proceedings and a copy be mailed to The Mayor, The Asylum Management, The Promotion Club of Jefferson and Dr. Reed.
R. M. Smith, H. W. Lewis, Geo. L. Ward.

We, the members of The Association of Trustees, Superintendents and Matrons of County Asylums of Wisconsin herein convened in session hereby wish to extend our thanks to our President, J. E. Cofflland, F. M. Smith, our Secretáry, and the other officers of this Association for the manner in which they have conducted the affairs of the Association during the past year

Resolved: That this resolution be spread upon the records of this Association and printed in the proceedings thereof.

Geo. L. Ward.
R. M. Smith,
H. W. Lewis.

## AFTER CARE OF THE INSANE

By Dr. Adin Sherman

The state of Wisconsin has an insane population cared for in institutions at public expense of over 7,000 or in the neighborhood of 1 to 400 of the entire population of the state with but little prospects, with our present methods of caring for them, of the ratio being reduced.

That the suffering entailed upon the relatives and friends of these unfortunate people is something appalling is apparent to the most superficial observer; and that the financial burden to the people of the state is great, is not questioned by any one. Relief from this great sorrow by the relatives of the insane and from the financial burden by the people of the state at large is earnestly to be desired; and as a partial solution of the problem, intelligent after-care of the insane is suggested as promising speedier and more far-reaching results than any other means which is at hand at the present time.

The question of the after-care of the insane has only very recently attracted much attention in this country; but during the past three or four years societies for that purpose have been in successful operation in New York, Massachusetts, and in some other states, and isolated individuals, with a clear view of the actual conditions, have been doing some good work in thist direction in various parts of the country.

As long ago as 1848 a society, assisted by the French Government, was founded in Paris for the purpose of providing temporary assistance to those who had been recently released from hospitals for the insane. This society took upon itself the work of finding homes for them, securing them employment, and in some instances supplying them with a limited amount of money.

That the society has met with success in its labors is attested by the fact that it is still in existence, is recognized by the French Government, in the various departments of the country, and reports that it continues to assist many in the ways mentioned till they have become self-supporting and reasonably free from danger of relapse.

In Great Britain an organization for the same purpose was established in 1879, and was supported by voluntary contributions by its members, who were people prominent in the work of caring for the insane, and in other philanthropic undertakings, and who saw a great field open to them for charitable acts among this unfortunate and neglected class. Its reports, as well as those of the French society, show that many have been assisted, put in the way of becoming self-supporting, and the public thereby relieved of their constant care.

While Americans have usually been pioneers in adopting ideas which are of benefit to mankind, we have been unaccountably backward in this particular line of work; and not till 1893 is there any notable mention made of anything of the kind in the proceedings of any of the societies of this country interested in the care of the insane. In that year Dr. Peter Wise, of New York, delivered a very able paper upon the subject before the American Medical Psychological Association. Not for several years do we again hear of anything of note upon the subject. In 1905 Dr. Richard Dewey, of Wauwatosa, presented a paper on the "Assistance of Destitute Convalescent and Recovered Patients Discharged from Hospitals for the Insane" before the Portland meeting of the Conference of Charities and Correction; in which he enters thoroughly into a description of the work done and the results obtained along this line in various foreign countries, and calls attention to the fact that little has been done in this direction in the United States.

In 1906 after-care committees were established in connection with most of the state hospitals for the insane in the state of New York, and a year later Dr. Wm. Mabon, Superintendent \& Medical Director of the Manhattan State Hospital at Ward's Island, read a paper before the American Medical Psychological Association in Washington, giving a description of the methods pursued and the results obtained.

If a person who recovers from an acute attack of insanity is in good circumstances, has a good home and intelligent relatives, if he be properly instructed concerning the care of his health, avoids excesses, and leads a quiet, even life, succeeds in escaping severe physical illness and excessive mental strain, the probabilities are that he will not suffer from a recurrence of the disease; but it is entirely different with the individual
who recovers and has no home to go to, or if he has, has no means of supporting himself. The environments of such a person are almost sure to be of the most unfavorable sort. People mistrust and fear him because he has been insane, and refuse him employment. As a result, he is subjected to the most severe mental stress, and often to actual physical suffering, frequently accompanied by alcoholic excess, sometimes taken ignorantly with a view of helping him withstand the fierce struggles for existence or to deaden the mental anguish of his miserable existence. More often intoxicants are taken through a continuance of a habit, which existed before the original attack, and which in many instances percipitated it.

These conditions are sufficient to shatter the strongest mind. As a result his mind breaks down, he suffers from another attack of insanity, which perhaps becomes chronic, and he becomes a permanent public charge and a living sorrow to his family, if he has one. Many such persons, had they been furnished with suitable employment, properly advised, ard a certain amount of supervision extended to them after their parole, might have remained permanently well, self-supporting, and usefful members of society.

With a view of remedying these conditions in Wisconsin, the State Board of Control provided for the employment of after-care agents, to assist in the after-care of patients who are in condition to be paroled from the state hospitals and from the county asylums under suitable conditions. In accordance with this provision, Mr. T. D. Wheeler, a man of good judgment, extensive experience with the insane, formerly superintendent of St. Croix County Asylum, was chosn for after-care agent at the Northern Hospital last August.

The after-care agents are under the direction of the superintendents of the state hospitals to assist in finding suitable employment for paroled patients who have no friends, and for those who have friends, provided they cannot furnish them with suitable employment; to investigate the home surroundings of patients before parole is granted, if there is any reason to think that thev are not what they should be; to visit paroled patients occasionally at their homes and at their places of emnloyment. and when their environments are found unfavorable give them such advice as is considered necessary to their welfare. This advice may be to change the character of
their employment, to remove from the locality in which they live, or to discontinue intemperance or bad associates. To instruct them in the proper ways of living, whereby they may escape subsequent attacks of insanity. To encourage them when necessary to return to the hospital or asylum from which paroled for advice or treatment, and at all times to encourage a feeling of confidence in the institutions and in the officers thereof.

Some difficulties have been encountered in procuring suitable employment for paroled patients; mainly owing to the fact that most of our patients who have no friends are of the wandering class, are factory or mill operators, do not care to work on farms, and if places are procured for them, they will stay only a short time and drift back to the town and factories, where they soon fall under unfavorable influences.

While it is comparatively easy to get employment for men in the factories, if the town's environments are not suitable, they soon begin to frequent drinking places with their fellowworkmen, for companionship, and from this it is only a short step to drinking, which is soon carried to excess, intoxicants take the place of nutritious food, the nutrition becomes poor, sleep is insufficient, and the unstable mind again fails. As a result he must be returned to the hospital. For this reason employment in the country is favored for this class of patients.

As improbable as it may seem, there are sometimes people who, for various reasons, do not wish to remove their relatives from the hospital when they have recovered and are in the condition to be cared for at home. Such people can often be reasoned with and have their legal and moral responsibility pointed out to them in such a manner that they take the relative home; where, with a little oversight he is self-supporting, and after a time becomes sufficiently energative that he does not need attention from any one, and he is thus saved from becoming institutionalized, and made a public charge.

In practically all instances where complaints are made concerning patients requesting their return to the hospital the after-care agent, after having been given such information as we have concerning the patient, is sent to investigate the case. He interviews the person who made the complaint, the patient, the relatives of the patient, and the public officers, and if nec-
essary consults with the county judge and the district attorney.
After such investigation, it is frequently found that the patient is in good mental condition, and that the complaint was made on account of a family or a neighborhood quarrel, or that the patient has been drinking some. In all such cases the matter is thoroughly talked over with the parties interested, the misunderstanding adjusted if possible, and the patient is not returned to the hospital.

When it is found necessary to send the after-care agent into a given locality he is furnished with a list of all the patients who are on parole in that neighborhood. He visits them and their families, and makes investigations concerning the condition of the patient, and of his surroundings, and gives such advice to both patient and the relatives as may appear to be necessary.

Both the patients and the relatives accept the supervision kindly, and not infrequently express their appreciation of the interest taken in them by the hospital authorities. These visitations bring the people closer to the hospital, and cause patients to be more careful of the way in which they live, and the way they act.

When a patient is leaving the hospital the superintendent calls him to his office, talks with him, informs him of what caused his mental disease,-when the cause is known,-instructs Thim how to live in order to avoid subsequent attacks, expresses an interest in his future welfare, and when advisable requests him to report to him by letter or in person at stated intervals, also informs him that the after-care agent will visit him occasionally.

In all instances we endeavor to secure the co-operation of the local authorities, and of private individuals who are willing to assist us in such work.

It might be mentioned that as alcoholic stimulants are one of the most fruitful causes of insanity, and of relapses in persons who have recovered from insanity, a valuable aid to the after-care of the insane would be a law providing a severe penalty for any one convicted of selling or giving alcoholic beverages to persons on parole from a hospital for the insane. It is true that such a law would be difficult to enforce; but if enforced, the results would be far reaching, and no responsible
person could possibly enter the least objection to the enactment of such a law.

After care, if accepted in its broadest sense, may be looked upon as not only applying to those who have recovered from acute attacks of insanity, but as well to those who have passed into a chronic state of mental derangement. Many of these are quiet, tractable, harmless, and capable of entirely, or partially supporting themselves,-under intelligent supervision.

Certain other chronic cases are always noisy, destructive, violent, or homicidal in their tendencies, and always require custodial care.

Briefly there are three principal methods of caring for the chronic insane:-The boarding out system, the large custodial institutions under state or governmental management, and thecolony system.

The boarding out system is in use principally in Scotland; and the Scotch, with their usual keen business insight, have made a marked success with it. Under this method persons living near large asylums, principally farmers, are permitted to take from one to five or six quiet patients to board, receiving a certain amount from the government for their board and clothing.

They are permitted to employ them at such work as they are able to perform, and the amount paid for board is to a considerable extent governed by this.

This system, as can readily be seen, is frequently accompanied by serious abuses, and must be under strict government supervision.

A second system, which is in most general use, is the large custodial asylums, accommodating from 1,000 to 3,000 patients, where the acute and chronic cases are cared for in the same institution. This method is unwieldy and expensive.

Midway between these is what is known as a colony system, in use in some of the Continental European countries; in which colonies or villages are established in which live a large number of the quiet and harmless insane, with a very small proportion of care-takers. A great degree of liberty is extended to these people, and it is said that they are orderly, well-behaved, and that deeds of violence rarely occur,-at most not more frequently than would happen among the same number of sane people.

Here it might be mentioned that the danger from the insane is much over-estimated; and that tendencies toward violence are rarely manifested except among the actively excited, a few who are affected with homicidal tendencies, and witn certain paranoiacs with delusions of persecution.

The Wisconsin system of caring for the chronic insane is similar to the Colony System of continental Europe, and midway between the boarding out system, and the large custodial institution.

Briefly it consists of a number of small institutions accomodating from 150 to 200 patients, situated in the different counties, managed by local boards of trustees chosen by the county board of supervisors, and presided over by a lay superintendent, and subjected to a certain amount of state supervision.

The working of this system is as follows: A patient is first committed to one of the state hospitals for the insane. If he becomes chronic, upon recommendation of the superintendent of the state hospital to the State Board of Control he is transferred to a county asylum, the one in the county from which he was committed, or if his county has no asylum, to a nearby county.

Relatives are always notified when the transfer of a patient is contemplated and given an opportunity under certain restrictions to select the county institutions which they prefer. It not infrequently happens that people prefer to have their relatives in a distant institution for the reason that inquisitive neighbors frequently have an opportunity to see them when near home, and make their sayings, actions, and appearance, matters of neighborhood gossip, to the great mortification of sensitive friends.

The patients in these asylums are well housed, well fed, properly clothed, and well cared for in every respect. Each asylum has a farm and garden, and such men patients as are able to work on the farm, in the garden, in the barns with the stock, and on the lawns, are required to do so. The women patients assist in the household duties, and all are happier, and much better mentally and physically by being employed. The products of the farm in many instances go far toward supporting the institution.

Up to the present time it appears that the Wisconsin sys-
tem is the most humane, efficient, and economical system which has been evolved for caring for the chronic insane.

The subject of the care of the insane would be incomplete without a word concerning the prevention of insanity.

It is a disease probably 75 per cent of which could in time be eliminated by proper living and proper education, though it is difficult to say to just what extent the hereditary element can be eliminated. It no doubt would take several generations. The term heredity is used in its broadest sense, and does not mean that the insane parent begets an insane child; but that the parent may be an alcoholic, a genius, a degenerate, a criminal, or other aberrant type; and the child defective or insane. Insanity is not transmitted directly as insanity, but as a predisposition.

Alcoholism, directly and indirectly, is responsible for something over fifty per cent of the insanity, directly in the pers:n who uses it to excess, by injuring the vital organs, and causing certain poisonous substances to be retained in the system, which react unfavorably upon the nervous system, by hardening the arteries of the brain, and interfering with the cerebral circulation.

Indirectly by heredity, and the privations entailed upon the family of the alcoholic. Syphilis is a cause in ten per cent to fifteen per cent according ${ }^{\circ}$ to locality; usually manifested as paretic dementia, which always results fatally.

A small percentage of persons who have been educated beyond their capacity, or who have attempted work beyond their ability. A certain considerable percentage owing to combinations of rather ill-defined causes including heredity and cases of unknown origin.

There is no question that with a good heredity, proper living, proper education and suitable employment, the amount of insanity would be much reduced.

## HOME MAKING FOR THE INSANE

By L. J. Pinkerton

Home making for the insane, particularly the incurable insane, which are the class we have to deal with in our county institutions, is a feature of the work which has been sadly neglected in years past, and even today, in some states lightly considered.

In our good state of Wisconsin under our present system the growth and administration of our county institutions has been not only rapid but wholesome.

When the special committee from the state of Pennsylvania visited our institutions some three years ago they reported an advanced standard in our institutions not exceeded in any state in the Union and equalled by few. (Mr. Grey's report on Illinois.)

This careful supervision of the basic principles governing the care of insane as exercised by our State Board of Control, together with evidence of wholesome good sense in execution on the part of those in active charge, has done much toward developing the sentiment so frequently expressed by our county patients that they are much happier and more contented in our county institutions than anywhere else.

This is due to the much smaller number at any one institution as well as the additional freedom given, the careful homelike treatment given them by our superintendents and matrons, as well as the studied plan to give them all possible opportunity to be occupied as far as is consistent with the physical condifion of the patient.

The addition of homelike surroundings which have in last few years been introduced into most of our asylums together with the improved sanitary conditions and abundant fresh air add much to the comfort and satisfaction of the patient.

Freauently there have been cases of complete cure among the class declared as incurable because of the cheerful, homelike atmosphere in which the patient exists.

Several cases have come under my personal observation, who were exceedingly unruly when received, but after a brief stay
in the cheerful homelike surroundings of our institution, and thoughtful care on the part of our superintendent and matron have become most docile amenable patients,

It is, of course, much easier, and perhaps quite proper, to have this subject treated by one who is not in daily contact and does not see the daily trials that tend to harden the consciences and sympathies.

However, the principles of love and sympathy with the exercise of cheerful good sense go a long way toward making the lives of these unfortunate people less a burden to themselves and those in charge. Never lose sight of the fact each is human and give them all the exercise and occupation in the fresh air possible, plenty of pure fresh air in sleeping rooms, no crowded quarters, with well cooked wholesome food, and we will have done much toward solving the problems of right care and of best Christian care of these most unfortunate of God's children, many of whom began life as propitiously as any of us.
thursday, june 15, $1: 30 \mathrm{P}$. M.
Dr. M. K. Green not being present, Dr. Chas. A. Gorst of Mendota in a brief way discussed "The Use of the Continuous Hot Water Bath for the Disturbed Insane."

## THE CONTINUOUS HOT WATER BATH

By Dr. Gorst

It is generally understood that the use of the continuous bath is valuable to the disturbed condition, periodically disturbed condition of the chronic insane patients as well as to the disturbed condition of the acute patients. We have not entirely but practically discontinued the use of mechanical restraint in most of our acute mental disturbances. I think it is quite necessary that you have a tub in your institutions. The care of the mentally disturbed patients by the continuous bath is the most humane treatment that I know of and the least restraint that I know of and the surest method to quiet the condition of the disturbed patient and because the county institu-
tions more and more have to care for the disturbed patients this method of treatment should be adopted. The state institutions are filled. The population is increasing, the dependent population is increasing, the insane population is increasing and for that reason it is necessary that many of the chronic patients who are disturbed must be cared for in a county asylum. It would save your county considerable expense and you would not have to send the patient to the state hospitals for awhile and then back again, as has been the case quite frequently.

We offered, and I think the Board of Control sent a circular letter to the superintendents of the county institutions stating that we would train a young woman, if you would send them to us, how to use that bath. If you send a young woman and one whom you think is liable to stay with you for awhile, in a few months time, I think she will be able to take charge of the bath.

I would advise the trustees and the superintendent of the county institutions to go to the expense of placing in each of the county asylums one continuous bath tub. You can place a bath in the institution and have it located in such a manner that you can use it for both the male and female patients, and I am sure that it would be very satisfactory to you, and you should have no hesitancy in using it at any time providing that you have a young woman who has been trained. This is surely the most humane method of treating the disturbed patients and it is the method which is being used all over the country. I believe that you will be thoroughly satisfied with it and will be unwilling to do without it after you have had the bath for awhile. In many of the chronic cases there is a recurrent acute disturbance of the mind which is periodical and you can treat those cases by that method and we would advise that you do it and that you send us someone whom we can train, and I am satisfied that you would not let it go for anything.
Q. Do you require any special equipment for this bath? Dr. Gorst. You can buy a regular tub which is made by the Clow people in Chicago. Their's is a good tub and I do not think it will cost you any more than $\$ 140.00$. It should be centrally located or located in such a manner that you can use it for both male and female patients. You can fix up this arrangement in your institution for about $\$ 300$.

## THE IDEAL SUPERINTENDENT.

By Mrs. Minnie McKiverain

We all have our ideals. That is, an imaginary standard of excellence: something faultless and fit for a model.

In my mind's eye, I portray this "Ideal Superintendent," governing the asylum with such humanity as to render the patients so perfectly contented, so delightfully happy that they could not even imagine a cause for complaint, neglect or cruel treatment.

He finances the institution on a plan so perfectìy economic that never a murmur is heard from taxpayers protesting against the burdens imposed on them to support this institution.

Verily, the parable of the loaves and fishes falls into insignificance when in sight of this Napoleon of finance.

He creates sanitary conditions so immaculately and dazzlingly perfect, that the world is moved to exclaim! "Behold it all! Behold the triumph of idealism."

But awake, awake from this dream of perfection, and face the cold, material facts that confront this convention, as there is not a citizen in Wisconsin who could fill the bill.

When we demand an "Ideal Superintendent," we ape the young man who went in search of an Ideal wife. This foolish youth passed a score of honest, sensible maidens of his acquaintance, any one of whom would have made him a good wife, only to fall a victim to a designing affinity who knew her game, baited her hook and snapped him up.
In any community are a score of men capable of filling any ordinary office with fair satisfaction, but they will not practice the arts of the gold brick swindler to secure the prize. Any man who has established a reputation for honesty and self control, and shown a capacity for managing his own affairs with success, will be a good risk for superintendent of an insane asylum.

Not least of these qualifications let me add: the man who undertakes the care of our unfortunates, must have a true, kindly heart that will govern his every act.

These are a few of the traits an Ideal Superintendent should possess, in dealing with pauperism and insanity.

Pauperism and insanity, in many cases, are due to the same cause, over strenuous and faulty civilization.

There is this difference between pauperism and insanity: Paupers, as a class, are indolent, and are wanting in the finer sensibilities. They beg without shame and accept charity as a right.

The insane are of a higher and better class of citizenship. They are gifted with the finer sensibilities, which in health and prosperity, make life a delightful existence. They are inspired by this gift to secure a full share of the good, and the better things of this world.

If they fail, their sensibilities become overstrained with anxiety: they think of the loved ones dependent on them for support: they get a distorted view of poverty threatening them with want: they are too proud to beg, too honest to steal. They fall into a state of intense mental suffering, that ends in acute melancholy or despair, followed by hopeless insanity or suicide. Of all forms of insanity, this is the most awful.

In many instances the victim becomes the dupe of his own distorted imagination. He imagines that disaster has overtaken him and wrecked his fortunes beyond hope of redemption, where in fact, his worldly affairs are safe and prosperous. The imagined will seem real to the victim, and he suffers accordingly.

In proportion to numbers, there is more insanity and suicide among the well-to-do, and the rich, than among the poor.
Truly, is the wind tempered to the shorn lamb. And when it comes to simple contentment and happiness, the poor do seem to have the best of it, as against the rich.

But who can imagine the suffering of the suicide who is driven to the act as the only escape from his agony? When we read of one suicide, let us consider how many others may be tempted to commit the same crime against themselves, as the only way of escape from intolerable, mental misery, but by chance, are prevented by the ever watchful care of the superintendent.

One of the superintendent's greatest tasks will be to find attendants who will take proper care of this class of insane.

Attendants are human. It is not always easy for the best.
of them to bear with patience and kindness, the abuse heaped upon them by their insane charges.

An air of content and cheerfulness should prevail throughout the institution for the benefit of both employes and patients, and care is necessary even in enforcing this rule, for their very cheerfulness may increase the suffering of certain patients by reminding them of happier days. Certain chords in music will have a depressing effect on other patients for the same reason.

A mother driven insane by the loss of a child, fell in a spasm of suffering at sight of another child that reminded her of her own. Another mother driven insane by a like loss would fly into an ecstacy of delight over every child she met. In both instances the effect was bad for the mother.

A personal friend who voluntarily became a patient in a hospital for the insane, to be treated for nervous prostration relates the following: "I was well treated myself, but the horrors I saw inflicted on other patients by brutal attendants, will haunt me to the grave."

A superintendent should be able to govern with firmness and judgment, tempered with sympathy for all under his charge. Employes on no account should bé allowed to treat patients with disrespect or cruelty. Music, games, etc., tend greatly to relieve the monotony of secluded life. Religious services should be provided but none should be forced to attend against their will. He must insist that the authorities furnish them wth food, clothing and all necessaries, on the same scale that the average man provides for his own family. Not only must the superintendent ever look carefully after the unfortunates trusted to his care; he has the supervision of the farm, seeing that crops are planted and harvested in season; placing under the care of competent employes, those patients who are able to assist in the farm work; seeing that buildings are kept in repair; stock properly housed and fed. These are a few of the many duties incumbent on a superintendent and which he is expected to perform to the best of his ability.

In this way, the institution becomes a veritable home for those confined within its walls: not merely a shelter for half starved beings: a source of revenue for the county; and a monument of outside glory for the superintendent.

When we view the uncertainties of life, it is no wonder that so many faint and fall by the wayside.

A host of dangers threaten the pathway. At any moment a best citizen may become as one of these. Then I beg of you do unto others as you would be done by.

Let us bear patiently the burden of supporting our unfortunate classes: let us keep ever in mind, "We are our brother's keeper.'

Though the sun shine brightly for us today, no one knoweth what the morrow may bring forth. Then would it not be well for us to consider the words of Matthew, 6th chapter, verses 19,20 and 21 ?
"Lay not up for yourselves treasures upon earth, where moth and rust doth corrupt, and where thieves break through and steal.
"But lay up for yourselves treasures in heaven, where neither moth or rust doth corrupt and where thieves do not break through nor steal.
"For where your treasure is, there will your heart be also."

## STATE PROVISIONS FOR EPILEPTICS

By Wm. F. Wegge, M. D.

The subject of state provision for epileptics is comparatively a new one in this country, but in Germany and in France separate care for this class of unfcrtunates has been practiced to a limited extent for nearly half a century.

In our country the state of Ohio has the distinction of being the pioneer in this movement; having established its hospital for epileptics at Gallipolis as early as 1881. About ten years later, New York state became interested and the result was the establishment of the Craig Colony for epileptics at Sonyea. Later Indiana, Massachusetts, New Jersey, Pennsylvania, Missouri, Michigan, Kansas and Texas entered the field and state provision for epileptics has become their established policy.

At the present time it is admitted quite generally that the necessity for state provision for these cases exists, and that the need is nearly if not quite as great as is that of caring for-
the insane, the feeble-minded and the other classes of unfortunates now in public institutions.

There has been some discussion of this subject in this state, but only to a limited extent. Some twenty years ago the essayist suggested that this state make proper provisions for its $\epsilon$ pileptics, and a number of years later the late Dr. Gordon came forward as a champion of the epileptic by contributing several papers on the subject. Still later the Milwaukee Medical Society appointed a committee with instructions to see what could be done in the way of having this state adopt the policy of state provision for them, but owing to the fact that there were so many demands upon the state treasury at that time on account of the destruction of the Capitol building at Madison, it was thought to be not wise to push the matter at that time.

You will no doubt remember the reading of an able paper on the subject by Dr. Richard Dewey at your last meeting. It was furnished at the earnest solicitation of one of your oldest members, Mr. Geo. W. Mayhew ; to whose untiring interest in the cause of the epileptic I am able to testify. However, Wisconsin has not been prepared to take up the question seriously up to the present time; but has continued in its failure to consult its own interests as well as the interests of this class of defectives. As it is, some of the insane epileptics are being cared for in the hospitals and asylums for the insane, where they form an undesirable and disturbing element, while some of the feeble-minded epileptics are housed at the home for the feeble-minded at Chippewa Falls.

The number being thus cared for is comparatively small and few who are familiar with the needs of this class would contend that they are being cared for in proper surroundings and under proper conditions. It is a matter of experience that epileptics get along best in communities composed of members of their own class.
There are many reasons why the state should provide proper care for its epileptics, and a number of them will occur to a majority of intelligent people who care to give the subject some thought. One is the limiting of the number of the offspring of these unfortunates. It is a quite generally accepted belief and this is based upon facts of experience, that epileptics are particularly liable to transmit a hereditary taint to
their off-spring, as well as frequently being themselves the off-spring of parents capable of transmitting a hereditary taint. Thus it becomes evident that segregation is an object desirable of attainment, and this is most readily secured by placing the members of this class in colonies where the sexes are separate.

Again those of you who are acquainted with families so unfortunate as to count an epileptic among its members will have observed the fact that such families as a rule do not progress. They are not as successful, neither are they as aggresive in the struggle for existence as are other people of the same class, less unfortunately situated. The epileptic member of the family usually is incapable of providing for himself and thus has become a burden upon the others. The result is that not unfrequently the unproductive epileptic takes up so much of the earnings of the family for his support as to keep them all in a more or less impoverished condition, and in a number of instances that have come to my knowledge they have been the cause of such families becoming public charges. No doubt the discouragement incident to carrying the hopeless load, in addition to the social restrictions and frequently of the social ostracism in which members of such families share to some extent with the epileptic member is a factor in bringing about the result indicated.

Now, if these families could be relieved of the burden which is hampering their progress and tends to make them paupers, the public would naturally be gainers. This end is best accomplished by placing the epileptic members of such families in colonies where experience shows they may become at least partly self sustaining in many instances. Furthermore; the state is interested in the prevention of crime. Four per cent of epileptics as statistics show are guilty of crime. Unfortunately the epileptic is potentially at least, a criminal. The public at large has a right to demand that it be safe-guarded against this dangerous element; just as the epileptic should be guarded against himself in a manner which takes due notice of his unfortunate condition.

In view of the present almost hopelessness of cure of these cases, it becomes the duty of the state in its own interests to try to discover a means of cure from this malady. The study of large numbers of cases by competent men may reasonably
be expected to lead to such a discovery, or at least to an improvement in the results of the treatment of these cases. This can best be attained by placing them in colonies having proper facilities for study and observation.

Every state ought to bear its share of the cost of this study and investigation, and I assert that Wisconsin has not the right to shirk its duty in this respect as it is now doing.

I believe it to be unnecessary to pursue this part of the subject further, by urging the humanitarian grounds for state provisions for epileptics. They must appear to every right thinking individual who will study the conditions under which epileptics in their own neighborhood exist.

I have repeatedly referred to a colony for epileptics as being the proper place for the epileptic. It is well to understand clearly that when we speak of a colony for epileptics we refer to the modern institution to which this term is applied, and which is sanctioned by long continued usage. It consists of groups of buildings arranged and grouped in such a manner as to facilitate classification with special reference to the nature and needs of different cases; some are large and some are small; some are closely grouped while others are more scattered, but all are placed upon one tract of land and are under one management.

The first colonies for epileptics were designed only for the care and treatment of the so-called sane epileptics. The insane and more troublesome cases and those of a low grade of mental development were excluded. In the course of time, it was found that it was rather difficult to draw the line between these classes and that in spite of the greatest care exercised in selecting cases, many were admitted who for various reasons were not fitted for residence in a free colony. and yet some provision had to be made for them. This resulted in additional buildings being erected which owing to the needs of this class had to be more closely grouped, and had to be arranged on different lines, and thus assumed more institutional features. The continual addition of new groups has finally resulted in what is still called "A colony," but which as a matter of fact is something quite different from the original idea of a colony.

At the present time it is quite generally considered to be desirable to provide for all classes of epileptics in the same
institution, and this is apparently becoming the prevailing practice. New York is still hampered by its laws in relation to its colony for epileptics at Sonyea. These laws provide that only sane epileptics be admitted to this institution, something which it has been found, and which every one familiar with epilepsy knows is not practical. They are regarded as serious handicaps to the efficiency of the colony by the present superintendent. There are some who believe that the epileptics and the feeble-minded present so many points of common interest, that both classes ought to be cared for under one management in an institution admitting separation into the two classes.

Then there is another group of men of ability and experience who favor keeping the low grade feeble-minded epileptics and also the very demented epileptics at the homes for the feeble-minded. Personally I am unable to see any particular advantage in this plan, especially not if it is decided to have a separate institution for epileptics only. On the other hand it does not appear to me as being particularly objectionable.

In view of the fact that Wisconsin now has an institution for the feeble-minded, the capacity of which is about as great as it is advisable to place under one management, and the arrangement of which precludes successful colonization of epileptics in connection, with it along modern lines, it appears to me that it must of necessity become its policy to provide for the separate care of its epileptics in a separate insitution.

While considering the establishing of such an institution, it would be wise to take advantage of such experience as may have been gained by other states that already have made provision for state care for epileptics. To this end I have from time to time paid some attention to this subject and have tried to study the progress made in this line of work. From this study I have gleaned the following:

It is the aim of the modern institution to supply as great a diversity of occupations for its inmates as possible, but in view of the fact that work in the open air appears particularly beneficial to these patients, the farm and the garden offer the most valuable variety of labor. The monetary return also being greater, it offers a means of making the institution as nearly self sustaining as possible. For this reason it is deemed
desirable to have the institution placed on a tract of land of sufficient extent to contain one acre to one and one-half acres per inmate when the population of the institution shall have reached its full capacity. This large area of land also admits of the grouping of the buildings for the different classes of inmates in such a manner as to separate each group from all other groups. Classification is thus made easy, and effective separation of those that would prove harmful to others for various reasons is secured.

That the questions of accessibility to means of transportation, character of the soil, adaptability to the proper disposal of sewerage, lay of the land with a view to the proper grouping of buildings enter into consideration goes without saying. The groupings of buildings falls naturally into that of the administrative or central group with its office buildings, its laboratories, its hospital buildings for those requiring more than ordinary medical or surgical care, its schools, its chapels, etc.; and separate groups for each sex of the various classes, such as the insane, the low-grade patients and lastly those of the better mental class of cases or those fitted for the colony proper. As a matter of course, this requires a variety of buildings as to size and interior arrangement, tach building being particularly adapted to the class of cases it is intended to accommodate.

In planning such an institution the first step should be to determine the total number it is desired to provide for. It should not be too large and should be for not more than a thousand to twelve hundred patients.

The next step should be that of selecting a desirable location and the securing of a suitable tract of land, following this the selection of a suitable site for each group of buildings. That the central or administrative group should be the first to be erected follows naturally. The views as to which of the other groups should follow differ widely; some holding that the colony proper ought to be the next group to be erected, while others hold it to be a better plan to provide for those already in state institutions, i. e. the insane and the feeble-minded epileptics.

I am of the opinion that the latter plan would serve very well as it provides a sufficient nucleus for the institution.

Thereafter other groups and other buildings may be added as may appear necessary.

In conclusion may I hope that each of you will make a determined effort to secure recognition for a much neglected class of unfortunates? Your influence individually and collectively would be of great value in attaining this end.
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## PART I

## GARNISHMENT OF WAGES

## GARNISHMENT OF WAGES.

In Wisconsin, as in several states, any suit upon a contract may be begun with garnishment. In other words, the principal suit may be accompanied from the outset by an ancillary suit against any person, firm, or corporation indebted, or supposed to be indebted, to the defendant in the principal action. The ancillary action, although a separate suit, proceeds simultaneously with the principal action until independently dismissed, or until the conclusion of the principal action. The ancillary action, intended to tie up the property of the principal defendant found in the possession of a third party, is instituted by a garnishment summons, and hence the defendant in the supplementary suit is known as the garnishee defendant, or simply as the garnishee.

The common law does not recognize the right of a creditor to funds belonging to his debtor while they are in the hands of a third party. On the other hand statute law has in many states provided a very effective means by which creditors may procure the payment of their claims by third parties. This has been done by means of foreign attachment, or trustee process. Beginning originally with a device whereby a judgment could be collected by requiring a third party to hold goods belonging to the judgment debtor for the benefit of the judgment creditor; the statutes of a number of states have extended the principle so as to permit the trusteeing of goods in advance of the judgment -in fact upon the commencement of the principal action, and hence before the plaintiff has established the justice of his claim against the principal defendant. The burden of proof is practically imposed upon the defendant, because he must dispose of the claim of the plaintiff before he can secure the release of property belonging to him, but held by a third party. Garnishment thus grants the plaintiff process analogous to an execution,
and grants it before judgment. Such a remedy is out of harmony with all other provisions of the law of remedies. Where domestic attachment is permitted, it issues only upon a showing of fraud on the part of the debtor, or deliberate effort to defeat the collection of a judgment when rendered. Such attachment issues only upon plaintiff giving a bond to indemnify the defendant against injury suffered should the attachment be dismissed. Likewise a temporary injunction issues only upon a showing that irreparable damage will result to the plaintiff unless it is issued; and in that case also a bond is required. In Wisconsin no bond is required for a garnishment and plaintiff is not liable for damages for any injury to the defendant in case the garnishment is found to have been improper.

Garnishment is commonly employed to tie up wages of workingmen, although in rarer instances it is resorted to in order to catch other property, such as a bank account, goods held in storage or in transit, insurance benefits, and the like. An examination of a considerable number of dockets of justice courts in Milwaukee, however, shows that an overwhelming majority of garnishment actions results in reserving wages due from, but not yet paid out by, employers.

There have been strong reasons for liberally extending the facilities of creditors in the collection of their claims. Viewing the matter superficially, it appears obvious that the state should assist, by every legitimate means, in the easy collection of just debts. No legal process is more effective or prompt than gar. nishment. To law-makers, urged to consider the difficulty of collecting many claims, it doubtless has appeared as a very slight hardship, if any, to compel the defendant to incur the delay necessary to put the plaintiff to the proof of his claim, especially when considering the substantial hardship to the creditor unable to collect a just debt. The annoyance and embarrassment caused by the notification of the garnishee, or third party, was of course understood. So was the detention of the property. Yet these were regarded lightly because they seemed necessary incidents to the collection of just debts.

But the embarrassments and inconveniences are in many cases far from trivial. In the first place a garnishment undoubtedly injures the defendant's standing with the garnishee. An employer, for instance, is quickly prejudiced against a workman
who, it appears, does not pay his debts. He at once begins to have doubts as to his integrity and efficiency. Moreover the employer is annoyed by the necessity of answering the garnishment summons. Many of the large employers of labor discharge, or threaten to discharge, employees after several garnishments. Hence, to avoid threatened garnishment a wage earner will sometimes pay an unjust claim. The following routine notice of garnishment shows the not unnatural attitude of employers:-

Ohicago, Milwaukee \& St. Paul Railway Co.
Assistant General Superintendent's Office, Room 15, Union Depot.
Milwaukee, ............, 191...

Mr .
Sir:- Your wages have this day been garnished by.......... and .......... at Milwaukee. This suit is returnable before Justice O. E. Schwemer at 441 National Ave., ............ 191.. at $9 \mathrm{a} . \mathrm{m}$. You are hereby notified of said suit, and to take such action as may be necessary to protect your interests therein. The case should be settled before the return day unless you have a good defense. Three or more garnishments against an employe's record will be considered good cause for dismissal.

> Yours, etc.,

> A. J. Gamm, For. P. C. Eldridge, Ass't Gen'l Sup't.

In the second place, it is a much greater inconvenience to a workingman to have his wages held back for several weeks, than the mere loss of interest on the money. Of course if he is discovered to have justly and legally incurred the debt, no sympathy need be wasted upon him. But if it should prove that he is not liable for the debt on account of exemption, or that he never contracted the debt, or that the amount of the debt was over-stated, or that he had a valid offset, he has been subjected unjustly to real hardships. When it is considered that most wage earners live close up to their incomes, it is easy to appreciate the inconvenience occasioned by holding back their wages even for a short time.

It is commonly claimed, indeed, that the burden of a garnishment is so great that the defendant is usually driven to settle,
irrespective of the justice of the claim, and irrespective of his right of exemption. The law of Wisconsin allows a wage earner having a family dependent upon him for support, an exemption of his earnings to the amount of $\$ 60$ per month for three months preceding the service of the garnishment, but not exceeding $\$ 180$ in all. Unfortunately it is impossible to verify with accuracy the charge that this exemption is practically defeated by the operation of the garnishment law. A very large proportion of the garnishment cases begun are settled, but it is not possible to ascertain the circumstances under which they are settled. They may be settled because the defendants realize that they have no defense, or by voluntary adjustment, or because of the pressure of necessity. If for the last named reason, the exemption law may be practically defeated.

Whether or not the right of prior garnishment is commonly abused, and hence works hardships and injustice, depends of course largely upon the spirit in which justice is administered. If the justice before whom the garnishment case is brought is scrupulously careful to protect the defendant against illegitimate use of the garnishment action, the hardships entailed are reduced to a minimum. A careful justice will scrutinize the claim to satisfy himself that it is apparently regular and containing no items not warranting a garnishment action (such for instance, as liquor bills,* or usurious interest) ; he will inquire whether the ordinary means of collection have been fairly tried; he will above all take pains to learn whether there is plausible ground for presuming that the accused has enjoyed a greater income than he is entitled to reserve under his exemption privilege. In addition, it ought to be the universal rule for the justice to demand the full fees in advance, not only as a test of the good faith of the plaintiff and of his confidence in the strength of the case, but also to protect the justice from temptation or suspicion of temptation. The gravity of this suspicion comes from the fact that a judgment against the defendant carries with it an order for costs, and if the accompanying garnishment action has successfully tied up any money, the costs are first defrayed out of the money "caught" before the judgment is satisfied. On the other hand if no money is "caught" it is difficult to collect the costs from the plaintiff.

[^26]It untorturately appears to be the well-nigh universal practise of justices to demand of the plaintifi only the witness fee and "transportation" of the garnishee defendant to start the action, leaving the court lees to be assessed against the losing party 1 u the action. 'íhere is room here for collusion or a corrupt bargam between the plaintifi and the justice, the understanding Neing that, if tie paintifl loses, the costs will be cut or atogether remitied. Under such an agreement it is of course entirely possible that the delendant might be justly dealt with, but the justice wio in such a circumstance found for the defendant wotid be deciding adverseiy to his own interest as well as agamst that ol the piaintifi. in other words he would not be disinterested, and in case of any doubt might unconsciously lean townd the side of the plaintiit. 'lo avoid being misunderstood, it cannot be too emphatically dectared that there is little evi-dence-maded that there is rarely any ground even for sus-picion-that such Nagains are celinerately entered into by jusuces. It must ie admsted, however, that, in extremely rare instances, sach bargains have become notorious. Collusion of this sort is of couise pecuibarly vicious if entered into with a collecusil agency, or cther concern or individual having frequent occasion to collect debts through garnishment proceedings.

While there is no reason to suspect that collusion has actually existed except in extremely rare instances, it should be pointed out that the common practise among the justices, though they are apparently conscious of no wrong doing, has nearly the same effect as collusion would have. By not collecting fees in advance, and by failing to press claims for costs against plaintiffs, the justices not only lay themselves open to the accusation of prejudice, but also encourage dubious and frequent actions. When a single witness fee is the only outlay demanded, there is no strong deterrent to the instituton of actions, and when the justice is lax in collecting from a plaintiff "where no money is caught" he is practically extending an invitation to "call again." The failure to collect in advance is a natural but not an inevitable incident of the justice court system. It is natura, because the fees are regarded as the private emoluments of the justice, and it is not unnatural to regard it as the justice's business whether he collects a personal debt. Laxity, however, is not inevitable, for in view of the possible bias of justices, it
would be perfectly proper to enact that no suit in garnishment should be entertained before the full costs had been paid into the court. To make this effective it would be necessary to provide penalties for failure to conform to the law. The civil courts in Milwaukee are not subject to the above mentioned temptation because the judges are salaried, and the fees are public property. Hence fees are collected strictly in advance and the judges have no personal interest in the outcome of the suit. The difference in organization results in a reversal of at. titude on the part of the courts. The justices of the peace, whose fees depend upon the business that plaintiffs bring to them, instinctively sympathize with the creditor, while the judges of the civil court as instinctively sympathize with the defendant until the plaintiff has made out a clear case. That this difference of attitude is fully recognized is shown by the preference of plaintiffs for the justice courts. Although Chapter 544 of the Laws of 1909 provided for a practical abolition of justice courts in Milwaukee County, the decision of the Circuit Court (lately confirmed by the Supreme Court) that this law was unconstitutional enabled the justices to retain their commissions. Hence a plaintiff may bring an action in the civil court, or in any one of the justice courts, and the great majority of garnishment cases accordingly still go to the jus. tices. Even lawyers who on grounds of principle are most favorable to the civil courts prefer to start their actions in justice courts because they regard the justice as more prompt, more effective, and more inclined to find in their favor. It is clear that for the state as a whole the establishment of civil courts could not be a solution of the possible abises in justice courts under garnishment proceedings. Although the Supreme Court has sustained the objections to Chapter 544, chief of which is that it attempts by indirection to practically abolish the constitutional office of justice of the peace, it is argued that there could be no difificulty in a new act depriving justices in cities of the first class or counties of over 250,000 inhabitants of their jurisdiction in garnishment cases. It is true that such an act might have substantially the same effect as Chapter 544 of the laws of 1009 , since from one-third to two-thirds or three-fourths of all actions in Milwaukee justice courts are begun with garnishment, and these courts would scarcely be profitable to the
incumbents if garnishment actions were taken away. But garnishment rests entirely upon a statute enacted since the constitution was adopted, and it is claimed that what the legislature has given, it may take away, if it deems it expedient. In passing upon the constitutionality of the law of 1909 the supreme court waived this question, but the opinion appears to intimate a doubt as to the validity of such a distinction between "the necessities and interests of such communities" (Milwaukee city and county) and tho e of other communities.

Civil courts may gradually supplant the justice courts in the other large cities of the state, but cannot be expected to do so in smaller places, so that it is at least desirable to legislate thar justices shall actually collect fees in advance, even if no other action is taken. The fact that the present laxity in this regard originated innocently enough is no warrant for allowing it to continue. It is probable that the present custom arose from a good natured indulgence, fortified by the instinctive feeling that the plaintiffs were acting in good faith, and were deserving of sympathy and, in many cases, of assistance. On its face, this indulgence was at the expense of the justice's own pocketbook. If no money was caught, the costs were simply not collected; if the plaintiff and defendant were disposed to settle the case amicably out of court, they were encouraged by the agreement of the justice to cut the costs. But when șuch concessions became habitual, it was difficult to refuse them. Hence even if a justice desired to do so, he could not be strict in this regard without inviting creditors to forsake his court in the expectation of negotiating more satisfactorily with some other justice. It is probable, therefore, that the justices would welcome a statutory requirement that fees should be collected in advance. Of course, if a case is settled before it comes to trial, justice does not require as heavy costs. This is recognized by the civil courts, where instead of charging for the court's fees $\$ 1.50$ each for the principal action and the garnishment action, the $\$ 3.00$ is divided into $\$ 1.00$ to start each of the actions, and $\$ 1.00$ for the return day, the latter fee not being payable unless the case actually comes to trial. This arrangement should be taken into account in legislation for a mimimum scale to be paid in advance.

The only objection likely to be raised against requiring fees
in advance is that the law could be nullified by a system of rebating, the judge returning a whole or a part of his fees in the event of the failure of the plaintiff's action for any reason. This, however, if in pursuance of an agreement or an understanding, would be a corrupt bargain, and it is not deliberate dishonesty but unconscious bias that should cause concern.

A more radical proposal is that garnishment should be reduced to its original function as a remedy in aid of executionthat is after a judgment has first been obtained,-and in cases of alleged fraud, attempted fraud, or concealment. The arguments against such a change are mainly three:

1. That it would be difficult to catch anything after judgment.
2. That it would result in a contraction of credit.
3. That men would be careless about a judgment, while they would contest a case if garnishment were involved.

It will be observed that the first, which is a creditor's argument, and the third which is a debtor's argument, are virtually contradictory. A judgment once secured stands good for 'six years, unless sooner satisfied, and if a transcript is taken to the circuit court, it stands for ten years. Hence a garnishment in aid of execution would be as effective as a garnishment simultaneous with the principal action, if, as the debtor complains, a mere judgment has no more effect on a man than a dun. But the creditor complains that the debtor respects a judgment more than an ordinary bill and hence after judgment would take pains not to allow any of his property to lie where it could be gamished. A discussion of this issue on a priori grounds would be fruitless. But in Illincis, Missouri, and other states where garnishment requires either a prior judgment or a ground of attachment, experience seems to confirm the debtor's argument, namely, that men are careless of a judgment which involves no garnishment or attachment. Of course those who conscientiously try to pay their bills would not be likely to allow a suit to go against them by default. It would seem, therefore, that the proposed change in the law would affect most the very persons whom it is desirable to affect-the "deadbeats." The innocent would not suffer, as they do under the present law, and those who try to dodge claims would be reached more easily than at present, because they would be inclined to allow judgment to be taken against them by default. The creditor upon getting judgment would only have
to wait twenty days in order to deprive the debtor of the right of appeal, after which he could easily recover the debt by repeated gainishments. The debtor who now allows property to remain in the hands of a third party is in as certain peril of immediate garnishment under the present law, as he would be after judgment under the proposed change. Hence the dishonest debtor would profit nothing by the change.

The argument as to the contraction of credit practically stands or falls upon the answer to the preceding question. If it were true that it is no more difficult to recover on a garnishment action after judgment than at the commencement of the suit, there could be no motive for merchants to contract their credit, as far as legal remedies influence them. Here, again, the case of Chicago is instructive. Nowbere are there more elaborate and extensive credit systems than in that city, notwithstanding the fact that it is impossible to garnish before judgment except on grounds of attachment. There are apparently at least two very strong reasons for this. In the first place there are open to creditors an abundance of other legitimate remedies against dishonest debtors. The second, and by far the more important, explanation is to be found in the fact that in retail business, as in wholesale trading, banking, stock exchange transactions, and practically all commercial affairs, credit depends fundamentally not upon legal safeguards, but upon the confidence of the creditor in the honesty of the debtor. It is true that this confidence is oftener misplaced in retail trade than in other lines of husiness, yet it does not necessarily follow that it is imprudent to extend credit with less caution in retail trading than is customary in large transactions. Though the number of risks assumed is large, the aggregate of the risks is comparatively small, and there is an element of safety in the wide distribution of the aggregate among numerous debtors. It is an oper question whether or not widespread credit is advantageous to the working classes; but the disadvantage comes, if at ali, from the scductive eare with which purchases can be made, through the eredit system, beyond the means of the purchasers, rather than through the shifting upon the shoulders of honest debtors, of the burden of the unpaid debts of the di honest; for the intelligent tradesmen, who ultimately succeed, will not extend credit where experience indicates that it is imprudent to assume the risk.

There is one class of creditors who might suffer, if they were unable to garnish at the beginning of the principal suit. This class consists of boarding and lodging-house-keepers. Dockets examined in Milwaukee, especially those of the south side justices, reveal the fact that many of the garnishment suits are brought against boarders or lodgers who have suddenly left without paying their rent or board bills. This practise is very common among certain immigrants, especially the Polish. Some men continually dodge their debts in this way, taking one alias after another, thus making identification very difficult in many cases. For this reason, it might work a general hardship if the creditor of a lodger or boarder were obliged to procure a judgment before garnishing, since before the judgment had been secured the defendant might have withdrawn his pay in full, and disappeared. Therefore, if a change is made in the present law, it would be well to make a special provision for debts of this nature.

The following table showing the results of an investigation of the dockets of certain justice courts in Milwaukee, covering about half the calendar year of 1909, reveals many points of interest in connection with this inquiry. Thus it will be seen that garnishment actions constitute the chief business of justice courts. Although the justices have jurisdiction in "straight", suits, replevins, attachments, unlawful detainer actions, and "state" (or bastardy) cases, these combined appear to be decidedly fewer than the garnishment actions alone. Before one justice, the garnishment actions were only one-third of the total. In two courts, more than half, and in a fourth, nearly four-fifths of the cases were begun with garnishments. In the civil court, however, only about one-fifth of the cases were begun with garnishment, although the jurisdiction of the justice courts and the civil courts are concurrent. All of the above estimates were based upon tests covering the first half of the year 1909, the double action in each garnishment case being counted as a single suit. The garnishees were with extremely rare exceptions employers of the principal defendants. The heavy preponderance of garnishment actions in the petty courts not only clearly indicates the relative importance of this class of actions, but also establishes a fair presumption,-though indeed not proof,--that garnishment actions are too lightly and easily brought.

| Court. | Proportion of garnishment cases. | No. of garnishment cases noted. | - Object of the Debt. |  |  |  |  |  | Service on Principal DefendANT. |  | Cases Not Tried. |  |  | Sworn away. | JUdGments. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  | Not |  |  |  | - |  |
|  |  |  |  | $\begin{aligned} & \text { ở } \\ & \text { º } \\ & \text { ¢ } \end{aligned}$ | $\begin{aligned} & \stackrel{3}{0} \\ & \stackrel{0}{0} \\ & \stackrel{0}{0} \end{aligned}$ | ¢ | $\begin{aligned} & \dot{B} \\ & \text { O. } \\ & \text { H } \\ & \hline \end{aligned}$ | $\dot{0}$ ¢ ¢ 0 | $\begin{aligned} & \text { Per- } \\ & \text { sonal. } \end{aligned}$ | Publication. | Settled. | $\begin{gathered} \text { Dis- } \\ \text { miss- } \\ \text { ed. } \end{gathered}$ | con- <br> tinued on docket. |  | $\underset{\substack{\text { plain- } \\ \text { tiff. }}}{\text { To }}$ | plain- <br> tiff by default. | To defendant. | To defendant by default. |
| A | 55\% | 159 | 27 | 5 | 7 | 6 | 3 | 8 | 43 | 27 | 42 | 25 | 59 | 5 | 23 | 11 | 5 | 2 |
| B | 58 | 99 | 26 | 15 | 2 | 8 | 1 | 5 | 28 | 68 | 1 | 8 | 35 | 5 | 44 | 25 | 6 | 1 |
| C | 78 | 81 | 9 | 27 | 1 | 5 | 6 | 2 | 38 | 35 | 7 | 5 | 3 | 13 | 44 | 27 | 9 | 1 |
| D | 33 | 201 |  | not | giv | en. |  |  | - 39 | 37 | 151 | 1 |  | 10 | 37 | 19 | 2 | 1 |
| E | 21 | 77 | 14 | 4 | 1 | 5 | 1 | 3 | 52 | 15 | 9 | 45 | 8 |  | 12 | 3 | 3 | 2 |

Tt is true that the wage earner is protected by numerous provisions against abuse of the process, but in practise these are of little benefit to him. In the first place he may plead a liberal exemption, if he has a family dependent upon him, but until the garnishee is formally released by the court, the defendant's wages are effectually tied up, unless the employer is willing to pay at his own risk, and this is rarely the case. Again the defendant is entitled to demand that the plaintiff put up security for costs, but unless a lawyer is retained, this demand is not likely to be made. Finally, it was provided by a statute of 1909 , that the principal defendant could secure the release of the garnishce, and hence of the wages due and payable, by furnishing a bond, but of course very few wage earners are able to furnish a bond.

Probably the greatest hardship under the present garnishment statute is that which results from the long period during which wages are tied up. At present the summons is returnable within 6 to 15 days. In practise it is necessary to make the summons returnable in not less than 7 or 8 days, in order to give the constable or sheriff time to serve the summons and yet give the defendant the six days notice which is required. Therefore, a wage earner who wishes to defend a suit must suffer his wages to be tied up not less than a week. In practise the justices consult the convenience or preference of plaintiffs, and the summons is most often made returnable in 14 days.* Plaintifis undoubtedly frequently selcet as late a date as possible, for the purpose of embarrassing a debtor by depriving him of the use of his wages, and so forcing him to settle. If the constable fails to find the principal defendant, service by publication becomes necessary, and this necessitates an adjournment of not less than 20 days. There is a prevalent feeling that constables do not always exercise all of the zeal that they might in obtaining personal service. It must be remembered, of course, that it is not always easy to get personal scrvice upon debtors, because of the obscurity, the occupations, the habits, and the environment of many debtors, and because debtors not infrequently contrive to avoid personal service for the purpose of postponing jurlement. Dehtors anxious to evade their just obli-

[^27]gations find it advantegeons to postpone service of legal process. There are undoubtedly many cases in which it is practically impossible to reach the principal defendant in any other way than by publication. Nevertheless, a comparison of the dockets of several courts shows plainly that some officers are much more successful than others in sccuring personal service. In two courts personal services and cervices by publication were nearly equal in number, in one personal were nearly twice as numerous as publication services, while for the civil court, the sheriffs suceceded in serving personally more than three times as many defendants as were served by publication. Delay, which is desired by the dishonest debter, is nearly always a serious injury to an honest defendant.

An examination of that part of the accompanying table relating to cases not tried will readily show that there is little miformity among the justices' dockets in the way in which they reeord cases not actually brought to trial. Some justices do not enter such cases at all, others enter but do not continue them, others enter in full until the case is disposed of, and then abruptly close the case with the word "settled," or "dismissed." Hence it would be unsafe to draw conclusions as to the proportion of the cases settled out of court, from the proportion of such cases found in all the dockets examined,--but in three courts in which each case appears to have been docketed as sona as an affidavit was filed, the ratios of cases settled, dismissed, or dropped to cases brought to judgment were respectively 126 to 28,152 to 39,62 to 15 , or an average for the three of 340 to 82 . In other words it appears that $80 \%$ of all of the garnishment cases entered and not sworn away on an affidavit of projudice are disposed of without trial. It is of course impossible to ascertain the terms of settlement, or the grounds of non-continuance or dismissal. Full payment of claim, partial payment, various compromises, entreaty, failure to "catch" anything, and cxemption rights are all grounds for disposing of cases before judgment. The dockets rarely show the motives of plaintifis in allowing cases to drop, and they even less freequently show the considerations which induced defendants to settle, lut it is inconceivable, especially in view of the strong popular impression, that of the $80 \%$ of cases that are settled without joinder of issue, there are not a fair proportion that are
settled simply because of the pressure of necessity imposed upon the debtor whose wages are tied up.

The argument for limiting the scope of the garnishment remedy is very substantially strengthened by an examination of the laws of other countries and particularly those of other states, with reference to the protection of wage earners with families, and of debtors generally, against garnishment.

England and Germany, our chief industrial competitors, grant complete exemption of all wages of manual wage earners (who are heads of families). Norway and Brazil also grant complete exemption. In our own country there are six states which practically do the same. Arkansas allows no garnishment for a debt of less than $\$ 200$, and railway companies cannot be made garnishees (Ark. Digest, 1904, sec. 3695). Florida exempts wages for personal service or labor of a head of a family (Fla. G. S. 1906, sec. 2530). Georgia exempts all daily, weekly, or monthly wages of all journymen, mechanics, and day laborers in the hands of employer or others (Ga. code 1895, sec. 4732). Lonisiana exempts wages for personal service, but this is interpreted by the Louisiana court to apply only to unskilled manual labor, and artisans are not exempt (Rev. Laws 1904, sec. 1696. State ex rel I. X. L. G. Co. v. Land, 1902, 108 La. 512). Missouri exempts from garnishment all wages of railway employees, except for sums of over $\$ 200$ (Mo. R. S. 1909, sec. 2427). Practically no actions for debts of wage-earners are for more than $\$ 200$, and it is generally, if not universally, the case that railway employees are the principal class of workmen elsewhere subject to garnishment, as railways pay high wages and are accustomed to hold back two weeks' pay continuously, making a garnishment almost surely successful provided a judgment is secured. Moreover, in Missouri each head of a family may hold exempt wages to the amount of $\$ 300$ (less $10 \%$ ) in lieu of other exempt property, and there can be no garnishment except for $10 \%$ of his wages earned during the last thirty days (Rev. Stat. 1909, sec. 2183, 2415). Hence it will be seen that while Missouri's laws do not cover all possible cases, they must make the garnishment of wages very rare. Pennsylvania exempts wages of laborers in the hands of employers (Purdon's Digest, sec. 144). Texas exempts all current wages from attachment, garnishment, or execution. (Const. 1876, Art. 16, Sec. 28, Civil St. Sec. 2395).

For the purpose of comparing procedure in garnishment in the several states, it will be convenient to classify the states in three groups. By far the largest group consists of those states which require either an affidavit of attachment or a judgment before garnishment is available. Another group of six states and one territory includes those which do not require an affidavit of attachment, but which do require the filing of a bond by the plaintiff before the garnishment summons or writ is issued. Finally, in a group of twelve states, Wisconsin being among the number, plaintiffs may freely garnish without incurring any liability for damages resulting from wrongful garnishment.

Within the first group, the grounds of attachment vary considerably. Thus, by reference to column 3 in the appendix of this bulletin, it appears that Delaware and Lousiana allow only non-residence and absconding as grounds of attachment and hence of garnishment. It appears that Georgia, Kentucky, North Carolina, Tennessee, and Virginia, recognize as grounds of attachment the concealment or removal of property as well as non-residence and absconding. In addition to the grounds already named, fraudulent contraction of the debt is recognized by the District of Columbia, Illinois, Indiana, Iowa, Maryland, Mississippi, Nebraska, New Jersey, New Mexico, New York, Ohio, Pennsylvania, South Carolina, Utah, West Virginia, and Wyoming. Very broad grounds of attachment are recognized in California, Colorado, Idaho, Missouri, Montana, Nevada, and Oregon.

In the seven states last named, a plaintiff would have little difficulty in finding a ground of attachment, which would enable him to garnish. But it would be necessary to furnish a bond. These states, therefore, differ in the form, rather than in the substance, of their provisions for garnishment from the states in the second group which do not require a ground of attachment, but which require a bond of the garnishing plaintiff. The states in the second group are Alabama, Arizona (Terr.), Arkansas, Kansas, Oklahoma, Texas, and Washington.

The last group, offering no safeguard against improper garnishment, includes the six New England states, Florida (which, however, totally exempts all wage earners), together with Michigan, Wisconsin, Minnesota, North Dakota, and South Dakota.

The degrec of protection enjoyed by wage earners against unfair garnishment of course depends upon the amount of exemption as well as upon procedure, and within each of the three groups as here arranged, the states differ widely in the amount which may be protected against execution. But owing to the varying terms in which exemptions are stated, it is difficult to arrange the list of states in the order of the generosity of exemption allowed to debtors. (A careful summary of wage cxemption laws, prepared by Margaret A. Schaffner, has been published by the Wisconsin Free Library Commission).

It is commonly assumed that the Wisconsin exemption is liberal. At first glance it so appears. But it is not in fact liberal as compared with many states. It allows no more than $\$ 60$ a month nor more than $\$ 180$ in three months and this exemption is rendered still less liberal by virtue of an arrangement, not common in other states, which requires a debtor to include the wages of his minor children in the exemption which he may claim. Any carnings of the debtor and his children combined which excoed $\$ 60$ per month or $\$ 180$ in three months are subject to garnishment. In the typical wage earner's family, therefore, the exemption is easily covered.

The bill herewith submitted, embodying the reform in procedure advocated in this bulletin, has been drafted by Attorney George H. Katz of Milwaukee, who suggested this investigation.

## (Additions are in Italics.)

An Act to Amend Proceedings in Garnishment in Justice Court and in Civil Court.
The people of the state of Wisconsin, represented in the senate and assembly, do enact as follows:
Section 1. Section $3 \dot{5} 97$ of the Wisconsin Statutes of 1898 is hereby amended to read as follows:

Section 3597. A justice of the peace shall issue a summons returnable in three days in every case where he is satisfied from the facts and circumstances stated in an affidavit of the plaintiff or other competent witness that the plaintiff has a subsisting and unsatisfied cause of action upon a contract, express or implied, against the defendant and that the defendant is a non-resident
of the county or is about to remove from the county with intent not to return thereto to reside, or that the defendant is about fraudulently to remove, convey or dispose of his property so that the plaintiff will be in danger of losing his debt or demand unless such summons be granted. Whenever an affidavit shall be filed in garnishment proceeding pursuant to section 3716, of the Wisconsin statutes, as herein amended, the justice shall issue, in the principal action, a summons returnable in three days as herein provided.

Section 2. Section 3716 of the Wisconsin statutes of 1898 is hereby amended to read as follows:

Section 3716. Whenever an action shall have been commenced, by summons, returnable in three days under the provisions of section 3597 of the Wisconsin statutes of 1898 , as amended herein, upon contract, express or implied, or by warrant of attachment in a justice's court, if the plaintiff or some one in his behaif shall make and deliver to the effeex hating jus. tice issuing such summons or attachment an affidavit stating that the affiant has good reason to believe that some person (naming him) is indebted to the defendant or has personal property in his possession or under his control belonging to the defendant, or when there is more than one defendant to any or either of them, not by law exempt from sale on execution, and containing a further stalement. that deponent knows or has good reason to believe either,

1. That the defendant is a foreign corporation, or if created under the laws of this state, that all the proper officers thereof on whom to serve a summons do not exist, are non-residents of the state or cannot be found;
$\therefore$. That the defendant is not a resident of this state;
2. That the defendant has absconded or is about to abscond from this state;
3. That the defendant has removed or is about to remove any of his property out of this state, with intent to defraud his creditors;
4. That the defondant resides in any other county and more then one hundred miles from the residence of the justice;
5. That the defendant contracted the debt under fraudulent representations;
$\%$. That the defendant so conceals himself that the process of summons cannot be served upon him;
6. That the defendant has fraudulently conveyed or disposed of or is about fraudulently to convey or dispose of any of his property or effects so as to hinder or delay his creditors;
7. That the action is brought against the defendant as principal upon an official bond to recover money due to the state or some county or other municipality therein;
8. That the defendant has incurred the indebtedness upon which suit is brought in the principal action, being for board or accommodation at a hotel, inn or boarding house, with the intent to defraud the proprietor or manager thereof, there being no express agrecment between defendant and such proprietor or manager for credit to be given for such board or accommodation; or that defendant has incurred such indebtedness by obtaining credit at a hotel, inn or boarding house by a false show or pretence; or that defendant after obtaining credit or accommodation at such hotel, inn or boarding house has absconded or surreptitiously removed his baggage therefrom without paying for his board or accommodation;
and demand that he shall summon such person as garnishee such effeer: justice shall summon such person in writing to appear before the justice, on the return day of such summons or attachment, to answer touching his liability as garnishee. Such affidavit may be amended with the same effect as is provided in section 3702.

Section 3. Section 3722 of the Wisconsin statutes of 1898 is hereby amended to read as follows:

Section 3722. If the plaintiff shall not be satisfied with the answer of the garnishee, or if either party shall desire a trial the justice shall enter that fact on his docket and the case shall forthwith be proceeded with and tried upon the issue formed by the affidavit and answer, as in other actions commenced by summons, and if upon the trial of any such issue property or effects, not by law exempt from seizure upon attachment or execution, shall be found in the hands of the garnishee or it shall be found that he was indebted to the defendant and that such indebtedness was not exempt, the justice or jury shall assess the value thereof and the garnishee shall hold the same subject to the further order of the justice; but if, upon such trial, it shall be found that the property or effects in the hands of the garnishee or his indebtedness to the defendant is exempt or if the issue formed by the
affidavit and answer, as to any of the defenses in the answer contained, be found in favor of the defendant, the justice shall forthwith enter an order in his docket discharging the garnishee; and if it shall be found that any part of such property or effects or such indebtedness is exempt although the issue formed by the affidavit and answer, as to other dejenses therein contained except that setting forth said exemption be decided in favor of plaintiff, he shall enter an order in his docket discharging the garnishee from all liability to the plaintiff as to the property or effects or the amount of indebtedness so found to be exempt. Either party may appeal from such finding and order to the court to which an appeal might be taken from a judgment in the action, but such appeal must be taken separately from any appeal from such judgment.

Section 4. Section 3723 of the Wisconsin statutes of 1898 is hereby amended to read as follows:

Section 3723. The defendant in the original action may appear and defend the proceedings against the garnishee upon the ground that the indebtedness of the garnishee or any property held by him is exempt from execution against such defendant or for any other reason is not liable to garnishment, or upon any ground upon which a garnishee might defend the same, and may participate in the trial of any issue between the plaintiff and the garnishee for the protection of his interests. And the garnishee may, at his option, defend the principal action for the defendant, if the latter does not appear therein; but such defense by a garnishee shall not preclude the defendant from any right he may $r$ ave to a new trial in such action under the provisions of section S666 and 3667. And the garnishee, if he has property in his possession or under his control belonging to the defendant, may further answer that said property is exempt from execution, or defend on any of the grounds that the defendant might defend the same, but said garnishee shall not be compelled to set up said exemption defenses and shall in no manner be held liable to said defendant or to any other person for failure to set up such exemption defenses.

Section 5. Section 27 of chapter 549 of the laws of 1909 is hereby amended to read as follows:

Section 27. 1. Whenever any action shall have been commenced by summons returnable in three days under the pra-
visions of section 3597 of the Wisconsin statutes of 1898, as herein amended, upon contract, express or implied, or by warant of attachment in said civil court, or shall be pending therein, if the plaintiff or some one in his behalf shall make and deliver to the clerk or any judge of said court an affidavit stating that the affiant has geod reason to believe that some person, (naming him) is indebted to the defendant, or has personal property in his possession or under his control belonging to the defendant, or when there is more than one defendant, to any or either of them not by exempt exempt from sale on execution, and containing a further statement that deponent knows or has good reason to believe either,

1. That the delendant is a foreign corporation, or if created under the laws of this state, that all the proper officers thercof on whom to sove a summons do not exist, are non-residents of the stale or caninot be found;
2. That the defendant is not a resident of this state;
3. That the defendant has absconded or is about to abscond from this state;
4. That the defendant has removed or is about to remove any of his properly out of this state, with intent to dejraud his creditors;
5. That the defendant resides in any other county and more lhan one fundred miles from the residence of the plaintiff;
6. That the defendant contracted the debt under fraudulent representations;
7. That the defendant so conceals himself that the process of summons cannot be served upon him;
8. That the defendant has fraudulently conveyed or disposed cf or is about fraudulently to convey or dispose of any of his property or effects so as to hinder or delay his creditors;
9. That the action is brought against the defendant as princtis al upon an official bond to recover money due the state or some county or other municipality therein;
10. That the defendant has incurred the indebtedness upon which suit is brought in the principal action, being for board or accommodation at a hotel, inn or boarding house, with the intent t. dofraud the proprietor or manager thereof, there being no express agreement between defendant and such proprietor or manager for credit to be given for such board or accommodalion; or
that defendant has incurred such indebtedness by obtaining credit at a hotel, inn or boarding house by a false show or pretence; or that defendant after obtaining credit or accommodation at such hotel, inn or boarding house has absconded or surreptitiously removed his baggage therefrom without paying for his board or accommodation;

Thereupon said clerk or judge shall issue a summons to such person to appear before said court on the return day of such summons or attachment, to answer touching his liability as garrishee. Such affidavit may be amended with the same effect as is provided in section 3702 of the statutes.
2. Such summons shall be issued under the seal and be returnable before said court, shall be signed by the clerk or a judge thereof, shall be otherwise substantially in the form provided by section 3717 of the statutes and shall be served by a deputy sheriff of said Milwaukee county. All proceedings in garnishment in said civil court, except as herein otherwise provided, shall be governed by the provisions of chapter 158 of the statutes, relating to garnishment proceedings in courts of the justices of the peace, as amended by this act.

## APPENDIX.

The following table was prepared for this bureau under the direction of Prof. W. U. Moore of the Law School of the University of Wisconsin.

| State. | Statutes. | Showing. ${ }^{1}$ |  | Remarks. |
| :---: | :---: | :---: | :---: | :---: |
| Alabama., ...... | Code 1907. Secs. 4300-05. 4312-13, 4695, 4700. | None. | 4303 |  |
| Arizona........... | R. S. 1901, Sec. 363. | None. | 364 |  |
| Arkansas......... | Digest 1904, Secs. 3694-5. | None. | 3694 | 3695. No garnishment for $\$ 200$ or less, and a railway company not to be garnishee. |
| California........ | $\begin{gathered} \text { Code of C. P. P., } \\ \text { 1901, Secs. } 537-9, \\ 543,555,866-9 . \end{gathered}$ | 5, 11. | 543 |  |
| Colorado.......... | R. S. 1908. Secs. 3766-7, 3777-8. | $\begin{gathered} 1,2,3,4,5,6,8, \\ 9,10 . \end{gathered}$ | 3777 |  |
| Connecticut...... | R. S. 1902, Sec. 880. | None. |  | C. 95, laws of 1903, exempts $\$ 25$ from attachment as well as execution. |
| Delaware.......... | Stat. Laws, Del., 1893, Ch. 104, Secs. 1, 2, 4, 19. | 1, 5, 6. | 2, 4 | Garnishment available only for debts of over $\$ 50$. |
| Dist. of Columbia | Code, 1906, Secs. 445-7, 456, 468. | 1, 2, 3, 4, 5. 6. | 456 |  |
| Florida...... .. .. | $\text { G. S. } \underset{2130,2144 .}{1906, \text { Secs. }}$ | None. |  | 2530. Wages for personal service or labor of head of family are exempt. <br> 2145. Garnishee not to retain more than twice the amount of the claim. |
| Georgia.. | $\begin{array}{ll} \text { Code 1895, } & \text { Secs. } \\ 4510-11, & 4549, \\ 4732 . & \end{array}$ | 1, 2, 3, 5. | 4549 | 4732. For all journeymen, mechanics, and day laborers, daily, weekly, or monthly wages are exempt in hands of emplovers or others. Attachment of goods for purchase money, but cannot be levied by garnishment. |
| Idaho.............. | $\begin{aligned} & \text { Code 1908, Secs. } \\ & 4302,4307 \text { sub. } 5, \\ & 4308 . \end{aligned}$ | 5, 11. | $\begin{aligned} & 4307 \\ & \text { sub. } 5 \end{aligned}$ |  |

Note 1. Key to numbers in this column.

1. Absconding.
2. Concealment of property.
3. Removal of property.
4. Fraudulent contraction of debt.
5. Non-residence.
6. Foreign corporations.
7. To recover money due the state, etc., on a bond.
8. For work, labor or services.
9. For goods which should have been paid for on delivery
10. For farm products, provisions, rent, furniture, clothing, fuel.
11. Contract for direct payment of money without security.

Note 2. Where garnishment before judgment is incidental to attachment, the section showing this fact is given. Otherwise the column shows the section which requires a bond before the institution of garnishment action. The bond is commonly required for the protection of resident defendants only.

| State. | Statutes. | Showing. |  | Remarks. |
| :---: | :---: | :---: | :---: | :---: |
| Illinois........... | Annotated Stat. 1896. Chap. 11, par. $1,2,4,15,21$. | 1, 2, 3, 4, 5. | Ch. 11. par. 21. | , |
| Indiana........... | $\begin{aligned} & \text { Burns' Annotat-- } \\ & \text { ed Stat. } \\ & \text { Secs. } 908 . \\ & \text { Sec, } 947, \\ & \text { 980, } \end{aligned}$ | 1, 2, 3, 4, 5, 6. | 943 | 943 is construed to require an affidavit of attachment to be filed, issued. Pomeroy $v$. Beach. 149 Ind. 511. entitled to reserve $\$ 600$. (ib.) Employer may relieve himself of liability for exempted wages by paying employee. |
| Iowa .............. | $\begin{array}{cc} \text { Code } & 1897, \\ 3877, & \text { Secs. } \\ 3885 \\ 3907, & 3935 . \end{array}$ | 1, 2, 3, 4, 5, 6. | 3935 |  |
| Kansas............ | Gen. Stat. 1909, <br> Secs. 5821, 5823, <br> 5888. 6397, <br> 6415.  <br> 6412,  | Nonc. | 5823 | 6127. Three months wages exempt. |
| Kentucky......... | $\begin{aligned} & \text { Code } 1895 \text {, Secs. } \\ & 194,196 . \end{aligned}$ | 1, 2, 3, 5. | Sub. 3 |  |
| Louisiana......... | Code of Practice, 1901. Secs. 239, $243,245,246,259$. | 1, 5. | 246 | Rev. Laws 1904. sec. 1696 , exempts wages for personal service. (As construed by the courts, this does not apply to skilled laborers.) |
| Maine............. | $\begin{gathered} \text { Rev. Stat. } 1903 . \\ \text { Chap. 88, Sec. 1. } \end{gathered}$ | None. |  | 55. No person to be adjudged trustee for wages due up to $\$ 20$ except for necessaries |
| Maryland......... | Pub. Gen. Laws, 1904, Art. 9 , Secs. $4,10,19,32,37$. | 1, 2, 3, 4, 5. | 8,11,12. | \$100 exempt. |
| Massachussetts... | R. L. 1902, Ch. 189. Secs. 1, 40, 65, Chap. 168. Sec. 1. Ch. 167, Sec. 80. | None. |  | 189. Sec. 27. Wages to the amount of $\$ 20$ are exempt from attachment unless the writ states that the debt was for necessaries, in which case $\$ 10$ exemp't. |
| Michigan.......... | C. L. 1897. Secs. 990 , 10.600, 10,646. | None, |  |  |
| Minnesota ........ | R. L. 1905, Secs. 4229, 4256. | None. |  | ; |
| Mississippi........ | Code 1906, Secs. 129, 133, 137, 140. | $1,2,3,4,5,6,7$ and shipping or banking frauds. | 8 | $\cdots$ |


| State. | Statutes. | Showing. |  | Remarks. |
| :---: | :---: | :---: | :---: | :---: |
| Missouri .......... | $\begin{aligned} & \text { R. S. } \\ & \text { 2294, } \\ & 7654 . \end{aligned}$ | $1,2,3,4,5,6,9$, and damages from felony or seduction. | 2413 | Railway employes exempt from garnish ment excent for debts above $\$ 200$. Other heads of families are exempt except for $10 \%$ of current wages. |
| Montana.......... | Revised Code, 1907, Sec. 6656. | 11. | 6667 |  |
| Nebraska....... | $\begin{array}{ll} \text { Compiled } & \text { Stat. } \\ \text { 1907, Secs. } & 1172, \\ 1180, & 1866, \\ 1889, & \\ 1874 . \end{array}$ | 1, 2, 3, 4, 5, 6. | 1180 |  |
| Nevada........... | Compiled Laws, 1900, Secs. 3218, 3219, 3222, 3234. | 1, 2, 3, 4, 5, 11. | 3223 |  |
| New Hampshire.. | Pub. Stat. 1901, <br> Ch. 245, Secs. 1, 3. | None. |  | 20. Wages to the amount of $\$ 20$ exempt from trustee process except for necessaries |
| New Jersey....... | Laws 1901, Chap. <br> 74, Secs. 1, 7, 17, <br> 37, 40. | 1, 4, 5. |  | 1, 29. |
| Now Mexico...... | C. L. 1897, Secs. 2686, 2690, 2691, 2696. | $1,2,3,4,5,6$. | 2698 |  |
| New York......... | $\begin{aligned} & \text { Code of C. P. P. } \\ & \text { 1905, Secs. } 2432, \\ & 635,641 . \end{aligned}$ | $1,2,3,4,5,6$. | 635 |  |
| North Carolina... | $\begin{gathered} \text { Revis al } \\ \text { Secs. } 1905, \\ 762,767,777 . \\ 759, \end{gathered}$ | $1,2,3,5,6$ | 779 |  |
| North Dakota.... | R. C. 1905, Sec. 6969. | None. |  |  |
| Ohio............... | $\begin{gathered} \text { Gen. Codé 1910, } \\ \text { Secs. } 10253-4, \\ 10259,10265,10287, \end{gathered}$ | 1, 2, 3, 4, 5, 6. | 10205 |  |
| Oklahoma........ | C. L. 1909, Sec. | None. | 5712 | 3346 exempts all wages earned in last 90 days. |
| Oregon............ | $\begin{aligned} & \text { Codes \& Statutes } \\ & 1902, \text { Secs. } 296, \\ & 2977, \quad 311, \\ & 312,324 . \end{aligned}$ | 5, 11. | 301 |  |
| Pennsylvania..... | Purdon's Digest 1905, p. 260, Sec. 98, p. 263, Sec. 101. p. 264 , Sec. 102, p. 265 , Sec. 108, p. 1715, Sec. 4. | 1, 2, 3, 4, 5. | $\begin{aligned} & \text { p. } 263 \\ & \text { Sec. } \\ & 101 \end{aligned}$ | P. 2153, Sec. 144. Wages of laborers in the hands of employers not attachable. |
| Rhode Island..... | Gen. Laws 1909, Chap. 301, Sec. 12. | None. |  | 302. Sec. 12 exempts $\$ 10$ from trustee process except for necessaries. |


| State. | Statutes. | Showing. |  | Remarks. |
| :---: | :---: | :---: | :---: | :---: |
| South Carolina... | Code of C P. 1902, Secs.248, 250, 253, 257. | 1, 3. 4. 5, 6, and " pilotage fees. | 253 |  |
| South Dakota..... | C. L. 1908, p. 540, Sec. 31. | None. |  |  |
| Tennessee......... | Code 1896, Secs. <br> 5238,  <br> 5211, 5222, <br> 5229.  | 1, 2, 3, 5. | 5238 |  |
| Texas............. | Stat. 1897. Secs. 217, 218, 223, 252. | None. | 218 | 2395 (as well as a clause in the constitution) exempts all current wages for personal service. |
| Utah............. |  | 1, 2, 3, 4, 5. | 3090 |  |
| Vermont.......... | $\begin{gathered} \text { R. S. } \\ \text { 1657, } \\ \text { 1672. } \\ \text { 1965. } \end{gathered}$ | None. |  |  |
| Virginia | $\begin{aligned} & \text { Va. Code, } \\ & \text { Sec. } 2959 . \end{aligned}$ | 1, 2, 3, 5, 6. | 2967 |  |
| Washington....... | Ballinger's Code and Stat. 1897, Secs. 5390, 5391. | None. | 5391 |  |
| West Virginia.... | Code 1906, Sec. 3536. | 1, 2, 3, 4, 5, 6. | 3540 |  |
| Wisconsin ........ | $\begin{aligned} & \text { Rev. Stat. }{ }^{1898} \text { Secs. 2752, } 2754, \\ & \text { 2771, 3716, Ch. } \\ & \text { 549. laws of } 1909 . \end{aligned}$ | None. |  |  |
| W yoming ......... | $\begin{aligned} & \text { Compiled Stat. } \\ & \text { 1910,Secs. } 4847- \\ & 8,4856 . \end{aligned}$ | 1, 2, 3, 4, 5, 6: | 4856 |  |

## PART II.

## TRUANCY IN WISCONSIN.

# TRUANCY IN WISCONSIN. 

This investigation was prompted by the impossibility of ascertaining the true situation with respect to truancy in the state. Some county superintendents were reporting that there were no children in the county who were not attending school the required number of weeks, and others were reporting more children 7 to 14 years of age in attendance than there were children of these ages in their counties. The function of factory inspectors as truant officers made it seem expedient to make a careful canvas of a few counties. Accordingly every school district in eleven counties was visited and the reports of these investigations of the factory inspectors have been studied and summarized by Mr. Benjamin M. Squires of the department of political economy of the University of Wisconsin, whose report follows.

## A REVIEW OF COMPULSORY EDUCATION AND TRUANCY LAWS IN WISCONSIN

The question of truancy in this state is by no means a recent one. Considering it in its present meaning, as a non-compliance with the compulsory education laws, it may be said to date back to the passing of such laws. However, that any serious attempt to stamp out truancy is limited to the past few years, will be admitted by all who have been acquainted with school attendance.

Chapter 121, of the laws of 1879, provided that children between the ages of seven and fifteen years, should attend school twelve weeks unless excused by illness of the child or need of his labor at home. It was provided further, that equivalent instrutcion elsewhere in the subjects ordinarily taught in the common schools, might be accepted in lieu of attendance at the public school.

The laws of 1889 contained the "Bennett Law", apparently repealing the law of 1879. By this law attendance, for a period of twelve consecutive weeks, was made compulsory for children between the ages of seven and fourteen years. Instruction elsewhere than at the public school, must be in the subjects of Reading, Writing, Arithmetic, United States History, and English Language, in order that it might be accepted as equivalent instruction. Few excuses for non-attendance were acceptable.

This law was considered as an infringement upon personal liberty and became a political issue in the state. In 1891, it was repealed in its entirety and a new law passed. The age of compulsory attendance was fixed at from seven to thirteen years, the time of required attendance, twelve weeks, not necessarily consecutive. Equivalent instruction elsewhere, with no prescribed subjects, was acceptable in place of instruction in the public schools. A reasonable excuse would permit nonattendance. The board might appoint truant offlcers, but it was the duty of the director of the board to see that the law was enforced. The census was to be taken in such a way as to show the causes of truancy.

In the laws of 1901, the ages of required attendance were fixed at from seven to fourteen years; except for this, the law remained much as in 1891.

Chapter 189, sections 439 a and 439 b of the laws of 1903, provided for eight months of attendance in cities and five months attendance in the rural districts. At this time provision was made that any factory inspector should exercise the
power of a truant offlcer. This law was considerably modiffed in 1907, a copy of which is included in this report. No mention was made of factory inspectors as truant officers. Attendance was increased from flve months to six months in rural districts and this attendance must be regular.
The present compulsory education law as amended in 1909, is as follows:
Relating to Attendance at School.-(Chapter 446, Laws of 1907, amending sections 499a and 439b. Statutes of 1898. as amended by chapter 189. Laws of 1903, and creating three new sections.) Section 439a. Any person having under his control any child between the ages of seven and fourteen years, or anv child between the ages of fourteen and sixteen years not regularly and lawfuly employed in any useful employment or service at home or elsewhere, as provided by chapter 349 of the laws of 1903, shall cause such child to be enrolled in and to attend some public, parochial or private school regularly (regular attendance for the purpose of this statute shall be an attendance of twenty days in each school month, unless the child can furnish some legal excuse), in cities of the first class during the full period and hours of the calendar year (religious holidavs excepted) that the public. parochial or private school in which such child is enrolled may be in session: in all other cities not less than eight school months: and in towns and villages not less than six school months in each year. and all children subject to the provisions of this act shall be enrolled in some public. parochial or private school within one school month after the commencement of the school term in the district in which such children reside. excent that in cities of the first class such children shall be enrolled at the time of the onening of the school which they will attend (and the word "term," for the purposes of this act. shall be construed to mean the entire time that school is maintained during the school year); provided that this section shall not apnly to any child not in proper physical or mental condition to attend school, who shall present the certificate of a reputable physician in general nractice to that effect, nor to any child who lives in country districts more than two miles by the nearest traveled road from the school house in the district where such child resides; provided that if transportation is furnished by the district this exemption as to distance shall not apply, nor shall this section apply to any child who shall have completed the course of study for the common schools of this state or the first eight grades of work as taught in state graded or other graded schools of Wisconsin, and can furnish the proper diploma, certificate, or credential showing that he has completed one of said courses of study, or its equivalent. Instruction during the required period elsewhere than at school. by a teacher or instructor selected by the nerson having control of such child shall be equivalent to school attendance. provided that such instruction received elsewhere than in school be at least substantially equivalent to instruction given to children of like ages in the public, parochial or private school where such children reside. Any person who shall violate the provisions of this section shall upon conviction thereof, be punished by a fine of not less than five dollars nor more than fifty dollars, together with costs of prosecution, or by imprisonment in the county jail not exceeding three months, or by both such fine and imprisonment in the discretion of the court, for each offense. It shall be the duty of the district attorney and his assistants to prosecute in the name of the state all violations of the provisions of this section. Any person who shall be proceeded against under the provisions of this section mav prove in defense that he is unable to compel the child under his control to attend school or to work. and he shall be therempon discharged from liability. and such child shall be proceeded against as incorrigible. or otherwise. according to law. and in case of commitment, if the barents or person having control of such child desire it. such child shall be committed to a school or association controlled by persons of the same religious faith as such child, which is willing and able to receive and maintain it without compensation from the public treasury. When in any proceedings under this section there is any doubt as to the age of any child, a verifled baptismal certificate or a duly attested birth certificate shall be produced and flled in court. In case such certificates cannot be secured. upon proof of such fact. the record of age stated in the first school enrollment of such child or first school enrollment to be fornd shall be admissible as evidence thereof.
Section 439b. In all cities of the first class the board of education or any board having similar powers, shall appoint ${ }^{*}{ }^{*}{ }^{*}$ ten or more truant officers and in all other cities having more than 2.000 population by the last United States or state census, such board shall appoint one or more truant officers whose duty it shall be to see that the provisions of this * ** * act are enforced and when of his personal knowledge. or by report or complaint from any resident of the city, or by redort or complaint as provided herein. a truant officer believes that any child is unlawfully and habitually absent from school and not otherwise receiving instruction as provided in section 439a as amended. he shall immediaely investigate and render all service in his power, to compel such child to attend some public, parochial or private school which the person having control of the child shall designate. or if over 14 and under 16 years of age, to attend school or become regularly employed at home or elsewhere, and upon failure he shall serve a written notice, as required in section 4 of this act and proceed as hereinafter provided against the person having charge of such child. And in all cities having less than 2.000 population bv such census. and in all towns and villages the sheriff of the county. his under-sheriff, and deputies shall be the truant offlcers, and it shall be the duty of all truant officers named in this section to enforce the provisions of this act as provided herein.
Section 439 cb . It shall be the duty of the school clerk of every school district, the clerks of boards of education and the clerks of sub-districts. or other officers whose duty it is to take the school census under the law, at the time of taking the school census of their respective districts, cities, or subdistricts, to make out three copies of
such census reports, on blanks to be furnished by the state superintendent, and send one of such copies by mail or otherwise to the proper superintendent on or before the fifteenth day of July each year and at the time of the opening of school in his district, he shall deliver with the register, a copy of such census report to the teacher employed in said district, and if the school consists of two or more departments the copy shall be placed in the hands of the principal. In case the district includes within its boundaries, territory lying in two or more counties it shall be the duty of the clerk of such district to make out separate copies of the census reports ior each part of said joint district, and forward the same to the proper superintendents; provided that in all cities having a population of 2,000 or more the clerk. of the poard of education or other officer, whose duty it is to take the school census shall not be required to furnish copies of the census returns to the county superintendent, city superintendent or teachers. Said clerks of boards of education and other officers who shall have the care and custody of the school census returns, shall have their offices open at all reasonable hours, and allow and assist superintendents, teachers, and truant officers to examine and secure information from the school census reports on file in their offices, that may, in any way, aid in the enforcement of the provisions of this act. All teachers in public schools except teachers in high schools, shall at the request of the proper superintendent, while school is in session report to him. Said report shall show the name of the school and its location, the name and address of the teacher, the number of months school is maintained during the year, the date of opening and closing of the school, the names and ages of all children enrolled in their respective schools between the ages of seven and fourteen and fourteen and sixteen, the names and postoffice addresses of the parents or other persons having control of such children, the number of the district and the name of the town, city, village and county in which said children reside, the distance such child or children reside from the school house in the district in which they live by the nearest traveled road, the number of days each such child was present and the number of days such child was absent during each month and such other reports requested by him, said reports to be made on blanks to be furnished by the county, district or state superintendent. It shall be the duty of every school clerk, or the clerk of the board of education to deliver to the teachers in the public schools a sufficient number of blanks as described above, to supply said teachers for one school year; provided that when there shall be enrolled and in attendance at parochial or private schools, children residing in a county or counties other than the one in which the school house is located, the teachers in such parochial or private schools may make the reports hereinbefore described to the county, district or city superintendent of the county, or the city in which the children between the ages of seven and fourteen and fourteen and sixteen so attending, reside; provided further that in districts that include within their boundaries territory lying in two or more countes, or districts joint with cities having separate superintendents, it shall be the duty of the public school teachers in such joint districts to make separate reports as provided herein to the county, district or city superintendent of the county or city in which the children between the ages of seven and fourteen and fourteen and sixteen so attending reside; and provided that the teachers in cities of 2,000 population or more shall not be required to make the report provided herein, except when called upon to do so by the proper county or city superintendent. All teachers of private and parochial schools shall keep a record embodying all the data enumerated in this section, and such record shall be open to the inspection of all truant officers specifled in this act, at any and all reasonable times; and provided that when called upon by any truant officer, or superintendent, the teachers in private or parochial schools may furnish in writing on blanks furnished by the truant officer or superintendent the above mentioned data in regard to any child or children between the ages of seven and fourteen and fourteen and sixteen who claim, or who are claimed to be in attendance upon said school; and every teacher in a public school shall, and every teacher in a private or parochial school may promptly notify the proper truant officer of any child whose attendance is habitually irregular; provided such irregularity is not excused by any provision of this act. Any officer or teacher in a public school who shall fail or neglect to make the reports required by this section as required, or any teacher in a private or parochial school who shall fail to keep a record as required in this section shall be subject to a forfeiture of not less than five nor more than twenty-five dollars for each such failure or neglect, said forfeiture to be sued for by any voter of the district where such officer resides, or where such teacher is employed, and recovered in the same manner other forfeitures are sued for and recovered under the Wisconsin statutes; one-half of the amount of the forfeiture to be paid to the voter bringing the action and the other half to be paid into the school district treasury of the district where such offender resides.

Section 439 cc . It shall be the duty of the county, district and city superintendents upon receiving the reports and information as provided in the preceding sections, to compare carefully the reports of attendance and enrollment with the reports of the last school census on file in his office and ascertain therefrom the names of all children who are not complying with the provisions of this law, and it shall be the duty of such superntendents to report the names of such children together with the names and addresses of the parents or those having control of such children to the proper truant officer of the county, district or city. The truant officer shall immediately upon receipt of such report, or when he obtains information of delinquencies, notify by registered mail, or by service of notice in the same manner as provided for the service of summons in a civil case in a justice court, the parent or the person having control of such child or children, cause such child or children to be sent to some public, parochial or private school within five days from the date the notice is deposited, properly addressed in the postoffice, if notice is served by registered mail, or flve days from the date of the personal service of said notice. The notice shall inform the parent or
other person in parental relation that the law requires that all children between the ages of seven and fourteen and between the ages of fourteen and sixteen if not regularly employed as provided by chapter 349, laws of 1903, are to be in regular attendance at some school as provided in section 4.39a. It shall be the duty of all truant officers, after having given the notice hereinbefore described, to determine whether the narent or other person in parental relation has complied with the notice, and in case of failure to so comply he shall immediately and within three days after having knowledge of or having been notified thereof, make complaint against said barent or yersons in parental relation having the legal charge and control of such child or children, before any justice of the peace in the county, where such barty resides; provided that in counties where the criminal jurisdiction of the justice of the peace has been abolished the court or courts now having such power, shall have jurisdiction in cases brought under the provisions of this act; for such refusal or neglect to send such child or children to some school as provided herein; and said justice of the peace or other court shall issue a warrant on said complaint and shall proceed to hear and determine the same. in the same manner as provided by statute for other criminal cases under his jurisdic ion. All truant officers or other officers having the nower of truant officers shall have the rower to apprehend without warrant, any child or children found violating the nrovisions of this act, and cause such child or children to be placed in some public, parochial or private school. It shall be the duty of all school officers, superintendents, teachers or other persons to render such assistance and furnish such information as they may have at their command, to aid truant officers in the performance of their duties.
Section 439cd. Truant officers in cities of 2,000 ropulation or more shall receive such compensation as shall be fixed by the boards of education of such cities or boards having similar powers. When the sheriff, under-sheriff, and his deputies are acting as truant officers as provided herein, they shall be paid the same fees as provided for such officers in criminal actions brought under the laws of this state, and in counties where the sheriffi and deputies are paid an annual salary no extra compensation shall be allowed.

## RELATION OF THE BUREAU OF LABOR TO TRUANCY.

By amendment to the labor laws of 1909, factory inspectors were again made truant officers. It was through the enforcement of the child labor laws, that a real insight as to the rrevalence of truancy was given. During the school year of 1506 and 1907, 3,047 children were taken out of factories and caused to be fnrolled in school by inspectors. This was done, not in an enforcement of compulsory education, but as supnlemetnary to an enforcement of child labor laws. In all of these cases, an enforcement of the compulsory education law, would have done away with the necessity of enforcing the child labor law. This phase, then, of the work of factory inspectors, was, in a measure, thrust upon them because of its being fundamentally the cause of violation of the statutes on child labor. The question of enfore:ng one law to prevent the violation of another, gave the order of precedence to the truancy law. It was of little consequence to take a child out of a factory and let him remain wholly idle. Considerable work had been done by inspectors, prior to 1908, in the way of enforcing school attendance, but it had been done, largely as has been suggested, in order that a disposal might be made of the child when taken out of the factory.
As the cases increased in number, the problem grew in importance. It was found that school records were vague and far from conclusive on the condition of truancy in the state. Many cases were brought to light where the traunt in question was not on a school census roll. It came to be conclusive that the root of the evil of child labor, lay in not keeping the child in school. That keeping him out of the factory was starting at the wrong place in the control of the child.

With this in mind, an invetsigation which would do more than conjecture at. or even approximate conditions, became imperative. It was decided by the Bureau of Labor to make a systematic canvas of representative counties in the state with a view of determining what cases of truancy existed, why they existed, why they had not been handled by local authorities, and to see that such truants were returned to school. In order to do this and to be able to contrast conditions reported, with conditions as they existed, each school in the county, not under a city superintendent, was visited, notices were sent to parents, and visits were made at the homes of the parents. Actual conditions affecting the compulsory education law, were carefully investigated.
The report which follows, is an attempt to summarize the result of the investigation. Much of the information has been gained from a study of the correspondence
of county superintendents, inspectors and parents, and as well the daily reports of the inspectors, while making the investigation. In the preparation of the appended bill, access has been had to the principal provisions relating to compulsory education, of the laws of this country and of Europe. Certain features of the bill, which are not found in other laws examined, have suggested themselves as a possible means of solving some of the problems with which not only this state but other states are concerned.

## COUNTY SUPERIN'TENDENTS AND TRUANCY.

As an initial step in the investigation of conditions of truancy in this state, the following letter was sent to the county superintendents in the fall of 1908:

To the County Superintendent of Schools.
Madison, Wisconsin, October 24, 1908.
Dear Sir: Will you kindly write me the number of cases of truancy that have been called to your attention during the school year of 1907-1908 by the teachers of your county and others? Also what has been done towara enforcing the compulsory education in your county?
An early reply will be appreciated. Enclosed find stamped, addressed envelope. Respectfully yours,

J. D. Beck, Commissioner.

-These were followed, several weeks later, by a card, calling attention to the letter and requesting a reply. The results were not gratifying. In but very few instances had any definite record been kept of cases reported. Some counties were trying "moral suasion," while others were attempting to define truants as, "those pupils absent without the knowledge of the parent or the teacher." A few counties were taking hold of the work and using the law as an effectual means toward a definite end-decreasing the number of truants. Others were shifting the responsibility to the sheriffs. Still others felt they had not had time to give the law a fair trial. Less than fifty of the 71 counties were even heard from, and it may be safe to assume that in the remainder of the state, enthusiasm was not at a white heat on the subject. The general impression given, in going over the correspondence of that fall, is, that with the exception of a few, indefiniteness of knowledge and a luke-warm indifference on the part of county superintendents, prevailed with respect to truancy. It is somewhat interesting to note that in those counties where the least was being done, no cases of truancy were reported, and where the superintendents were conscientiously at work in trying to handle the problem, there were reported four and five hundred instances of non-compliance with the law.
During the year 1909, the following circular letter was sent out quite generally:

$$
\text { Madison, Wis., ..................................................... } 1909 .
$$

To School Officers and Teachers:
Chapter 338 of the Laws of 1909 makes it the duty of the Factory Inspector to enforce the Compulsory Education Law. The law also provides that sheriffs, and others designated by the school boards, shall be truant officers to compel school attendance. Notwithstanding these provisions of the law, the teacher can make himself the best and most efficient truant officer possible. The teacher who not only interests himself in the child while in school, jut will interest himself in the child's life outside the school, will visit the child's home, become acquainted with the parents and the child's home life, ascertain his needs and try to supply them; that teacher will have very little complaint to make about truancy. School officers should see to it that teachers make every possible effort to overcome truancy. Yet there are undoubtedly cases of truancy which any amount of effort on the part of the teacher will not remedy. In such cases this department will be glad to lend its assistance. If you have any truancy which every effiort on your part has failed to correct, and will write us the names of the truant children and the names and addresses of their parents or guardians, we will see to it that such children are placed in school.
All such information received by us will be strictly confidential.
Yours respectrully,
Commissioner.
In reply to this letter, many complaints came in of non-enforcement of the law. As a result of these complaints and with the desire to see what progress had been made during the year, the following letter was sent to superintendents as before. This letter being sent in November, 1909, reached the superintendents after the arst reports had come in from the teachers.


#### Abstract

County Superintendent, Madison, November ......... 1909. .................., Wisconsin. Dear Sir: The last legislature enacted a law making it the duty of the officials of this department to enforce the compulsory education law. In 1907, a law was enacted, and is still in force making the sheriff the principal truant officer of each county. Complaints are coming to us from different localities in the state that these officials are not enforcing the law, and we are urged to take the matter up. Before entering upon a campaign of this kind, we desire to know whether this law is being enforced in your county to your satisfaction. If not, we will be glad to render you whatever assistance we can in enforcing it. Kindly write us whether you desire our services. If so, all we want is the name of the truant child and the name and address of its father or guardian and we will do the rest. Trusting we may hear from you by return mail, I beg to remain, Respectfully yours,

J. D. Beck, Commissioner.


Although a year had elapsed since the sending of a previous letter, the returns from this letter showed but little change in conditions. There were still those who considered truancy as running away from school, and others who aid not understand clearly what the law meant. Some recognized the importance ol the law but found other work so pressing and the work of other officers, upon whom they must depend, occupying so much time, that truancy was put into the background. From a few county superintendents came the report that sheriffs did not co-operate, that teachers did not try to explain the law to parents, and did not visit the homes to determine whether truancy existed and why. But from the greater number came complacent reports,-"Our officers are efficient and willing." "We are enforcing the law." "We thank you for your offer of assistance; if we need you,-we will call you." And all this time were coming letters of complaint from parents, from teachers, from members of school boards, stating in no uncertain language, that the law was not being enforced.
Shortly after the return from this letter, inspectors were sent into eleven counties with instructions to study truancy conditions and to see if the law could be enforced. Two forms of cards were used, one a report on truancy on visitation of schools, the other a report on individual truants.

## Form A.

## REPORT ON TRUANCY ON VISITATION OF SCHOOLS

Date.
District No...................... Town of.

3. Number of children between 7 and 14 years that have not completed the common school course or the 8th grade who do not attend school regularly.
4. Number between 14 and 16 years who are not legally employed, and have not completed the common school course or the 8th grade and that do not attend school regularly.
5. Number of children enumerated in 3 and 4 living more than 2 miles from school by the nearest traveled road.
6. Does the county superintendent report teachers to report cases of truancy?
7. What action does the sheriff take in truancy cases?
8. Does the teacher ever visit the homes of truant children?
9. When did the county superintendent last visit the school?

## Remarks:

## Form B.

REPORT ON INDIVIDUAL TRUANTS
Date.

1. Name of child


2. Is parcnt or guardian able to send child to school?
3. Is ed cation of parents good, fair, or poor?.
4. Is triancy due to greed or shiftlessness of parents or guardian?
5. Can you assign any other reason for this case of truancy?
6. Number of days absent during this school year to date of investigation
7. Days 1 resent
8. What grade is child in?.................. 10. Is health good, fair, or poor?..... 11. Is child dull or bright?......................... 12. Any defects in hearing, sight, or
9. Deportment while in school.
10. Has the teacher ever
reported this case to county superintendent?
Remarks:

Whenever a case of truancy was found, the following formal notice was mailed to the parent as preliminary to other action:


Information has been received at the Bureau of Statistics that
is not attending school in compliance with chapter 446 of the laws of 1907 , which provides that all children between seven and fourteen years of age, and children between fourteen and sixteen years not legally employed, living within two miles of the nublic or parochial school, by the nearest traveled road, and who are physically able to attend school, shall attend some public, parochial or private school the full calendar year in cities of the first class; in all other cities not less than eight months in each year; and in towns and villages not less than six months in each year; unless such children have completed the common school course or have finished the 8th grade and can furnish evidence of such completion. The law further provides that it shall be the duty of the state factory inspector to enforce this law, and you are hereby notified that unless you forthwith comply with the above mentioned law, prosecution will be started against you.

Respetfully yours,
State Factory Inspector.

Thirteen hundred and fifty schools were inspected. In these were found 4,160 truants between seven and fourteen years of age, and 1,728 between the ages oi fourteen and sixteen years. In all there were 5,888 truants. Fifteen hundred and sixty truants were found who lived more than two miles from school. In the schools reported, 459 teachers reported that their county superintendents did not require a report of truancy. Thirty reported that blanks were furnished them. Eighty reported that blanks were required for children between seven and fourteen years. Sixteen reported that blanks were not required after the first month. It must be remembered that some teachers would not answer the questions asked them, but the above figures are taken from definite answers. Over 100 teachers reported that the superintendent had not visited their schools for more than a year. There would seem to be conflicting opinions, leading to the inference that the teachers, at least, had not been made to feel the importance of the law. Several superintendents resented the action of the Bureau,-objected to the questions asked of teachers respecting the enforcement of the law and tried to discredit the value and the motive of the investigation. One even went so jar as to say that it was an infringement on the privileges of the department of education, and as such was resented by the head of that department. Not a few complained justly of the failure of the sheriff to follow up cases. One superintendent stated that he had made nearly 800 reports and had secured but one prosecution, even though many had not paid any attention to the notices sent them.
A marked change was seen in the attitude of the county superintendents in 1908 and 1909, evidenced by their letters, and their attitude in January and February of 1910, when the cases of truancy in their counties were coming to light. If it is said that this is a harsh criticism, the reply is, that it is not meant to be any form of criticism. The material at hand showed certain prevailing conditions, and this report attempts to summarize those conditions. The law on compulsory education, was considered when thought of at all, as a farce, the product of radical legislators and educators, an addition to the list of dead laws on the statutes, not meant to be enforced because not enforceable. In no other way, may the prevalent ignorance and indifference regarding the law, be accounted for,-indifference and ignorance that did not stop with the layman, but extended to school officials. However, it is no little satisfaction to find that when suacrintenden s awoke to the realization that the law was to be enforced, they co operated.

## STATISTICAL TABLES OF ATTENDANCE TAKEN FROM THE BIENNIAL REPORTS OF THE STATE SUPERINTENDENT.

It is to be regretted that there is no way of comparing accurately the present situation with previous years. The compiled statistics shown below are variable and uncertain. They perform one good service, however, in showing the need of something more reliable.

|  | Year | Whole number between 4-20 | Number between 7-14 | Number between 7-14 attending public schools | Number between 7-14 attending private schools | Number between 7-14 not attending any school. (Found by comparing preceding figures.) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1889 |  | 577,123 | 284,236 |  |  |  |
| 1890 |  | 592,755 | 294,950 | 225,344 | 33,560 38,508 | 40,619 31,098 |
| 1891 |  | 609,970 | 271,137 | 207,294 | 42,118 | 21,72\% |
| 1892 |  | 618,884 | ${ }^{278,646}$ | 202.159 | 44,454 | 81,993 |
| 1894 |  | 637,688 665,268 | 287,506 286,841 | 217,277 | 47,237 | 22,992 |
| 1895 |  | 674,612 | 286,841 303,075 | 230,359 232,597 | 47,916 | 18,566 |
| 1896 |  | 684,890 | 305,848 | 232,597 238,082 | 48,415 48,433 | 22,063 19,333 |
| 1897 |  | 696,933 | 309,725 | 247,538 | -46,610 | 19,333 15,577 |
| 1898 |  | 708,535 | 316,491 | 251,849 | 48,069 | 16,573 |
| 18900 |  | 722,655 | 319,844 | 246,589 | 50,726 | 22,529 |
| 1901 |  | 731,063 743,527 | 318,252 | 251,317 | 52,658 | 14,277 |
| 1902 |  | 751,699 | 359,424 367,861 | $\stackrel{271,700}{285}$ | 61,290 | 26,431 |
| 1903 |  | 758,626 | 371,690 | 288,262 | 63,423 60,830 | 18,674 28,598 |
| 1904 |  | 766,548 | 383,619 | 143,234 | 53,113 | 187,272 |
| 1905 |  | 773,857 | 376,376 | 159,564 | 60,355 | 156,457 |
| 1907 |  | 773,031 | 371,929 | 151,762 | 60,488 | 159,4i9 |
| 1908 |  | -771, 547 | 372,653 369,194 | ${ }_{2}^{252,323}$ | 66,854 | 55,376 |
| 1909 |  | 779,204 | ${ }_{363,856}$ | 223,733 240 | 44,934 37,724 | 100,537 |
| 1910 |  | 780,008 | 351,591 | 238,826 | -88,602 | $\begin{aligned} & 8,5,429 \\ & 24,1 \in 3 \end{aligned}$ |


|  | Year | Per cent attending school, 4-20 | Per cent in private, 7-14 | Per cent in public, 7-14 | Per cent not attending, 7-14 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1889 |  | 59.5 |  |  |  |
| 1890 |  | 59.1 | 13.1 | 73.9 76.3 | 14.3 10.6 |
| 1891 |  | 51.0 | 15.5 | 76.4 | 10.6 8.1 |
| 1892 |  | 58.0 | 16.0 | 72.5 | 11.5 |
| 1894 |  | 58.0 | 16.4 | 75.5 | 7.9 |
| 1895 |  | 57.8 59.0 | 16.2 | 77.5 | 6.4 |
| 1896 |  | 59.7 | 15.9 15.8 | 76.7 | 7.4 |
| 1897 |  | 60.8 | 15.0 | 77.8 | 6.3 |
| 1898 |  | 60.6 | 14.7 | 79.9 | 5.0 |
| 1899 1900 |  | 60.5 | 15.8 | 77.0 | 5.7 |
| 1900 |  | 60.7 | 16.5 | 78.9 | 4.4 |
| 1902 |  | 59.9 | 17.0 | 75.5 | 7.0 |
| 1903 |  | 60.3 | 17.2 | 77.6 | 5.0 |
|  |  | 59.4 | 16.3 | 75.9 | 7.8 |
| 104 |  | 60.0 |  |  | 17.6* |
| 1905 |  | 60.0 | 16.6 |  | $7.5 \dagger$ |
| 1906 |  | 60.5 | 16.2 | 62.2 | 19.4 |
| 1908 |  | 60.2 59.8 | 17.9 | 67.7 | 14.3 |
| 1909 |  | 59.8 | 12.1 | 60.6 | 27. |
| 1910 |  | 58.9 | 25.2 | 67.9 | 27.7 6.5 |

* Rural.
$\dagger$ Cities.


## REPORTS OF COUNTY SUPERINTENDENTS TO THE STATE SUPERINTENDENT ON TRUANCY, AND ATTENDANCE.

In the reports from county superintendents to the state superintendent, where information is requested, respecting the compulsory education law, may be found such vague terms as, "About (———", "?", "Quite a few," or simply "———". Others, less conscientious place a definite figure representing the number of truants, and report them as having complied with the law when notices were sent. One county reported 49, all of whom were notified, and all recounty super same county, investigated the same year, showed 512 truants. Another seven and fourteen Upon investigation this county showed 700 cases of truancy and showed also that the county superintendent had made no effort whatever to enforce the law. This superintendent was most strenuous in his objections to the investigation and did all in his power to arouse a feeling among other superintendents against the department of labor. Some county superintendents reported more children between the ages of seven and fourteen attending school than there were children between those ages residing in the counties.

In the reports of 1909 from county to state superintendent, eighteen report no truants or fail to report. In 1910 eight report no truants, or fail to report. In 1909, twelve prosecutions were reported with ten convictions. In 1910, there were according to the report, fifty-two prosecutions with forty convictions. In the 1809 report, 4,154 notices were sent to parents, a small enough number, yet the investigation gave room to doubt that all of these were sent. It should be said here, that there were county superintendents, though their number was small, who reported cases of truancy, the number of which must have been very near to the number of cases existing. The greatest number reported was 1,012 , over 500 of whom did not return to school.

It is evident that these reports from county superintendents are not always allthentic, are often compiled hurriedly in their several parts, while some of the matter put down as fact is merely conjecture, or put in to cause the report to appear well. A very human tendency exists to have the county seem progressive in school affairs. This is one of the causes of discrepancy in these reports. Carelessness and indifference also have their part to play as evidenced by the many letters necessary from the state superintendent before these reports may be tabulated for publication. In the 1910 reports one was marked, "This report remarkable for what it does not contain."
In order to show more clearly the inconsistency of the reports as compared with actual conditions, 1,208 schools were checked up. From these schools were reported by the county superintendents in 1909, 541 truants. In 1910, they reported 781 truants. In the investigation in 1910 by the factory inspectors, there were found 3,179 truants.

## THE CENSUS AND TRUANCY.

The county superintendent has been considered first because he is looked to, to educate his teachers with respect to the law, and because it is through him that all information respecting truancy comes. Next to a consideration of that officer comes a consideration of that factor which has caused as much trouble as all else,-the school census. The law requires that in rural districts, the school clerk shall take the census and make three copies on blanks provided by the state superintendent. One of these shall go to the county superintendent, another shall be placed in the hands of the teacher at the opening of the school year, the other shall be kept on file. Much difficulty was experienced by inspectors in obtaining the census. In 262 schools, the census was not on file. One teacher produced an old one saying that the clerk gave it to her with the words, "That is good enough." It is quite evident that without the census, the teacher, unless a resident of the district for several years, would be unable to determine cases of truancy and consequently could not report even if she so desired. Here again, the negligence of the superintendents is apparent in not demanding a return of truant children based on the census. In some cases where the census was at hand, it had
not been used, the teacher not having clearly in mind what was expected. In some instances it had been destroyed, the teacher saying that it was in the way. Censuses were found lacking in the address of the parent, or in the initial of the parent. In some cases the age was wanting, in others it did not agree with the age given by the child. The register, where kept, contained the ages as given by the pupil and not the age given on the census roll. One thing to be noted here is, that many children is giving their ages do not give their nearest birthday. Some just past twelve, give their age as thirteen. Others who lack a few days of being twelve, will give eleven as their age. This is very apt to occur when the child is nearly fourteen and wishes to be exempt from school attendance. The remedy for this will be considered later.
As has been pointed out, a large part of the truancy problem hinges upon the census and its being in the hands of the teacher. That is a prerequisite, under the present law to any definite action by any other official. We have now to consider the census from another aspect, that of its authenticity. First, the investigation shows that school clerks are not conscientious in the taking of the census. Many copy it from an old one and add one year to the ages contained therein. This may be possible in certain districts where the one taking the census is familiar with each family, but for reasons pointed out later, a personal canvas would be more satisfactory even in such districts. At the present, no note is taken of migratory families. There is evidence to support the statement that clerks have padded the census roll in order to increase the state money. A case was found where two years was subtracted from the ages of several children in order that their names might be continued on the roll. Another case came to light where a child had died more than a year previous and was still drawing state money. One name appearing on a census roll, was that of a young woman who had married and moved to a western state three years previous to the taking of that particular census. Many instances were met with where the child had moved from the district during the year but whose name was still on the list.

There seems to be but one way to check this census evil, and that is to require a personal canvas of every family in the district and to obtain the exact age of every child, all of this to be under sworn affidavit. In case of any doubt of age, the present method of resorting to birth or baptismal certificate must be used. Add to this some means of checking up migratory families and much will be done toward starting the teacher out with the necessary information.

## ATTITUDE OF SOHOOL CLERKS TOWARD TRUANCY.

The office of school clerk is not a desirable one, carries with it but little if any compensation, and is the center of complaint and abuse from the district. For these reasons, an incompetent man is often found in the office. It is evident that clerks and other members of the board are not exempt from violation of the compulsory education or truancy law, and that some use their office as a big stick over the teacher, securing for themselves the right to do as they please with respect to the non-attendance of their children. Letters to school clerks notifying them of their failure to comply with the law, oecasionally elicited the reply that it was not likely they, as members of the board, would permit their children to be truants. Many others on the contrary, welcomed the interference of an inspector and in many cases were, themselves, informants of truancy.

## RELATION OF TEACHERS TO TRUANOY.

Undoubtedly a part of the truancy problem might be solved by the teacher in visiting the homes and following up truancy where found. In answer to the question asked them, "Do you visit the homes of the parents?", 465 of the 1,350 teachers replied that they did not. Several would not answer the question, while many ni those who replied in the affirmative, did it in such a way as to convince the inspectors that such answer was not true. A great many had given little thought to the matter, more than to be glad that out of those who were truants, some were the undesirables. Schools were found where the general atmosphere was such
às not to encourage attendance but rather to discourage it. Some teachers were untidy in person and in their care of the schoolroom. Not a few were reported as having used or permitted abusive or humiliating language to pupils. One instance deserves mention because of its portrayal of the effect of the influence of such language upon a child. A little girl, a ward of a woman of refinement and culture, was sent to the public school for several years with seemingly no progress. Teachers reported her dull, pupils called her a "fool". She was not promoted, learned to detest school, and begged not to be forced to go. She became subject to nervous attacks, was kept at home and later was reported a truant. An investigation revealed the above facts and also that the child was normally bright, eager to learn, and under the instruction at home was progressing rapidly, and was strong and healthy. The Bureau decided that she was having equivalent instruction at home.

Several teachers in both pubilc and parochial schools, did not keep a register saying that they knew who was in school. And here it should be mentioned that the register should show the date of birth of the child, not merely the age in years, and the name and address of the parent. It will thus furnish a means of checking up at any time and will avoid dealing with the one who is found to be just past fourteen or sixteen years of age. Some such were reported and when followed up could not be prosecuted. Not a few teachers were very careless about their records of attendance, their records not showing when the child entered or how many days he was absent. Some few were found who wished that inspectors would attend to their own affairs. In the case of principals, some resented an inspection of their schools for truancy, and at first were reluctant about giving irformation. Where teachers were subordinate to principals, there was a natural hesitancy, the teachers evidently fearing to offend the principal.

It is very gratifying, however, to learn from the study of the reports, that on the whole, teachers were the ones who welcomed the inspectors. In spite of the overburdened program, the low wages, the janitor work, the criticism, they were anxious to see the children in school and co-operated with the inspectors. The reluctance and hesitancy previously mentioned, seems to have been a lack of understanding of the law, a feeling that their reports of truancy were only a farce and that the law would not be enforced. Add to this the inability to check up on account of not having the census, the failure on the part of the county superintendent to demand a report on truancy, the fear that trouble would be made for them if they reported a child, and the advice from superintendents (reported by several teachers) not to pay any attention to the truancy law, that it would only cause trouble and hard feelings, and you have the general attitude of the teacher. She is to be blamed much, but pitied more. The truancy problem will never be solved without her assistance. Other local officials may in some instances be dispenced with, but unless the teacher enters enthusiastically into the task of seeing that all in the district who should be are in attendance, legislation will not solve the problem. It is generally conceded that earnest endeavor, conscientious visiting of the homes where truancy exists, will eliminate many of the difficulties, but these are duties that may not be thrust upon the teacher by legislation.

STATE AND LOCAL ENFORCEMENT-SHERIFFS AND DISTRICT ATTORNEYS.
It is in the carrying out of the letter of the law that the comparative merits of state and local interference may be seen. So long as the enforcement of the law rested with the county superintendent, the sheriff and the district attorney, the law was not enforced. Teachers would not report, feeling that cases would not be followed up, and the only effect would be enmity against them. County superintendents seldom enforced the law when cases were reported, sometimes because of indifference, the urgency of other work, the laxity of other officials, or as it appears, because they did not wish to get their constituents down on them. Sheriffs, paid by salaries, acted only after considerable delay, and then only perfunctorily. Where they were paid by fees, the case was somewhat different.

The inspectors found that the sheriff of one county was eager to get the names of truant children and serve the required legal notice upon them, for which he charged one dollar each. There, his activities ended. This county has according to
the census of $1900,3,593$ persons over ten years of age that can neither read nor write. Taking a very natural conclusion, that the number of truants in that county must be large, a conclusion which is strengthened by the report of 1908, showing 990 truants, it is easy to see the cost to the county if the entire number of truants were reported regularly.
Another sheriff mailed notices to each truant reported by the county superintendent and charged not only for service of notice, but for mileage, the same as if he had actually driven to the home of the truant child. These notices when served, were not followed up by prosecution. The result of the cases reported and not disposed of is evident. Parents saw the law was not enforced, decided it was not a serious matter to vioalte such a law, and made life miserable for the compliance with the law when the inspectors sent notices and followed them up with a few prosecutions. To use the expression of many of the parents in their letters to the Bureau of Labor, "They sat up and took notice". It is meant here simply to show that a law, to be enforced by local authorities, must have the sentiment of the people of that locality in favor of enforcement. When that sentiment is lacking and when these officials are dependent upon the good will of the people for their positions, it is not likely that they will always be active in endangering that good will.

The District Attorney has not been much of a factor in truancy until the recent investigation because very few cases were brought to him for prosecution. It was noted that he often tried to discourage prosecution on the ground that the case was not clear and that it would be more harmful than beneficial to have a case brought to trial and lose it. Sometimes this undue precaution was warrantable, but often it concealed a deeper motive of not wishing to displease the people. There were instances where he worked directly against the efforts of the inspectors, but more often this was due to too great a caution.

## ATTITUDE OF THE PARENT TOWARD TRUANCY.

By considering the parent at this time, it is not meant that his place as a factor in non-attendance is second to any of the other factors. If parents did their duty, there would be no need of laws compelling their children to attend school, or to prohibit the employment of their children. But the fact remains that all parents do not do their duty. Some do keep their children out of school for trivial reasons, and they resent being forced to obey the law. It is often said that the parent is ignorant and cannot appreciate the value of an education. This is probably true in many cases, yet this is not the only cause of truancy. Out of the 5,888 cases reported, in but 1,210 instances, was the education of the parent reported as poor. In the other instances, the education was fair or good, considering the time during which they received their education. It is probable that as great a percentage of parents having a poor education, might be found among those who send their children to school regularly. Neither may we assign poverty as a large factor in truancy. In the cases consideerd, but 96 out of the 5,888 were reported as due to poverty. It is undoubtedly true that many parents are reluctant to send children to school poorly clad, and this feeling is accentuated in some cases by the attitude of the teacher and the pupils. There are, of course, fewer cases of abject poverty in this investigation than there would have been in an investigation of truancy in cities. It is probable that the school board should be empowered and have the duty of furnishing temporary relief as well as school supplies where poverty was given as a reason for truancy. This is being done in Des Moines, Iowa, and in Ohio, and it is having good results. In this way, the family does not become a town charge and the absences caused by inclement weather are avoided in a large measure.

## EXCUSES AND CAUSES OF TRUANCY.

There are two very common excuses given for truancy which are lawful where the cause exists. One is illness, the other work. The element of work does not apply very forcibly under fourteen years of age, but between the ages of fourteen and sixteen, considerable difficulty is experienced in getting a clear case for prosecu-
tion, for it is quite easy for farmers to prove that the child has been lawfully employed. The other excuse, "sickness" has been "worked to death." No account was kept of the number of cases where that was given as an excuse, but the percentage compared with other cases was large. According to the present law, sickness is an acceptable excuse, but the certificate of a regular practicing physician must be demanded before the excuse be accepted. If this were to be done, few parents would take the trouble to run to the family physician when the child had a headache. Parents seemed to have had the idea, however, that all that was necessary was the statement that the child had been poorly. Out of the entire number of cases investigated, but 259 could have been excused by poor health. Some of these were chronic, and here the visitation of the teacher would have avoided reporting the case as truancy. Thirteen were found to have catarrhal trouble, forty had defective hearing, 134 had weak or diseased eyes, 35 had defective vocal organs, and 23 were unable to walk normally.

The letters received from the parents in answer to the notices of the inspectors, belong to a few general classes, though differing widely in detail. Very numerous were the "surprised" letters, in which the parents denied their children were truants, declared they had been regular in attendance, demanded the names of the informants, were enthusiastic in wishing an education for their children and were ready with references. Some of these letters were true, but many when followed up proved to be merely "bluff," and the children were sent to school when it was found that prosecution would follow non-compliance with the law. Another very common letter was the "illness" letter, where the child had been out only when necessary, and the condition would be vouched for on application to the physician in charge. In addition to these there was the "bad weather" letter, the "child is needed at home" letter, the "pupil is past fourteen" letter, the "prosecute if you dare" letter, the "immoral school" letter, the "why don't you prosecute others and enforce other laws?" letter. These will indicate the general tone of the letters. In some few instances physician's certificates were secured. In one case at least, a physician issued a certificate without being warranted in doing so. The bulk of the cases, however, proved to be of such a nature, that when prosecution became evident, the child came back to school. In going over the several thousand cases, a few ideas stand out above many others-that parents cannot be depended upon to tell the exact truth in matters of truancy, that local officials cannot secure results by merely threatening prosecution, because the people feel they have such a leverage on them that they are assuming they will not prosecute. An illustration of local resentment is found in a case of a school clerk who attempted to force a neighbor to send his children to school. He was at first advised to attend to his own affairs, but persisting in his efforts to enforce the law, his barn and hay were burned.

Eliminating, then, the minor elements of poverty, illness, and lawful employment, the great causes of truancy, according to the reports of the inspectors, were greed, shiftlessness, and carelessness of the parent. Of these, greed was the cause attributed in the greater number of cases. Where any of these are the causes, the state cannot be too severe with the offenders. It cannot be overemphasized that such parents would make life miserable for a teacher who would attempt to bring the law to her aid, and they are able at times to do some political injury to county officials who attempt to enforce the law. The most direct and effective means of reaching such parents and of forcing upon them the duty of keeping their children in school is by a system of fining, judiciously but persistently enforced. Wherever such a plan has been tried, the result has been to lessen the amount of truancy and attendant evils.

## A CONSIDERATION OF THE TRUANT.

Of the truant himself, much might be written. He is not necessarily the dull student nor the vicious one. He is rather the tool of the parent. Only 722 out of nearly 6,000 were found to be dull, and but 77 whose deportment was poor. The remainder of the cases were classed as fair or bright in intelligence, and fair or good in deportment. When they were out of school, it was more the fault of their parents than because of their own volition. There are, of course, those who should be out of school rather than in, so far as the welfare of the rest of the school is
concerned, but that is not an excuse for truancy. The school for incorrigibles will handle such cases, and indeed they would be rare without the encouragement of the parent. People in general are already familiar with the assumed "headache," "lethargy," "toothache," and other aches that could easily be discouraged by the parent When the child is really ill or subject to sudden attacks of illness, as has already been pointed out, it is an easy matter to obtain a physician's certificate and the problem is solved so far as the parent is concerned. A child will as readily form the habit of regular as of irregular attendance, and the increased interest thus secured, will make for more perfect attendance. It has long been an accepted fact that the child is what the parent wishes him to be and faults at school can be traced directly to the home and the attitude of the parent.
No definite conclusions may be based on the age at which truancy occurs. Out of 5,024 cases where ages were given, 513 were seven, 460 were eight, 418 were nine, 464 were ten, 388 were eleven, 629 were twelve, 810 were thirteen, 777 were fourteen, and 664 were fifteen years of age. The highest number was at thirteen years, but there is hothing significant in this unless it could be traced to age discrepancy. A study of the grades from which children are truants is more interesting, though but little more enlightening. Over 800 were found from the first grade, and about 600 in the eighth grade. It makes the problem greater if it is considered that these 800 from the first grade are in a fair way to remain illiterates.

## PRIVATE AND PAROCHIAL SCHOOLS.

Of more than cursory interest is the problem of the parochial and private schools. By provision of law, attendance at these exempts the child from attendance at the public school. Census returns furnish no clue as to the place of enrollment of the child for the coming year, and the teacher when fortunate enough to possess such a census, has no ready means of determining whether the child is truant or enrolled elsewhere. Some were reported truants of the public school and were found enrolled in a private or parochial school. There should be a means of knowing the place of enrollment of the child. Records in the private and parochial schools were poorly kept and the optional reports were not made. A frequent excuse of truancy given by parents was that of enrollment or intention to enroll the child in the religious school. Where there were two or more private or parochial schools in a city, pupils frequently went from one with the avowed intention of going to another and in fact became truants.
These schools were on the whole, very favorably disposed toward the investigation and desired co-operation in increasing attendance. Several letters are on flle from teachers in these schools commending the work of the inspectors in causing children to be returned to school. Such schools should not be discouraged. They should, however, be required to come up to the same requirements respecting teachers, attendance, reports, and subjects taught as the public schools. There should be a deflnite checking system so that public, private and parochial schools would have the means of knowing when truancy existed. This would impose no serious hardship on parochial and private schools, but, on the contrary, from conditions found during the investigation, would benefit them fully as much as the public schools. At the present time our statistics on school attendance, truancy and delinquents are merely conjectures on account of inability to obtain definite information from the private and parochial schools. It may be that if the true condition of these schools was known, there would not be such a discrepancy in the figures shown.
Difficulty was also experienced with the private or parochial schools that maintained school but three or four days in the week, or were in session during the period of vacation in the public school. As the present law is interpreted, attendance at these schools during the vacation period of the public school will not exempt from the required attendance during the time the public school is regularly in session. These schools then should be left to their own devices during that part of the year when they may not take the place of the public school. Without an overdrawn interpretation, the present law permits all religious holidays in parochial schools. This means, for some religions, a number of holidays far exceeding the number permitted in the public school. While in a strict legal sense a school must be maintained five
days in the week in order to take the place of the public school, great laxity is shown in the enforcement of the provision, so that some schools are in session but three or four days out of the week and out of these are deducted a great number of holidays. It could scarcely be termed interference with personal liberty to require such schools to maintain school the same number of days in the week, and to total the same number of days of attendance as is required of the public schools. The same demand could justly be made with respect to equipment, reports, records, and examination of teachers as is made of public schools and teachers.

## TRUANCY IN CITIES.

The investigation made did not cover cities under city superintendents, though at the request of teachers and superintendents, the work of enforcing attendance has been entered into by factory inspectors in many cities. Owing to the truant officers in such cities, the truancy problem is somewhat better handled with respect to a knowledge of conditions, than in the country, yet there are probably more cases than are reported. In 1910, the number of truants reported from cities under city superintendents was 3,113 , the number of notices sent to parents, 2,279 ; the number returned to school from notices, 2,254 ; the number of prosecutions, 44; the number of convictions, 31 . Since the number of children between seven and fourteen years of age in the cities of Wisconsin is nearly 150,000 , it is not likely that 3,113 will cover the actual number of truants. Here more than elslewhere, it is difflcult to ascertain the actual number of truants owing to the many private and parochial schools and as well to the conflict in the reports.

Causes of truancy in cities are somewhat different than in rural districts and except where the law is more rigidly enforced, the percentage of non-attendance should be higher. Here, the number of truancy cases between the ages of fourteen and sixteen should be comparatively large, but more easily handled than in the rural districts, owning to the definiteness of the lawful employments for those ages. The age question becomes of paramount importance in cities, where the opportunities for the employment of children encourage age discrepancy. Care needs to be exercised in determining the exact ages of children and in checking up from time to time with previous records.

## ATTITUDE OF THE PUBLIC TOWARD TRUANCY.

The question must needs arise in connection with any law and its enforcement, what is the attitude of the public? It is a conceded principle that any law which conflicts with the general sense of justice, will not be enforsed. Is it thus with the compulsory education law? Is so much inactivity the result of adverse public sentiment? The correspondence on file leads to the conclusion that there is not such an adverse sentiment, but that, on the contrary, there is a preponderance of desire to see the enforcement of truancy laws. Press notices, while not always indicative of public opinion, have been very gratifying with respect to the investigation and the work of the factory inspectors as truancy officers. It has already been suggested that the law has been so generally let alone that the people who knew of it had little confldence in its enforceability or in the serious intent of the officers whose duty it was to enforce it. Confldence had to be established and the justice of the law shown. While the correspondence was necessarily with those violating the law and showed more clearly their attitude than the attitude of those who were sending their children regularly to school, nevertheless, many letters were received commending the action of the department, speaking of the wholesome local influence of the work and promising to keep in touch with the department. There is every indication that as the people are enlightened with respect to the possibilities of the law, in the same measure will they demand its rigid enforcement.

There has long been felt a righteous indignation toward the greedy, careless, indifferent or defiant parent. Scarely a community but has one or more, and not a teacher worthy of the name, or a parent with the interests of his own children at heart, but has longed for some means of getting the children of such a parent in school, that their absence and idleness might not influence other children to leave school. Almost every teacher has had to face the problem of how to keep a child in
school, and in many cases pamper and pet such an one that he will not leave school. Letters are at hand, and at the time of this writing are coming in every day with reports of truants, stating the attitude of the parent, with the appeal, "Can't something be done." "Ihis man needs to be taught a lesson." "He needs to be shown that the law must be obeyed." It amounts to a demand for justice for children now being reared in ignorance, for protection against the influence of this class over other children. It is a firm insistence, that as society has burdened itself with providing an opportunity for development, it should not later be burdened by having to provide maintenance for those who have not made use of the opportunities provided.
As to the manner of enforcing the law there will always be a diversity of opinion, but it seems to have been generally accepted that there are unfavorable forces at work, making it difficult for the situation in rural schools to be handled by our present county truant officers, even were they disposed to handle it. It has been sufficiently shown that they do not attach sufficient importance to the problem, and do not enforce the law. It was found that as a whole, county and district officers are only too glad to get out of this work and do not feel it is an encroachment on their rights when the state assumes the responsibility. The question of which department shall enforce the law is a minor one, but will be discussed in the proposed changes in the law.
The following is a summary of conditions found to exist during the investigation:

1. The law of truancy and compulsory education has not been thoroughly understood by teachers, and in some cases by county superintendents.
2. A few county superintendents have taken hold of the work with a will, but the greater number have not been overzealous in explaining the law nor in creating an enthusiasm for it.
3. Not all of the county superintendents require cases of truancy to be reported and when cases are reported, they do not enforce attendance.
4. Fear of loss of political power deters some county superintendents and sheriffs from acting.
5. All county officials are overcrowded with work and truancy is put in the background.
6. County superintendents are often inspecting schools when the report of truancy comes in and even when disposed to act, much delay is caused by not getting the reports.
7. The desire to have their counties show up well causes some county superintendents to report few cases of truancy.
8. Teachers have not made the law clear to parents.
9. The number of cases of truants reported by county superintendents and by teachers is not authentic and the compilation is often made without reference to $\%$ census roll.
10. Teachers do not visit the homes to ascertain the cause of truancy.
11. Many teachers have lost confidence in the efficacy of the law. Others do not report for fear of losing their positions or incurring the enmity of the parents.
12. The first requisite in determining truancy-a school census in the hands of the teacher-is often wanting.
13. School censuses are not reliable and are often incomplete.
14. School clerks are often incompetent, frequently have truant children of their own, do not visit the homes conscientiously in taking the census, sometimes cópy a preceding census, and are not careful to get the exact ages of the children.
15. Registers are not kept in all cases and where kept entries are often not made regularly. No space is given to show the exact age of the child and in place of entering the names and age from the census roll, the teacher takes the word of the child.
16. Private and parochial schools are more negligent than public schools with respect to registers and reports. They employ no checking system when a child goes from one school to another and thus have no means of knowing whether truancy exists.
17. Some private and parochial schools are in session but three days of the week.
18. Many families are migratory and the absence of a system of registration makes it impossible to check up the lists of children who should be in school.
19. Parents think they are safe in not complying with the law because it has not been enforced.
20. Even where an attempt has been made to enforce the law there is great loss of time in reporting the child and in subsequent notices to the parent.
21. Parents do not always tell the truth regarding their children.
22. Some cases of truancy could be avoided if the school boards were required to furnish temporary relief during inclement weather.
23. Many children live more than two miles from the school. In one county in the state there are over 700 such. This should not invariably be an acceptable excuse, as some parents are well able to transport their children.
24. Causes for truancy are for the most part, greed, shiftlessness, and carelessness.
25. Truancy does exist in a greater degree than has been generally believed.
26. The law can be enforced without imposing unnecessary hardship.

27 . In the enforcement of the truancy law, state interference has proven to $b \varepsilon$ more effective than local interference.
Some of the results of the investigation may be summarized by saying:

1. Truants were returned to school with few prosecutions.
2. A wholesome respect for the law was fostered.
3. The interest of the public was aroused and the hearty co-operation of those previously lethargic was received. At school board conventions in the fall of 1910, factory inspectors were impressed with the earnestness of school board members in their desire to see cases of truancy reduced to a minimum.
4. Parents were made to feel that the state meant business, and at the same time that it was desirous of helping rather than hindering, in promoting the welfare of the parent and the child.
5. Not a few complied with the law after witnessing the action brought against others.

## OU'TLOOK.

Thus far, the report has attempted merely to show conditions and not more than suggest a remedy. One of the causes of non-enforcement of the law has been shown to be a lack of appreciation of the true condition of truancy and its economic effect upon the rising generation. One of the results of the investigation has been to arouse the people to such an appreciation. Factory inspectors report that when the foreign speaking child and parent have been led to see that ability to speak English will secure better positions the child has either been enrolled in the public school or English has been taught in the parochial school attended by such child. This suggests that one mode of attack on truancy is in the direction of enlightenment as to the economic advantages of an education. That, of course, would be the ideal way, and at the present time the attitude of the state is understood to be a sympathetic rather than a tyrannical one. As has been previously pointed out, so far as possible, the parent is led to see that the law is not for the purpose of imposing hardship, but rather to serve as a benefactor of the child.
It is only just, however, to say that admirable work has been done along these lines for years. Educators everywhere have encouraged a more perfect attendance and not without beneficial results. But there are parents who will not respond to the educative treatment and for the sake of their children and other children, these must not only be urged, they must be forced to comply with the law. It is time to get away from the American idea of personal liberty, when that liberty interferes with the opportunities of the child for advancement. If it be said that some children cannot be forced to attend school, the answer must be that there ought not to be a child of school age, mentally, and morally fit, who is not in some way receiving the essentials of an elementary school education. If he is not fit, he should be in an institution for his kind. Millions of dollars are expended annually in maintaining public institutions for development. Side by side with these are the institutions for restraint, for reformation, and for protection. We have prided ourselves on attempting to carry a free education to every child. With other nations, we have been forced to provide for the delinquents. In almost every county may be found an almshouse, a sanatorium, or a jail. In every community families are begetting offspring who will become their occupants. If it is the duty of society to provide for these latter, it is the privilege of society to take every possible means to prevent an jncrease in their number. If, as is generally conceded, education will limit the
dependents, make for efficiency, and decrease crime, we ought by all means to seë that every child is receiving that education.

At the present time, there is a great need for a careful and systematic study of the development of the child. We have isolated cases. We have a few statistics. In a few cities, a careful record is kept for each child, but only for a few years while he may be enrolled in a particular school. It is known when a child enters school, how many days he attends, and when he leaves school, but little is known as to what becomes of him. Our laws require a record of birth and of death. They should require much more if we are to reach and better conditions, the complex causes of which we have only a vague idea. What is needed and what will eventually come, is a card record system which will follow the child from the time he must enter school until at least the time when the law permits him to leave it. Such a card or system of cards might show the deportment, scholarship, health, promotion or non-promotion, truancy, punishment, occupation and character of parent, final destination of the child after leaving school, and such other information as would suggest itself with actual use of such a system. This would act at once as a census, a checking and a registration system. It would furnish a most excellent means of getting at the problem of how to limit the number of undesirables by a systematic study of the conditions affecting the development of characteristic types.
The following are two of a series of cards suggested by the United States Commissioner of Education. Both front and back of the cards are given. One card is to be transferred with the pupil, the other card is to be kept by the principal or, in a county system of schools, by the county superintendent.
(Front)

| 1. Last name 2. First n | 2. First name and initial |  | Elementary School record system-admission, discharge and promotion card. |
| :---: | :---: | :---: | :---: |
| 3. Place of birth | 4. Date of birth | 5. Vaccinated | To be kept for every pupil and with the pupil when he is transferred to any school, either public or private. in the city or outside the city. Great care should be used to have the names complete and correct. <br> Write all dates as follows: 1912-9-95. |
| 6. Name of parentor guardian | 7. Occu parent, | ation of or guardian |  |



When a pupil is permanently discharged to work, to remain at home, or because of death, permanent illness, or commitment to an institution. this card is to be returned to the principal's office and a full statement of the cause of the pupil's discharge is to be made in the blank space remaining above. (over)
（Back）

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(Front)

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In the space below may be recorded: (1) cases of truancy; (2) cases of corporal punishment; (3) reasons for nonpromotion; (4) other matters worthy of record, such as serious illness, or pronounced characteristics likely to affect success.
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A state system of recording would not be impracticable. Less than 400,000 between the ages of seven and fourteen reside in the state. An ideal central system would arrange these by counties and districts. A transfer from one district to another or from one county to another would involve but a moment's time, and the conditions surrounding every child could be watched by the state. The system need be neither complex nor expensive. However, if it involved both, the returns, some time in the future, would justify it.

An apparent inconsistency exists in our present state compulsory education law in that it requires rural schools to maintain school eight months during the year andpermits parents to keep children at home two months. Childron are permitted to register one month late when the school is well in hand and leave a month before its close, before final examinations are given. We do not need to dwell upon the evils of this. Children should be required for their own development, for their interest in school work, for the convenience oi the teacher, and for the good of the rest of the school to enroll at the beginning of the term, and to be in school while it is in session. If eight months is not too long to require a school to be maintained, it is not too long to require attendance. The economic value of those two months of school is greater to the chfld than is the value of the same two months of work to the parent. It is true that work on a farm or at housekeeping has an educational value, but that will in no way lessen the harm wrought by late registration, nor wil it change the inconsistency of requiring eight months of school and six months of attendance. One of the two should be changed
The law requires that the school census should be taken at the end of the school year. Many of the school reports are based on this census. During the summer months, children move in and out of the district. Some pass the age limit while others die. The result is, that however accurate the census might have been in June, it is not accurate for September. It may not be desirable to change the time of taking the census though at this time there appears no reason why it could not be taken the week preceding the opening of the school. If the time cannot be changed, there should be a supplementary census and the old census checked up with this, that there may be no unnecessary delay in securing a list of those who should be enrolled at the opening of school.

As to the subject matter of the census, one change has been suggested-that of requiring the exact age of the child. One advantage of this is obvious-it will furnish a means of determining the exact age of the child at any time. It will also prevent the excuse often given without ground that the child is just past his fourteenth or sixteenth birthday. It would be well if the census could include remarks concerning the ability of the parent to send the child to school. If this were used in connection with the card system, the teacher would be in a situation where she could understand the child better, and could work to better advantage. By all means, the census must be in the hands of the teacher when the school opens. School districts should not be entitled to receive state aid unless they see to this; teachers should be liable if they do not insist on a census being at hand the first day.

A word needs to be said concerning the school records. Public, private, and parochial schools are required by law to keep certain records, but many cases appear where such records are either improperly kept or not kept at all. Such records should be uniform, regularly kept, and give the following information: Name and address of parent, name of child, exact age, date of entering, which part of day absent or truant, tardiness, health, conduct, and a uniform scale of standings.
There is need also of a uniform report card for each pupil which shall contain the standings of the pupil based upon a scale uniform throughout the state. This card should also show the deportment, absence, and tardiness of the child. The state should have these cards printed in quantity and furnish them at cost, requiring every district to use them.

No less imperative is the use of promotion cards. Many, but not all, schools use them and much uncertainty arises when a child goes to a new school.

To correct the evils attendant upon migratory pupils, a transfer card is necessary. This should not be given to the child but should be sent to the truant officer under whose jurisdiction the child will be. Such card ought to give the full name and exact age of the chid, the date of discharge from school, grade, days absent, health, conduct, scholarship, name of school to which transferred, name,
address, and occupation of parent. This card when received by the truant officer should be forwarded at once to the teacher who will have such child that he may be duly reported for truancy if not enrolled. The necessity of uniformity and regularity of reports cannot be urged too strongly.
It is to be regretted that so many children in the state live more than two miles from school and that they may thus be permitted to remain at home. While the law is meant to encourage, either a greater number of schools, or free transportation, it is not intended to aflord a blanket excuse for all parents who are thus locatcd. Many are abundantly able to transport their children-some do. If local boards and a disinterested factory inspector could investigate such cases it might reasonably be required that parents, financially able to do so, see that their children are in school a certain portion of the year.
Throughout this report there has appeared the need of some system of registration of children. Parents move from one district to another, families move in from different states. Children enroll in one parochial school for a time, and leaving it enroll in another, or in the public school. Children in the parochial school withdraw and enroll in a private or parochial school. An investigation of a reported case of truancy often reveals the fact that the child has removed from the district, is enrolled in some other school, or has passed the age limit. If they have moved from the district after the taking of the census, they may continue to be truants. This could be avoided by requiring families to register in the district in which they located and if they proposed to send their children to other than a public school, to designate the school. Census returns could thus be furnished the teacher of private or parochial schools and the parent required to send his children to the school which he might designate. If he wished to send the child to a different school, his residence remaining the same, it is not imposing too great a hardship to require notice to that effect in order that the proper teachers may be notified. This would prevent duslication of reports, at present one of the causes of so much inconsistency in school statistics, and would prevent the whimsical changing from one school to another so common in the parochial schools. Whether these reports together with the census should remain in the county or go to a central state bureau is a difficult problem. In the enforcement of the child labor laws by the Bureau of Labor the information contained in such reports is not only valuable but imperative. Iruancy and child labor are so closely allied that the enforceemnt of laws concerning each can best be accomplished by one bureau. The state department of education has many other phases of work. County superintendents throughout the state are overburdened with the supervision of their counties along other lines than truancy. As has been previously suggested, they are often out of their offices during an entire week and all cases of truancy reported must wait until their return. In order for them to properly handle the situation they would need deputies and even if this were done the question of state vs. local interference and enforcement is not answered.

Some states have a compulsory attendance bureau. From the New York Bureau we have the following report ior 1910. Of 3,073 persons in parental relation arrested for violation of the compulsory attendance law, 677 were either fined or sent to jail. Of truant and delinquent children found absent from school in violation of the law, there were apprehended 8,271 , and 1,302 of that number were committed to truant schools or correctional institutions. Whether Wisconsin should have a distinct truancy or attendance bureau is of secondary importance to the centralization of authority and the systematizing of records and reports.

These are some of the needed legislative changes in compulsory education. Germany, France, and England have already worked out some of the problems. A few of the states have taken radical steps toward reform. In all states, where education is compulsory, the question of enforcing the law is being agitated. Legislation toward any end must be progressive. As conditions change, laws must change. What would meet the situation of a decade ago, will not meet it now. The legislation of this year may not-in all probability will not-solve the problems of a future decade. It cannot be questioned that there is need of improvement in our present educational system, particularly with refercnce to the elementary and secondary schools. It is with the hope of emphasizing a few of those needs, and suggesting legislaticn to meet them that this report has been made and the following bill drafted:

## COMPULSORY EDUCATION.

Section 1. Required Attendance.-Any person having under his control any child between the ages of seven and fourteen years, or any child between the ages of fourteen and sixteen years not regularly and lawfully employed in any useful employment in service at home or elsewhere as provided by chapter 349 of the laws of 1903, shall cause such child to attend some public, parochial, or private school, regularly, in cities of the first class during the entire time the school attended is in session, which period shall not be less than nine months; in all other cities not less than eight school months; and in towns and villages not less than seven school months in each year. Attendance must begin within the first week of the school term of the ds.rict in which such children reside.
This section shall not apply:
(1) 'To any child who lives in country districts more than three miles by the nearest traveled road from the school house in the district where such child resides unless transportation is furnished by the district.
(2) To any child not in sroper physical or mental condition to attend school, who shall present to the truant officer the certificate of a physician in general practice to that effect.
(3) To any child not physically able to attend in inclement weather who shall present to the truant officer the certificate oi a physician in general practice to that effect, a separate certificate to be secured for each day, or for each period of successive days' absence, and the district to pay the physician's fee for the certificate.
(4) To any child who has completed the course of study for the common schools of the state or the first eight grades of work as taught in state graded or other graded schools of Wisconsin, and can furnish a proper credential showing that he has completed one of the courses of study mentioned or its equivalent.
Section 2. Instruction elsewhere than at a public school.-If any child between the ages of seven and fourteen years or between the ages of fourteen and sixteen years, not exempted by the preceding section, is instructed elsewhere than at a public school, the instruction shall satisfy the following requirements:
(1) The same subjects shall be taught in English by a competent teacher, and the instruction shall be substantially equivalent to that given children of like age and grade at the public school of the city or district in which such child resides.
(2) The instruction shall be for as many hours each day, and as many days each week, as are required of children of like age at public schools.
(3) The number of days taught, after holidays are deducted, in any place of instruction where children not exempt are taught, shall not be less than the number of days required to be taught in the public schools after legal holidays are deducted.
(4) The county or city superintendent with the concurrence of the state superintendent shall yass upon all questions involving the competency of teachers or of the equivalence of instruction.
Section 3. Truant Officers.-(1) The board of education or any board having similar powers in all cities of the first class shall appoint ten or more truant officers and in all cities having more than two thousand population by the last United States or state census, one or more truant officers who shall enforce the provisions of this act. And in all cities having less than two thousand population by such census, and in all towns and villages, the state factory inspectors shall be the truant officers and shall be provided with a sufficient number of deputies to enable them to enforce the provisions of this act.
(2) Every truant officer is vested with nolice power, the authority to serve warrants, and the authority to enter workshops, factories, stores and all other public places where children are employed and do whatever may be necessary to enforce this act. He may take into custody any child between the ages of seven and fourteen years, when not by law exempt who is not attending school and may conduct such youth to the school he should attend.
(3) The truant officer shall institute proceedings against any officer, parent, guardian, person, partnership or corporation violating any provision of this act, and otherwise discharge the duties described herein, and perform such other service as may be necessary to preserve the morals and secure the good conduct of school children.
Section 4. Enumeration.-(1) At the annual school meeting or as soon thereafter as practicable, the board of education of each school district shall appoint one or more persons to take the enumeration of all youth between the ages of four and twènty years resident within the district. Each person appointed shall take an oath or affirmation to take the enumeration accurately and truly to the best of his ability.
(2) The enumeration shall be taken in each district annually during the last two weeks of August unless the schools open the regular term before that time, in which case the census shall be taken two weeks next preceding the opening of the school. The census shall state the full name and address of the parent or person in parental relation, the name, age, year, month and day of birth of child, the occupation of th: parent, ability of the parent to send the child to school, the distance from the school by the nearest traveled road, whether the parent contemplates moving from the district during the year, and, if any child coming under the provision of the compulsory education law is to attend a school other than the public school of the district, such other school shall be definitely named. The census shall also indicate the names of any children who are feeble minded, physically disabled, blind, deaf or mute.
(3) When making returns to the clerk of the board of education, the enumerator shall accompany them with his affidavit that he has personally taken the enumeration to the best of his knowledge and belief and that such list contains only the names of children actually residing in the district. The clerk of the board of education or any officer authorized to administer oaths, may administer the oath and take the affidavit.
(4) The board of education shall determine the compensation to be allowed for making the enumeration.
(5) When a school district including territory attached for school purposes is situated in two or more counties, persons taking the enumeration must report on distinct blanks for each county.
(6) Immediately upon the receipt of the returns of the census and before the opening of the school, the school clerk shall make three copies of the returns, and shall forward one to the city or county superintendent, one to the bureau of labor, and deliver one with the register to the teacher employed in the districc, and if the school consists of two or more departments, the copy shall be placed in the hands of the principal. Provided that in cities having a population of two thousand or over, a copy need not be sent to the county or city superintendent, and when children below the high school are taught in different school buildings in the city, whether public, private or parochial, the principal teacher of each school shall receive a copy of only that part of the census which applies to such school. Any child who is to attain the age of seven years during the first four months of school shall be reported and shall be required to attend in like manner as children of seven years of age at the opening of the school term. The clerk shall keep the original report in his office for a period of nine years from the date thereof.
(7) When children not exempt from the operation of the compulsory education law are by declaration of the parent to be enrolled in a school other than the public school, the copy of the census given to the teacher of the public school shall contain only the names of those children to be enrolled therein, and the teachers of other schools shall at the same time receive copies containing only the names of those children to be enrolled in such other schools respectively. The reports shall be exact copies of the original census report with respect to all information concerning the parent and child.
(8) The clerks of boards of education and other officers who have the care of the school census returns, shall have their offices open at all reasonable hours, and allow and assist superintendents, teachers and truant officers to secure information from the school reports on file in their offices, that may in any way aid in the enforcement of the provisions of this act.

Section 5. Transfer of Pupil.-In case the person in parental relation desires to enroll the child elsewhere than in the school designated either at the opening of the school or at any time thereafter, notice shall be given personally or in writing to the clerk of the district, who shall notify immediately the teacher of the school where such child has been enrolled. The teacher receiving the notice of withdrawal shall make the entry in her register, notify the truant officer who shall notify the truant offlcer under whose jurisdiction the child will come. In making the transfer, the teacher who had charge of the child shall fill out a transfer card containing the following information: The full name and exact age of the child; name, occupation, old address of the person in parental relation; name of school to which pupil will transfer; grade, days absent, days present, health, conduct, scholarship, and date of last attendance of pupil; namè and number of school district in which child resided. ''his card shall be sent to the truant officer; by him to the truant officer having future jurisdiction over the child and by the latter to the teacher to be charged with the child, who shall enter the name upon the register and proceed to report for truancy.

Section 6. School Records.-Each public school district and each private or parochial school which has enrolled children under the compulsory education law, shall provide a register for attendance and scholarship, which shall contain space for the name and address of the parent, the exact age of the child, his name written in full, days absent, days present, days tardy, deportment and scholarship attainments. On or before the day of opening school every teacher of private, public or parochial schools shall cause to be entered in the register the names and ages of all children required by law to attend. The entry shall be made from the census or the part thereof furnished the teacher by the clerk of the district. Other children or the required by law to attend school shall be duly entered in the register as they enroll. Each teacher whether of private, public or parochial school, shall keep a daily record of attendance and absence and a record embodying all of the data enumerated in this section, and such record shall be open to the inspection of all truant or other school officers at any and all reasonable times.
Section 7. Reports of Teachers.-(1) At the end of the first week after the op?ning of any public, private or parochial school, the teacher shall report to the proper truant officer, from the list furnished by the clerk of the district, the names of those children, with the information concerning parent and children appended thereto, as have not enrolled in compliance with the law. Printed forms for this and other required reports shall be provided by the bureau of labor and furnished to district clerks and by them to the teachers or other officers requiring them.
(2) At the end of each month that school is in session, principals and teachers of all schools, public, private, and parochial, shall report on blanks provided for that purpose, to the county or city superintendent the names, ages and residence of all pupils enrolled and in attendance, and to the bureau of labor the names, ages and residence of all pupils who are not complying with the law. They shall at all times
report such other facts promptly as the county or city superintendent. bureau of labor or truancy offlcers may request in order to facilitate the carrying out of the provisions of this act. Provided, that principals and teachers shall report to the proper truancy officer all cases of truancy and incorrigibility in their respective schools as soon after these offenses have been committed as practicable.
(3) For all schools below the high school, a promotion card and a monthly report card shall be used as a part of the required reports of the school and shall be sent to the parent. The form and contents of these cards shall be prescribed by the state devartment of education and shall be uniform throughout the state.
(4) In case a pupil enrolls whose name is not on the census roll and who does not enter by transfer card, the teacher shall ascertain as much of the information cal'ed for in the transfer card as possible and forward such information at once to the truant offlcer and to the bureau of labor,
Section 8. Precedure for Truancy.-The truant officer shall immediately upon ro. ceipt of a report of truancy, or when he obtains information of delinquencies, notifv by mall or by service of notice in the same manner as provided for the service of summons in a civil case in a justice court. the parent or person in parental relation to cause the child or children to be sent to some nublic. private or parochial schonl within five days from the date notice is deposited. properlv addressed in the post. office, if the notice is served by mail. or three days from the date of the personal service of the notice. The notice shall inform the person in parental relation that the law reguires that all children between the ages of soven and fourteen years, including those who will attain the age of seven vears during the first four months of school, and between the ages of fourtieen and sixteen if not otherwise exemnt, ar* to be in regular attendance at some nublic, brivate or parochial school. In case any child reported shall not have enrolled within ten days from the date on which the teacher mailed the report, of delinovency, a second notice shall be mailed by the teacher to the truant offlcer who shall immediately unon its receint make complaint against the person in parental relation before any justice of the peace in the county where the party resides. But in counties where the criminal jurisdiction of the justice of the neace has been abolished the courts now having such power shall have jurisdiction in cases brought under the provisions of this act, for such refusal or neglect to send such child to some school, and the justice of the peace or other offlcer shall issue a warrant on the comnlaint and shall rroceed to hear and determine it as provided by statute for other criminal cases under its jurisdiction.

Section 9. Commitment of Incorrigibles.-Anv person proceeded against under the nrovisions of the preceding section who proves in defense that he is unable to comvel the child under control to attend school or to work, shall thereupon be dischargerl from liability and the child shall be proceeded against as incorrigible according to law and in case of commitment. if the person having control of the child prefer. the child shall be committed to a school controlled by nersons having the same religious faith which will maintain it without compensation from the public treasury.
Section 10. Proof of Age-Whenever under this law there is any doubt as to the age of any child. a verified baptismal certificate or a dulv certifled birth certificate shall be nroduced and filed in court. In case of proof that no certificate can he secured. the record of age stated in the first school enrollment or first school enrollment to be found shall be admissible as evidence.

Section 11. Relief to Enable Attendance.-When a truant officer is satisfied that a child compelled to attend school by the provisions of this act, is unable to do so because required to support or care for others legallv entitled to his services, who are unable to sunport or care for themselves. such officer must renort the case to the president of the board of education. Thereupon the board of education shall furnish text books free of charge, and such other relief as may be necessary to enable th? child to attend school for the time each vear required by law. The exnense incident to furnishing books and relief must be paid from the contingent funds of the school district. The child shall not be considered or declared a pauper by reason of the acceptance of relief. If the child or its parent refuses to take advantage of the relief thus afforded, the child may be committed to a children's home or a juvenile reformatory.
Section 12. Interference with Truant Officers.-Any person interfering with a truant nfficer in the lawful discharge of his duties and any person owning or operating a factory. mercantile or other establishment who shall refuse on demand to exhibit to the truant officer the registry of the children employed or the employment certificate of the children shall be guilty of a misdemeanor.
Section 13. Failure to Make Enumeration.-If the enumeration of the children of a district is not taken and the reports made as provided by this act, the district shall not be entitled to receive any part of the school funds distributable in that year. If the loss to a district occurs through a failure of the board of education to porform its duty resnecting the census and reports, its members shall be liable jointly and severally to the district for the sloss, which may be recovered in an action brought in the name of the state. The money so recovered shall be paid into the county treasurv and apportioned as the school funds so lost would have been apportionet.

Section 14. Failure to Make Reports.-Any teacher in a public, private or parochial school, or any officer who shall fail or neglect to make the reports required by this act shall be subject to a forfeiture of not less than five nor more than twenty-flve dollars for each failure, or neglect, said forfeiture to be sued for by any truant officer and recovered in the same manner other forfeitures are sued for and recovered under the Wisconsin statutes, the amount of the forfeiture to be paid into the school district treasury of the district where the offender resides.

Section 15, Penalty for Neglect of Truant Officer.-When a child has been reported
to truant officers and they do not proceed to cause the child to return to school, or report to the teacher the legal excuse for not attending, or the findings of the court, the teacher shall report the delinquent truant officer to the bureau of labor which shall proceed to investigate, and where there is evidence of a failure to perform duty, action shall be brought in the name of the state compelling the offending officers to perform their duties required by law. Any officer thus proceeded against shall be liable in a sum not exceeding twenty-five dollars, and upon conviction the second time shall be removed from office. The bureau shall at the same time bring action against the parent violating the provisions of this act. who shall be liable as hereinafter provided. Provided, that where the truant officer reported is a factory inspector, the teacher shall make the report to the state superintendent, and the department of education shall proceed against the truant officer in the same manner and with the same penalty as where the action is brought by the bureau of labor.
Section 16. Neglect of Parent.-(1) Any person in parental relation, proceeded against for failure to keep child in school, shall be punished upon conviction thereof by a fine of not less than ten dollars together with costs of prosecution for the flrst offense and by a fine of not less than fifty dollars together with costs of prosecution, or by imprisonment in the county jail not exceeding three months or by both such fine and imprisonment in the discretion of the court for the second offense.
(2) Any person in parental relation who shall fail to comply with the provisions of this act with respect to the giving of information or the notice of transfer of child, shall be liable in a fine of not exceeding flve dollars for each offense. The district attorney and his assistants shall prosecute in the name of the state all violations of the provisions of this act.
Section 17. Forfeiture of State Money.-Any city or district whose officers refuse, in the judgment of the state superintendent of public instruction, to enforce the provisions of this act shall not be entitled to receive public school moneys due such city or district from the school fund as long as the refusal continues.

## PART III

THE NEWSBOYS OF MILWAUKEE.
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# THE NEWsbOYS OF MILWAUKEE. 

By<br>ALEXANDER FLEISHER,<br>Special Agent of The Bureau of Labor.

## INTRODUCTION.

It is a universally accepted principle in England and America, and in the principal countries of Europe that the employment of children under a certain age as bread winners is against the public welfare-a principle which is embodied in child labor laws operating thoughout these countries. In one respect these laws fail to accomrlish the purpose that dictated them; they leave a certain large class of child laborers unprotected. They prohibit children from working as employees for a definite wage or commission; but they do not prohibit children of any age from working as independent merchants. The child who sells newspapers or blacks boots or vends matches or chewing gum is not an employee. Since he works on his own responsibility, his earnings are classed as profits and not as wages. The person or corporation that supplies his merchandise is not responsible for his acts. The title has passed with the transferring of the goods, and the boy is working as a merchant. So. although he is engaged in child labor and although he is under the age at which children may lawfully be employed for wages, the child labor laws have no application to him.

Since the general child labor laws are thus limited in anplication, they must be reinforced by laws relating to the engaging of children in strect trades, in order that the principle of public policy above mentioned may be fully carricd out; otherwise we shall continue to have in our cities numerous children engaged as bread winners below the age which the community has decided should be the minimum.
Acting on these considerations, the legislature of Wisconsin passed in 1909 a strect trades law providing that no boy under ten years of age and no girl under sixteen might sell or offer for sale any newspapers, magazines or periodicals. No boy under twelve or girl under sixteen was to be employed or engaged in any of the other street trades. Boys, before entering on any work in the street trades, must comply with all legal school requirements and have a permit and badge issued by the State Facoory Inspector or by a judge. Neither permit nor badge may be issued until aprlication has been made by the parent or guardian of the child and until a certificate has been received from the principal of the school which the child is attending, showing the child's standing in school. Before the permit may be issued, the officer must be satisfled that the child is mentally and physically able to work in the street trades in addition to his school work. The permit must give the name and age of the child and a description of any peculiarities. The badge must be worn conspicuously on the person of the boy, and must be renewed annually. No children may sell during school hours nor after 7 o'clock in the evening nor before 7 o'clock in the morning. Newsboys may be engaged until 10 o'clock and may begin work at 6 o'clock. The badge shall be taken away from the child for the first violation of any portion of this act and in case of a second offence, he shall be taken before the Juvenile Court.

This law is, because of one serious defect, practically useless. It provides no efiective penalties for its violation. It does provide, to be sure, that a child who violates its provisions shall forfeit his badge. But there is no penalty for not taking out the badge; nor is there any adequate penalty for violation of any of the provisions. It is impracticable to enforce a law if the only means of enforcement is moral stasion; and this law is no exception to the rule. The factory insyectors and truant officers of Milwaukee agree that for practical purposes the street trades law of 1009 might as well not have been enacted. A large number of boys are selling without having obtained permits and it has been practically impossible to compel them to obtain these. It has been of no avail to take the cases before the Juvenile Court because the parents were not held responsible for their children's failure to live up to the law. The enforcement was left to four separate sets of officials-factory inspectors, truant officers, officers of the Juvenile Court, and police officers. Naturally little was accomplished.

Unless, then, a large class of children is to be left unprotected, new legislation regarding children in street trades must be enacted, and legislation containing adequate means of enforcement. One object of the present paper is to present some facts which it is hoped will aid in the solution of the question: what means of enforcement would be wisest and most effective?

But even if the provisions of the present law were made effective, the question remains whether the law does well to fix the minimum age at which a child may sell papers or black boots at ten or twelve years, as against fourteen years, the minimum age for occupations covered by the child labor law; whether this distinction between child merchants and child employees is any more than a legal technicality; whether justice does not require the state to set the same limit upon child labor in the street and child labor in the factory. On this question there are two opposite views. On the one hand the grave physical and moral dangers to which child traders are exposed, are pointed out; many superintendents of reform schools concur in the opinion, expressed by Nearing that "the professional newsboy is the embryo criminal." 1

These considerations would lead to the conclusion that the minimum age set for street trading should be as high as that set for other kinds of labor. There are two good arguments on the other side. First, it is said that a child may fulfil the requirements of the compulsory education law and still be engaged in a street trade. Second, it is argued by newspaper men, and by men in good standing in the community who have risen from the station of newsboys, that the work of the street trade is valuable to a child, as cultivating self-reliance and as furnishing good business training. These considerations would lead to the conclusion that the state should set a lower age limit for child traders than for child employees.

There has been abundance of discussion on both sides of the question; but there has been no adequate investigation of the facts. Before a valid conclusion can br reached, an adequate body of data must be collected. It was chiefly for the purpose of contributing something toward this end that the investigation reported in the present paper was undertaken.

To sum up: this paper attempts to present some facts to aid in determining these two great questions:
(1) What minimum age should the law set for engaging in street trading?
(2) What means should be adopted of enforcing the law?

These facts were gathered in the course of an investigation conducted in November and December, 1910. The investigation consisted of four parts: (1) Examination of the life of children engaged in street trade in Milwaukee; (2) examination of the statistics of the reform school for the purpose of discovering what connection might exist between strcet selling and juvenile delinquency; (3) interviews with the circulation manager of the newspapers regarding the state regulation of the work of newsboys; and (4) a study of the measures that have been taken in other states and cities in the interest of children engaged in street trades, and a review of previous investigations.

[^28]
## LIFE OF CHILDREN IN STREET TRADES.

The investigation of the life of children in the street trades was limited in the following ways:
(1) The investigation was confined to the city of Milwaukee, since the street trade law of 1909, summarized above, applies only to Milwaukee, the only city of the first class.
(2) The investigation was limited to the life of newsboys, since these form the largest class of street merchants-more numerous than the other classes combined.
(3) Boys engaged in delivering papers from house to house were not included in the investigation. The boy who carries papers on a route, although he frequently works long hours, is working near his own home-the "street life" does not grip him, and he is not subject to the temptations that are said to beset the boy who "hustles" on the busy down-town street.
(4) Boys under the age of ten years-the legal minimum fixed by the law of 1909were not included, because, although there are such boys selling papers on the street, they form only a small and unimportant class.
(5) Boys above the age of 14 were not included, because such are permitted under the child labor law to engage in almost any occupation, and the purpose of the investigation was to determine whether it is expedient that the legal minimum age at which children are permitted to engage in street trading shall be less than that at which they are permitted to work as employees.

To sum up: the investigation was limited to Milwaukee newsboys between the ages of 10 and 14 who sold papers on the street.
An investigation so restricted in scope leaves, of course, much to be done before all the important facts concerning children in the street trades shall be gathered and made available. And indeed much does remain to be done, for investigators have as yet given very little attention to the study of these facts. It is hoped that the present paper will suggest to some readers a study of other classes of child merchants than that here considered, and of child merchants in other cities than is Milwaukee. But meanwhile it is believed that the facts here presented are of considerable significance. Though they concern only newsboys, it is believed that they are an index of the life of other young street traders; for the life on the street is the same, no matter in what particular trade the child is engaged.
The present study was carried out partly by direct observation; partly by means of a schedule to be filled in by answers from the boy's family, partly from information received from the boy's teacher, and partly from information received from the boy himself.
In studying the newsboy in the street, the investigator came in contact with a large number and was frequently taken into their confidence. The boys were watched and studied at all times that they were on the street. Their various activities were observed; particularly sales and the returns from them.
The following schedule was used:

III. INCOME. (Amount Received by Family Cashier)


Remarks-Housing:

## Cleanliness

## Other:

## IV. TO BE ObTAINED FROM BOY

What does boy earn per week. $\$$
How much given to famils, \$
Why is he selling papers?


## Instructions

It is necessary to get answers to all questions, as there are a comparatively small number of cases being investigated.
Divisions I and III are to be obtained from the family. Division II from school principal or teacher, Divisicn IV from the boy himself, away from his family, if possible.
Only boys under fourteen are to be considered.
If parent is dead, cross out (line two, over).
*Use.check $\operatorname{sig} n(V)$ to mark what answer is.
If there are several answers, check each.

It was not expected that the questions in regard to shooting "craps" and selling in saloons and the tenderloin would be satisfactorily answered, as the families in the great number of cases would not be aware that these practices existed. It was hoped, however, that the questions would show some of the dangers of street selling to the members of the boy's family and would consequently act as a check. They were purely "educational questions."

The facts ascertained by the means above described will be discussed under three headings:
I. The boy's life on the street.
II. The boy's family and home.
III. The boy at school.

## THE BOY'S LIFE ON THE STREET.

The work of the boy has been reviewed many times and studies made of his life on the street. The emphasis has been laid primarily on the various temptations and pitfalls open to the street boy. The attempt has been very effectually made to dispel the illusion that the youth, who rushes up to supply the customer, is getting moly a valuable training on the street. There have been articles written showing the evils of boys hanging around newspaper offices, and carrying heavy bundles of papers, and going into the resorts of the "tenderloins" of our big cities. ${ }^{1}$ The gambling of the boys ${ }^{2}$ has also been pointed out, as have other phases of the boys' life in the street. The staying out all night ${ }^{3}$ and the tendency to become tramps have been emphasized. ${ }^{4}$ Accordingly, the attempt has been made in this paper to study these facts as brought out in other cities and to see if the newsboy is affected by them to as great an extent in Milwaukee as elsewhere.

Milwaukee is a rapidly growing industrial city, the greater part of whose business life is centered within a few blocks. The crowds have a tone slightly different, especially in the evening, from those of our eastern cities, but the fascination of the street is the same. There is life all about and continual excitement, even if it takes the form of dodging trolley cars and automobiles. The boy meets a gang that he likes. He naturally enjoys excitement, change, novelty and a congenial "bunch." These are found most easily on the business streets of our cities and when we ada the opportunity to make money and to be independent there is little wonder that we find the newsboy in the heart of the city. Moreover there are the added attractions of the brilliantly lighted shop windows at night, and the flashing electric signs to increase the already powerful fascination. It is hard to explain this "spirit of the street," but that there is something that attracts us all in anything that is moving and changing, is undoubtedly true and nowhere is it found to the same extent as on our down-town thoroughfares.
The boy goes into this excitement and has for his workshop a continually changing panorama and for his customers a continually changing stream of people.
The day's work naturally starts either in the circulation department of the newspaper office, or on the street, buying from the wagons. Of the circulation offices little good can be said. The delivery office of one of the newspapers is under the pavement, in the basement of the building, and is a small, narrow room adjoining the presses. There is practically no ventilation and the wooden stairs leading to the street would not give sufficient facilities for exit in case of fire. Before the time for the coming out of the various editions, quite a number of boys congregate-mostiy the young boys. It would be impossible to give an accurate estimate of the number, since it is continually changing-the boys going out after they get their papers-and varying with the clemency or inclemency of the weather, the season of the year, and the liveliness of business on the street. Another distributing office is also a basement room, but well lighted by large windows and much cleaner and more wholesome. This paper sells to more of the younger boys because it "trusts"--gives credit to-

[^29]many more than any other. These companies have the largest circulation. The others are primarily "home papers" and are sold through boys operating regular routes.
In the offices there are gatherings of boys older and younger and although some of the conversation is not fit to be repeated, it is, for the most part, the bravado spirit that crons out, and the stories tend to the ridiculous rather than to the vulgar. There is continual" "rough-house" and horse-play and shoving, but it is for the most part given and taken good naturedly.
The great trouble is the gambling that is permitted in these places. Most of the boys have stated that there is a great deal of gambling, "shooting craps" and "matching', about and in the offices. This is natural, when we consider that there is a group of boys with nothing to do and having considerable time on their hands and money in their pockets. There is undoubtedly a great deal more in the alleys around the offices, than in the offices themselves. The greatest amount takes place just before the noon editions of the paper come out, especially on Saturday; and after 7 o'clock in the evening. There is no excuse for the boys being at the offices at the latter time, for they settle up with the street men and it is only the street men that are to report back at the office at that time. They should not be allowed on or about the premises at that time at all.
When the edition comes from the press, the boys line up before the grating and receive their papers and rush out. After the appearance of the papers the place takes on a business-like air and everything goes with snap and order. The boys seldom count them and simply take their bundles, relying on the accuracy of the circulation manager or his assistants.
The other form of distributing is from wagons or automobiles in charge of bjys about 21, employees oì the newspaper companies, known as the "street men," who supply the newsboys. The boys then rush to their various corners or if they are not allowed on the corners, begin by selling up and down the street.

## THE BOY'S EARNINGS.

The result of the investigation of the earnings of newsboys will be given in the chanter on "The Family" (see below).
It is seldom that a boy buys for cash, although the newspapers naturally limit the giving of credit to boys that they know. If he buys directly from the newspaper, the boy makes $100 \%$ on his investment, i. e., papers that he sells for one cent cost him one-half cent. The "Morning Sentinel," a two-cent paper, wholesales for $\$ 1.25$ a hundred copies; Sunday papers selling for five cents apiece, wholesale for $\$ 4.00$ a hundred. Comparatively iew of the papers are paid for until the end of the das. The reason, beside the fact that in many cases the boy has not the money to pay for them, is that more than one handling of money is thus avoided. Most of the papers allow "full returns," i. e., the returning to the newspapers of all papers that are unsold, the boys paying only for those that they have sold.

The boy may, however, act as salesman for another and there are two scales of pay. The boy may work on a salary and receive a definite, stipulated amount for the day or the week's work, or he may sell on a commission of $20 \%$ of the total sales or for $50 \%$ of the profits on the papers. By this system, on the sale of 100 papers the boy would make either 20 or 25 cents, not including the tips, which go to the salesman. The rates vary, but the above stated are the usual ones. The opinion of the older boys is that the average boy under 14 years of age averages betwcen $\$ 2.50$ and $\$ 3 . c 0$ a week. This is what the Boston investigation also showed. It is rather difficult to get any definite information from the boys while they are on the street, since they have but a very hazy idea of what their incomes are, and their incomes vary greatly in individual cases. Their sales of the different editions vary, and this appears to confuse them so that they do not really know how they stant. The boys state, however, that tins compose $50 \%$ or more of their income.
The following are a few cases that have been selected as normal. The boy was asked how much he had made and immediately afterwards how many papers he had had; and the results were tabulated. These are not extreme cases, and the point
remains that a very large percentage of the income is not from the actual sale of newspapers.


The regular profit was one-half cent per paper.
In other words, in these cases almost three-quarters of the boy's income is extrapart perhans illegitimate. He makes three times as much from tips, etc., as from legitimate profits on the sale of papers.

There are slight seasonal and weekly fluctuations. The tendency is for earnings to rise slightly during the summer months owing to an increased sale of "sports" containing the results of the baseball games. This is, however, almost balanced by the fact that there are many more boys selling during this time and the individual earnings consequently do not rise greatly.

During the first three weeks in December, there is often a slow up, as many people are too busy with other things to buy papers; but it may be presumed that the tipping on the days before Christmas almost balances this.

## GAMBLING.

Practically all writers on street trades have emphasized the great amount of gambling done by newsboys as one of the worst dangers of the business. When Mr. Lovejoy wrote to the heads of our various Industrial and Reform schools asking for opinions as to the effect of street selling, one of the questions was, "If the tendencies are bad, in your opinion, do you consider the fact of a considerable sum of money in the boy's hands, much of it available for spending without the parents' knowledge, as one cause of the trouble?" The reply was almost wholly affirmative. Since one of the principal ways of spending is gambling, the opinions of these men could be very readily and appropriately applied to gambling.
"Craps" have gone out of style, for the time being, and "matching" has taken its place, for the most part. This is a result of the attempt to stop gambling; "matching" requires no incriminating paraphernalia, and if the police appear it is almost impossible to accuse a boy who simply has coins in his hand of gambling. It takes place mostly in the distributing offices, as has been mentioned, since here the boys come together in the largest crowds and have more time on their hands than during any other part of the day. The place where the most gambling on the street takes place is behind the Schlitz Palm Garden and in the alleys in the immediate vicinity. The crowd around here is Jewish; and gambling is a Jewish trait. This form of amusement, as far as it concerns the boys of Milwaukee, is limited almost entirly to boys of this race.

There is practically not a boy on the street that will not admit that he has gambled, but there are few that will admit that they are still doing so. But it is hardly fair to claim that gambling is directly due to the fact that the boy sells papers, and much gambling would probably be found if a census were taken oì our public schools. The fact that the street boy has more money than his brother who does not sell on the street, probably affects the size of the stake rather than the fact of the gambling itself.

The significant fact, however, is not that he gambles, but that he gambles a large part of his time. Many of the smaller boys consider it a part of their life to "shoot craps" or "match" at every opportunity. It should be noted that this gambling fever affects the small boy to the greatest extent, because it is possible for him, in many cases, to go home and report that he did not make anything. Thus his gambling losses are not remarked and no punishment follows. This cannot be said to apply to the older boys who are expected to contribute a definite amount to the family income. They must therefore reserve enough of their earnings to make up this required amount.
If the boy wins, on the other hand, it is probable that he will spend his winnings on "the gang." The worst feature of the gambling that has come to the notice of the investigator is the fact that the gambling is "not straight"-that there is cheating. He was shown a number of ways in which a coin could be turned in the hand so that a definite face might appear in matching, or that the dice could be thrown so that a definite combination might appear. There is undoubtedly great danger in this because it certainly must jeopardize the boy's idea of right and wrong and his sense of fairness.
The police in this district are doing their best to stop gambling, but even with continual watching little seems to result, as there are a great many alleys and small streets, with boxes, behind which the boys conceal themselves. Several of the newspapers have made spasmodic efforts to stop it, but these movements have for the most part been short lived and the moment that carcful watching has been relaxed, conditions have again become very bad. The minute a policeman appears within the block, the boys scatter; the result is that this group is developing a fear of the law as expressed in the policemen, and not any respect or desire to carry out the mandates of the law.

## OWNING OF CORNERS.

One finds, in attempting to make a study of the earnings of newsboys, that the boy on the corner does the largest busines sand in fact practically all the business of the street. These boys make varying amounts, but it is no exaggeration to say that the earnings of the boys on down-town corners run between $\$ 15$ and $\$ 50$ a week.
The question naturally arises as to how the corner is first obtained and how it is maintained in the face of what must be very severe competion. The boy clearly has no legal right to his stand, but that certain boys hold definite corners is, nevertheless, undoubtedly true. The boys themselves have no very clear idea of how this right exists, or at least are not willing to explain this peculiar iorm of monopoly, if they have. Many boys, the proprietors and street sellers, were asked and the only answer seemed that the following system was in vogue: A boy sold papers around a corner until he had established a "trade"-people who bought from him regularly and would in all probability not buy from any one else. Gradually this list of customers would consist of almost all those who bought their papers at this corner, and then the boy would sell the great percentage of these sold at that location, because the regular customers form the backbone of the business, as they form the greater bulk of the sales.
The testimony of the newspapers shows the importance of these regular corners. Mr. Bert Hall, when circulating manager of the "Milwaukee Journal," estimated that the papers sold to transients, people who did not regularly buy papers at a definite place or have their papers delivered to them, did not constitute more than $4 \%$ of the circulation of the naper ( 2,000 of a circulation of 56,000 ), and Mr. Cull, the present manager, docs not feel that the number is above 3,000 , although the paper has grown materially since that time. The estimates of the other circulation managers were that at least $75 \%$ of the street sales were to people who bought from the same boy at all times.
This boy, in case he desires to leave the newspaper business, can sell out his corner, and turn over his customers to a newcomer. But it would be impossible for a boy to hold his customers unless he were at his corner regularly, and in order to maintain his place it is often necessary to hold his position by fighting for it. It is to be supposed that some corners are obtained in this way, by the driving away of the
smaller boys. But the presence of the police, and the recognition by the boys of regular rights in corners often prevents this, as is illustrated by the case of a boy of twenty who had just entered the newspaper field, who was asked why he did not take charge and hold the "Palm Garden" (the block in which the Schlitz Palm Garden is located, one block above the St. Paul depot). He said that it was practically impossible to build up a trade in this locality as the sales were primarily transient, owing to the crowds going to and from the trains; and also that the policemen would undoubtedly interfere if he tried to drive away the little fellows. If the policemen did not interfere, the other boys on the street would, and in the end it would be impossible for him to sell papers at all. The employees of the newspapers, the "street men," have much to do with the maintaining of this right, since they would refuse to sell to any but the acknowledged owner of the corner, and any unknown person would, of necessity, be forced to withdraw.

## THE BOY'S PRESENCE IN SALOONS.

The law in this state forbidding the presence of minors in saloons ${ }^{1}$ is not enforced, althought there is one forbidding girls under 17 years of age to participate or be present at any dance in or near a saloon ${ }^{2}$, and also one forbidding the sale of liquor to a minor ${ }^{3}$, both of which are enforced.
Since this is the case, it is not unnatural that we should find newsboys, even the very youngest, in and about saloons. There are four reasons for this, (1) tips are larger and more frequent in saloons, (2) the crowds are happy and consequently more attractive to the child, (3) the saloon is the warmest and most comfortable resting place, (4) there is lunch that may be taken.
Of course, it is not a very serious matter for a child to enter the saloon of one of his customers and deliver a paper and then leave at once, and the boy who happens to have a saloon on his route need not be considered in this connection.
The youngsters who do not have a definite stand or corner, without exception, state that if they were kept out of saloons, they would "quit sellin'." They explain this by the fact that a great many papers sell for 10 cents in saloons and that almost everybody buys. When people are enjoying themselves, especially when they are spending money freely, they are glad to help a little shaver of 10 or 11 years who asks them to buy something. This is more particularly true when the boy is cold and seems hungry.

It is cold work to sell papers and be on the street for hours at a stretch, and the boy frequently drors into the saloon to get warm, even if there is no sale in prospect. The lights and heat attract, and after the boy learns that money comes more casily, he develons the habit of staying in the saloons a good part of the time.

There is, besides these four reasons, the psychological reason that a boy is curious, the crowd in a saloon is always a good-natured one, and the boy likes to be admired and made a fuss over. No one rays much attention to him on the street, but in the saloon the customers are not busy and have the time and frequently the inclination to pet him.
The investigator has never seen a boy offered a drink nor has he seen the boy offer to buy one. Consequently he believes that the danger does not lie in the boy's temptation to drink, but rather in the language and attitude toward life, which he learns from the crowd that is usually found in these places.

On one evening at about $10: 30,7$ boys were taken out of one of the toughest: saloons in Milwaukee. The oldest was a little over 12 years and the youngest a little under 10. They had apparently stopped selling papers but still had papers under their arms; three had boot-black boxes slung over their shoulders. On the following Saturday 5 boys were found in the same saloon. For the most part, however, boys were found singly, their presence frequently being explained by the desire to transact business.
Some saloon owners, and more particularly the bardtenders, stated their op:nion that being around did not hurt the boys, and that it was wrong to try to make

[^30]them stop and to keep them from making a little money. This seems, in fact, the general opinion of people on the street. In the better saloons and restaurants the boys are not allowed, and if they do enter are promptly put out.

## THE BOYS' PRESENCE IN THE TENDERLOIN.

But one class of boys engaged in the street trades enters the "red light district" to any extent; that is, the boys in the public messenger service or those on private errands. This district was visited at all hours of the twenty-four, and on no occasion were any boys under sixteen discovered in this part of the city, which in Milwaukee is largely limited to the eight squares which it covers.

The newspapers have made the attempt to keep young boys from having routes :n this part of the city, and seem to have succeeded. Moreover, as there is no street life in the district and it is exceptionally quiet, there is no "street selling" and little attraction. For the same reasons, bootblacks were not found.
A few messengers were, however, seen entering this district, and it may be that the conditions found by the investigation of Mr. Lovejoy ${ }^{1}$ would be true of Milwaukee as well as other cities, but this matter was not investigated, and so no results can be given.

## BEGGING.

That the conditions which surround the life on the street, make it particularly easy for a boy to beg, is undoubtedly true. It is very hard clearly to differentiate between the system of accepting tips, which is universal, and the asking for money or accepting it without giving any real article or service in return. It is somewhat easier to distinguish between this, however, and what might be classed as petty stealing that enters into many of the transactions of the street.

The boy trades on the sympathy of the customer by his extreme youth and his appearance of poverty. That the clothes that a boy wears and his size have much to do with the making of the sale and with the proceeds of a sale has been clearly realized by the Manchester (England) ordinance which forbids children who are insufficiently clad to appear on the street.

He is able to turn to account, also, the inconvenience in making change. It must be remembered that the regular price of a paper, one cent, is a very small sum, and in many, if not most, cases, the purchaser has not the exact change. This makes it neces. sary for the boy to have at the very least four cents in his pocket to make a sale of one paper. In other words, he must, if he started without any capital, have sold four papers. He seldom has this, early in the day, and as the day advances he may frequently find himself without the proper change. The purchaser will then, in all probability, tell hịm to "keep it." This may be a perfectly legitimate tip, but the boy will at many times thereafter fail or pretend not to have the correct change. Often the purchaser may plan to give the boy a larger coin than the sale calis for, and many persons apparently regularly give a boy five cents for a newspaper. Many sales were watched, and it seemed that this system of giving something extra occurred in about $33 \%$ of the sales.

Of course, in many cases sales are lost owing to the failure to have change, and, on the other hand, the newsboy often runs off to get change. In the latter case, another danger is encountered. The customer may suddenly hurry off before the boy has returned. If this happens several times, the boy may develop the habit of forgetting to return with the change. In this case an accident or series of accidents have turned the boy into a thief.

When a newsboy who is selling papers in front of a restaurant or theater rushes to open a carriage or automobile door as the people are about to enter, is he there to sell papers or is he trying to get a tip and really begging? From a number of cases of this type that were watched, it would seem that the only real object was begging, because in practically no cases were the newspapers offered for sale.

Often newspapers or picture postals are used as a blind for begging. Boys have been found carrying newspapers a day old or older editions of the same day; it does

[^31]not seem possible that they were trying to sell them as they could have "returned" them to the delivery offices and received papers that were up to date. The only explanation is that they were begging.

A boy, aged six, was fcund in a saloon, with two newspapers and a few grimy picture postals. These he said he had had for several weeks and that he only tried to sell in saloons. He was, of course, violating the law of minimum age; but there are quite a number that make the same pretense of selling, who really engage almost entirely in begging. The majority of the boys that engage in this work are dressed more poorly and scantily than the boys who intend to make the selling of papers their main object.
There are crowds or" "gangs" who, whenever an extra appears on the street, take out a number of papers and after the excitement is over return the same papers. They must have been begging.
Another form of begging and one peculiar to the smaller boys is to stand in front of restaurants and theaters and to light the cigars and cigarettes of persons coming out. The man who has just satisfied his palate or delighted his eye is in a mood to feel sympathy for the poorly clad urchin who, seeing him feel for a match, rushes up to supply him; and he gives the boy a nickel or dime. If he resents it, he simply passes on, and the boy loses nothing. This scheme works best on drunken men, or on the young man accompanied by a woman. The latter in particular is the mark of every boy on the street.

Milwaukee is afflicted with what may be called "the suit-case evil." There are a number of boys who loaf near the St. Paul depot and ask anyone carrying a suit case for permission to carry it. The victims are generally women, and it is seldom that a woman can walk between Grand Avenue and the station, on Third Street, without being asked at least hali a dozen times if she does not desire to have her suit case carried. If ignored, in many cases, the boy will follow and continue to offer his service, or if refused will frequently turn away with an oath. In many cases, however, the boy will come up behind a woman and "grab" a suit case. He will insist upon carrying it and, finally, refuse to return it unless he is paid. In this service, the boy reckons purely on the generosity of the person whom he has "done."

These are by no means the oniy forms of begging that exist, but they are the ones that come to the surface most frequently and are consequently the most readily noticed.

Many of the boys who have long distances to go after their work, obtain their rides home free. They do not ride behind or on the steps of cars, but when stopping time approaches they take advantage of the desire of some of the T. M. E. R. \& L. Co.'s conductors who do not want to pay for their evening papers. The boys give them papers, and receive in return, transfers good on the line which they take home. It is impossible, of course, to judge of the extent of this, but it is probably a noticeable item. Of course, some boys are given transfers by passersby who do not desire to use them. The investigator, however, did not see any case of the sale of a pass no a passenger, and those the boys obtained were entirely for their own use.

Another means of "beating his way" that is used, is for the boy to keep moving in a crowded car and to manage to keep on the opposite end of the car from the conductor and so avoid paying a fare. But the boy often enters the car and starts fumbling in his pocket when the conductor comes toward him. Usually, he says in a tearful voice, "Ain't got it." Some man in the car will probably then pay his fare.

In spite of this virtual begging covered by the carrying of newspapers, there was little if any apparent begging, in the sense that there were no cases where there was not the appearance of a sale or the rendering of some service. 'This is because existing ordinances against the begging of minors are strictly enforced. It would seem, accordingly, that these other forms could also be done away with and some, at least, that seem inherent in street trading, mitigated.

## THE LANGUAGE OF THE STREET.

It is difficult to determine that the language of the boy in street trades differs radically from that of the average boy. The youngster between twelve and fourteen, whether or not he has been carefully reared, feels more grown up when able to use vile
or vulgar language, or to swear as he hears men do. Newsboys, however, and those in similar occupations have more opportunity to acquire this vocabulary than others, not only because they come in contact with older boys in the newspaper offices, but beeause they deal almost entirely with men. 'Ihis opportunity to acquire a vulgar vocabularly is increased in the case of boys who transact much of their business in saloons, and the lack of restraint allowed by their being on the street, with the added dignity implied by their earning money on their own responsibility, affords greater freedom in the use oi what they consider "manly" language.

## SUPPER.

The irregularity and insufficiency of meals has been mentioned as one of the disadvantages of the business. As has been pointed out, the greater number of boys have homes. In each case investigated, with the exception of five, the boy ate his supper after the completion of the day's work. The exceptions were Jewish boys, of whom two ate in restaurants, one in restaurants occasionally, one at a lunch counter, and one took lunch from home. These results are not, however, complete, because without doubt the saloon "free lunch" furnishes many suppers. The cook on the Goodrich Line boats, docking at the foot of Sycamore Street, furnishes a number of boys with supper in return for papers. The use to which he puts these has not been ascertained, but in all probability they are sold to passengers.
There is, however, a danger to the boy in his waiting for supper until he arrives at home in the evening. This is usually about 9 o'clock. 'The boy has not had anything to eat from the time of his noon meal until that time. It was necessary for him to rush to the delivery station directly after the close of school, and it was impossible for him to go home to eat between that time and the time of his leaving the street in the evening.
To bridge this interval between 12 and 9 , many of the boys buy cheap candy and "broken cakes" from the bakeries. The majority, it appears, do not eat a regular meal during the nine hours which contain their working time. The condition on Saturday is more serious since the boy in this case eats nothing substantial between his breakfast and his arrival at home in the evening. A child, especially one who is in the open air and active, requires good food at regular hours. It is impossible for the newsboy to obtain this.

The boy selling near his own home is not affected by this difficulty, as his work is usually over in time for him to join his family at supper.

## THEATERS.

Probably the most important factor entering into the newsboys' search for amusement is that the theaters are open on sunday. Consequently the boy frequently postpones his visit until that time instead of indulging after working hours as is the case in many places. There are no Sunday afternoon papers in the city and consequently no work in the afternoon. Even if the boy handles a Sunday morning paper he is in cull probability ready to stop by 10 o'clock or noon. Sunday is moreover a hard day "to kill" as there is neither the school nor selling to occupy his time. All these agencies tend to make Sunday afternoon the big theater time for the boys. Many boys who claim "to give at home" all the money they make, are allowed money for a show on this day.

There are four varieties of entertainments that the boys patronize: Moving picture shows, burlesques, melodramas and prize fights. These rank in importance in the order named.

The moving picture shows are of two grades, the "nickel-shows" and the "tencent shows." The chief difference is in the type and amount of vaudeville that is added to the moving pictures. The boy prefers for the most part seeing two fivecent shows rather than one ten-cent show. Almost all the shows in the heart of the city were visited in this investigation and although many improvements in the matter of ventilation and means of exit in case of fire are to be desired, the shows were, on the whole, very satisfactory. Morally, the pictures were clean and although much of the fun portrayed was of the rough-and-tumble variety, there could be no legitimate ground for complaint. Often, moreover, very instructive pictures of travel
were shown. At one theater there were colored moving pictures that gave the story ot various dramas.
The vaudeville portion of the program consisted generally of illustrated songs, and the crowd for the most part did not appreciate the singers. The songs were without exception of the sentimental type, illustrated with colored slides.

Boys were seldom found in those places in the evening excepting on Saturday between nine and eleven. But as has been stated, crowds of boys are only present or Sunday afternoons. They are well behaved and, judging from their enthusiasm, enjoy the performance exceedingly.

The burlesque played in Milwaukee is second rate, and newsboys do not attend it to any great extent. Moreover "amateur night" has gone; this used to be a great drawing card because of the freedom of language and "rough-house" that was permitted.

There is a merging of the burlesque and prize fight in Milwaukee; the holding of bouts after the regular burlesque show. On this night the number of young boys in the gallery is noticeably larger than ordinarily, but this form of amusement does not seem to have taken a great hold on the boy.
Several boxing exhibitions were visited and again the number of boys attending was found remarkably small.
The melodrama, likewise, does not gain a hold on a great number of boys, although they form a noticeable percentage of the gallery crowd at the Sunday afternoon performance. It is apparent that the moving picture show has made great inroads into the other forms of amusement. Another factor that tends to keep the boys from the various theaters in the heart of the city is the development of centers for amusement in outlying parts.

## TRAMPING AND ITS RELATION TO THE BOY IN THE STREET TRADES.

It has been stated that there is a great tendency for* boys in the street trades to become tramps and it has even been stated that this tendency is, increased because of the habits of newsboys of jumping on and off cars. This last seems rather overstated; there is comparatively little "hopping" of cars by newsboys. ${ }^{1}$
The boys of Milwauke do not become tramps. If any have done so, they are most certainly the exception. There is a strong counter influence in the city, due to the fact that the boys almost always have homes, and the influence throughout the city seems to tend toward a strict family life modeled on that of the German element whose influence predominates in the city.

That many tramps, and even more particularly loafers, when they are in need of a little money, often sell papers temporarily, is undoubtedly true; and this may cause the appearance that has led to these statements. Milwaukee has members of this transient class, but as they are not numerous and as the regular boys are clannish, their influence is slight, and they need not be considered.
Milwaukee newsboys do not stay out nights. A great many boys were questioned on this point, and in all the cases the negative was the unanimous answer. In the investigation at the Industrial School, the same was found to be almost always the case. It is safe to say, then, that the selling of newspapers in Milwaukee does not tend to make boys tramps.

## THE BENEFITS TO THE BOY OF STREET TRADING.

In considering the boy on the street and engaged in business, it must not be forgotten that there are distinct advantages in street trading. The boys in the business are as sharp and clever as any group of the boys that one finds. Street trading awakens an interest in business and business dealing as no other field open to a youngster can do; for in this case the boy is his own master, and his success depends largely on his own nerve, energy, capacity to "size up" a customer, and ability to meet competition.

[^32]Every sale is a bsuiness transaction and it is necessary not only to sell a paper when called upon, but to bring to the attention of the passerby the fact that he really wants a paper and should buy one. This develops a remarkable ability to judge faces. Then, if a man shows a desire to buy a paper, it is the boy who gets to him first who will probably make the sale; thus the ability to meet competition is developed.

There is responsibility put upon the boy in the handling of money and it is certainly often a benefit for a boy to learn the value of money and the effort that is necessary to earn a dollar. To many boys, it is undoubtedly a beneflt to learn this and the alertness and keenness that is developed is certainly a positive result.

The basic. law of salesmanship-to sell a man what he needs when he feels the need and to bring that need to his attention-is learned.

It is a question whether the claim that has been advanced that newspaper selling gives the boys a valuable training in the open air and tends to keep him out of mischief could be substantiated. But the employment does keep the boy in the open air and in that way helps him, and that it also gives him a certain amount of exercise is an advantage that should not be overlooked.

The self reliance and ability to take care of himself are characteristics that the boy will often find very helpful in his later life. The boy will learn politeness, as he finds that it would help him not only to immediate sales but to the building up of a trade, for which each boy is really striving. Where the boy is assisting the family and really paying for himself, he learns the satisfaction of being not only economically independent but of being a valuable member of society. The spending of his own money brings with it the lesson of valuing and judging before money is spent.

The fact that many boys in the city have been able to go through college as a result of their newspaper work, and that many business men attribute at least a part of their success to the early training of newspaper selling, seems to show clearly that there are some decided benefits in the business.

For many boys, the strentious outdoor exercise, the rigorous business training, the practical knowledge of salesmanship, the tense rivalry of competition, the acquaintance with business system and with business standards, which are obtained so naturally in street trading, form the basis upon which a successful and prosperous carcer will be founded. But for the majority of newsboys, the irregular and insufficient meals, the unhealthy mental over-stimulation, the distorted conception of business methods and of business ethics, the too early acquaintance with the vitiating influences of life, the acquired reliance upon the generosity of others rather than upon personal effort, together with the development of a passion for excitement and gambling, cause a physical, mental, and moral deterioration that will handicap the boy in all his future activities.

## THE NEWSBOY'S FAMILY AND HOME.

It should be borne in mind that the present part of the investigation was limited to Jewish and Italian newsboys belonging to the poorest class of the people of Milwaukee. The family conditions about to be described would probably not be found in a study of a different, class of newsboys. In particular, it may be mentioned that as a rule boys who carry papers on routes come from better homes than those who sell on the street. The family of the route boy is for the most part thoroughly American. It desires him to work, primarily for the training that he receives and not for his earnings. These are usually saved for him or used as a fund for his education. There is every inducement for the boy to return home, directly his work is over, and he has the opportunity to eat his meals with his family. There is slight iriction because English is usually the language of the home, and there is not the friction between parents and children that is felt in the home of the recently arrived immigrant who has not been thoroughly assimilated. The family conditions of the poor street newsboy are widely different, as will presently appear.

The reasons for which the boys whose cases were investigated followed the trade of selling papers were stated by the boys of families and by the boys themselver as follows:
AS STATED BY FAMILY.
AS STATED BY BOY.
Necessity 48 Necessity ..... 40
Parents' wish .............................. 20 Parents' Wish ..... 21
Own desire 12 Own desire ..... 19
80 ..... 80

The data here presented suggest three subjects for further inquiry: (1) the nature and extent of the alleged necessity for the boys selling papers, (2) the parents' willingness that the boys sell, and (3) the boys' willingness to sell.

## (1) Neccssity.

In the great majority of cases the families of the boys investigated were regular; that is, both parents were alive and living together, and the chief source of income was the father's labor. The conditions in the families were as follows:

$$
\begin{aligned}
& \text { Both parents living together............................................................. } 70
\end{aligned}
$$

$$
\begin{aligned}
& 3^{*} \\
& \text { Father deserter ................................................................................... } 3 \\
& \text { Mother dead ....................................................................................... } 1
\end{aligned}
$$

The alleged necessity, then, did not lie in any peculiarity in the constitution of the families.

The occupations of the chief supporter of the families are shown in the following table:


The great majority of the occupations here represented are seasonal. Peddlers' wages vary perhaps more than the others; their summer and winter incomes differ greatly. The family may be in comparative affluence during the summer months, but the approach of winter causes the income to fall to practically nothing. The average variation is from $\$ 3$ or $\$ 4$ a week in the winter to $\$ 15$ or $\$ 20$ in the summer. Almost half of the Jewish cases were dependent on such irregular incomes. It is well known that the expenses of these people increase greatly during these months of least income. The work of tailors and pressers is also subject to seasonal fluctuations. Hebrew teachers lead a precarious existence and it is seldom that they rise to economic independence. Small storekeepers frequently are just solvent. Their trade is composed of the none too wealthy residents of the immediate neighborhood and the slightest turn of fortune precipitates them into bankruptcy. All the boys who were investigated contributed to the income of their families a part, or the whole, of their earnings. In nearly all cases the sum contributed was a good percentage of the sum earned, and amounted to more than a dollar a week. The data on this subject (which it is feared are not accurate, for the boy has in all probability underestimated his earnings, in order to make it appear that a larger share was turned in to the family than is actually the case ${ }^{1}$ ) are summarized in the following table:

[^33]| Age. ${ }^{2}$ | No. | Av. weekly earnings. | Av. sum contrib uted to family. | Percentage contributed. |
| :---: | :---: | :---: | :---: | :---: |
| 6 ............. | 1 | ? | ? | .............. |
| 7 | 1 | \$1.50 | \$1..00 | . |
| ${ }_{9}$ | 2 | 1.12 | 1.00 |  |
| 10. | 7 | 1.82 | 1.68 | ..... |
| 11 | 14 | 1.61 | 1.33 | ............ |
| 12. | 18 | 2.12 | 1.55 |  |
| 13. | 22 | 1.83 | 1.50 |  |
|  | 80 | \$1.89 | \$1.50 | 80\% |

${ }^{2}$ Reckoned to nearest birthday.
It would be of great value, as throwing light on the question of the necessity of the boys selling papers, to know what proportion of the family income was contributed by the boys. But since the families investigated resented or were unwiling to answer questions regarding their income-as is natural in self-supporting peopleit was impossible to determine what the proportion was. It is clear, however, that the boys contribute a not inconsiderable amount, which may well have been of much assistance to the families-especially during the winter when seasonal occupations are most seriously affected; which might, indeed, have been necessary in order that the family remain self-supporting.
Among the families investigated only five were the recipients of public charity; and only two of these are regular and complete charges. The fact that so few of the families are on the charity lists does not prove conclusively that it is not necessary for the boys to sell papers; for a family may be just above the poverty line or may be helped out of temporary difficulty by relatives and friends, so that if the newsboy's earnings were withdrawn, the family would become a charge on the community. Still it may be questioned whether many of the families who are partially supported by a boy would ask the community for assistance if the boy's contribution stopped. It appears that frequently after the boy starts selling, the family finds that it can make good use of the money and, relying upon it, considers that the boy's selling is a matter of necessity. If the boy did stop, would not many such families, by means of a readjustment of their finances, still keep above the poverty line?

## (2) Parents' Willingness.

Many parents felt that the training of the street was of advantage to the boy, and that the lessons that he learned would benefit him later in life. Few were opposed to the selling; few realized the injurious and dangerous influences to which the street boy is exposed.
Cases in which parents required the child to work....................................... 58
Cases in which parents did not require the child to work................................ 22
$\overline{80}$

## (3) The Boys' Willingness.

The boys did not object to having these duties put upon them and in fact enjoyed the work:
Boys who liked the work................................................................................ 70
Boys who disliked the work............................................................................ 10

The charms of the street, the economic independence, the freedom from restraint incident to newspaper selling are of course among the factors in a willingness to be newsboys. But in the case of Jewish and Italian children there is another and a very important factor-the lack of harmony between the children who are in thought
and action American, and the parents who hold to the ideas, the ideals, and often the language of the Old World. The training received at home differs radically, in many cases, from that received at the school and among the child's companions. It is natural that the boy should be drawn to the street where the newly acquired ideas of freedom and equality appear continually on the surface and are always emphasized. The progressive happy-go-lucky spirit of the street is oprosed to the conservatism of the family and the former has the advantage in the struggle. The boy feels that his immigrant parents are out of place in the American atmosphere and he chafes under their conservatism and inability to conform to American standards and ideals.
In many cases the families continue their old language while the children of necessity adopt the English in the school and on the street. The successful, or apparently successful, persons that the child meets always use English, and there is slight wonder that the parents should appear "old fashioned" and out of place. All other persons with whom the child comes in contact have a common tongue, while his family insists on keeping up the Yiddish or the Italian. The child, with his American slang, feels out of accord with his parents.
Furthermore, the physical condition of the home is probably a factor in the child's willingness to go on the street. The conditions of the homes of the familics investigated is indicated by the following tables:

| Good | Housing. | Cleanliness. |
| :---: | :---: | :---: |
| Medium | 47 | 32 |
| Poor | 20 | 26 |

The homes of the Jews are all in the Milwaukee Ghetto and are mostly small l.ouses. Milwaukee is free from the large tenements that render the housing problem in our eastern cities so difficult. The houses of the Jews are, as a rule, small, and are occupied by two or more families. The housing of the Jews, however, is good and there is no reason why the cleanliness should not be raised to a similarly high standard. If the homes are fit places for living, there is no reason why the dirt should not be kept out.
The rent paid for the homes was noted by the investigator on about half the cards for the Jewish families. It ranged from $\$ 8$ to $\$ 28$, the latter for a house and store. The average, and that paid by the majority, was between $\$ 12$ and $\$ 14$ per month. Rather good conditions may be expected for this sum in Milwaukee. Five families owned their homes, but in two cases these were heavily mortgaged. The conditions in the Italian district are much more serious; the Third ward presents some of the worst housing conditions in the city. Here there is much crowding; usually there is a large number of lodgers in addition to the family.
It is not surprising that a boy should grow away from a home that is not attractive, especially if this is due to the carelessness of the housekeeper. When the home is inviting, the child will desire to leave the street promptly, so that he may spend a part of the day, at least, with his family; but in the opposite case he will spend as much time as possible on the street.

So much for the conditions of family life that cause, or induce, the boys to engage in newspaper selling. The effect on the family life of the boys doing this remains to be considered. And it may be said in advance that this effect is much to be deplored. It has been mentioned that there is a tendency toward discord between children born and reared in America and their immigrant parents. Newspaper selling by the children inevitably widens the breach-weakens, to the point of breaking, the ties between the child and the home.
The boys investigated began work on the street at the ages shown in the following table:
Starting age.
$61 / 2$ ..... 2
2 ..... 2
2
7 ..... 3
$71 / 2$ ..... $\stackrel{3}{6}$
8 ..... 3
${ }_{9}^{81 / 2}$
5
5
$91 / 2$ ..... 6
10 ..... 11
$101 / 2$
15
15
111/ ..... 3
12 ..... 6
$121 / 2$ ..... 3
13 ..... 4

It will be observed that a large number began selling at an age lower than that allowed by the present law. Some of these boys are known to be violating the law today.

The length of time during which these children have been in the business is shown in the following table:


Thus the majority of the boys began selling pavers on the street when less than 11. years old; the majority have been doing this for more than two years, though they are still less than 12 years old. They have begun work, with the consequent breaking from home, when mere "tots," and have snent a large part of their life on the street away from their families.

As is shown in another part (The Boy and the Street-subject, supper), the newsboy seldom arrives at home in time to join the family at the evening meal. The work seldom stops until after 8 o'clock, and the family cannot be expected to delay the meal until this hour. On Saturday the child, as a rule, also misses the noon meal, for the selling on this day begins about 11 o'clock. This enforced absence of the boy from a large roportion of the family meals is one of the most serious ill effects of the newspaper business.

Thus, the longer a boy remains on the street, the firmer the grip of the street is upon him and the weaker becomes the influence of the family. If a child seldom comes in contact with its family from the time it is six or even ten years old, the home influence must of necessity be very slight. If newspaper selling results in a weakening of home ties when the children are very young, the family has but little influence in the training of these children for citizenship.
The facts presented in the first part of this chapter indicate that the earn'ngs of the newsboy are in many cases of great value to his family, in some cases serving, perhaps, to keep the family above the poverty line. But the injurious result of newspaper selling by children seem to outweigh the benefits. It is a serious question whether society should countenance the breaking away from the home which must result from the child's being with his family so little as strect trading permits. Society should make every effort to conserve the home and the influence which the nome excrts, and not sanction or encourage its destruction.

## THE BOY AT SCHOOL.

The most important duty of a child under fourteen years of age is to attend school. It has been decided by the people of this state and of many others that a common school education is essential to the preparation of the American child for citizenship. In order to accomplish this result, compulsory education laws have been passed and a scheme of enforcement develoned. In this way the community has decided that nothing should be allowed to interfere with the child's training. It is felt that schooling is necessary to insure success and value to the community, and the law, consequently, requires systematic and regluar attendance.

One of the difficulties that has been experienced in the enforcement of these laws is the employment of children; several states have constituted fourteen as the minimum working age. The great number of occupations necessitate the constant presence of the child and consequently a choice had to be made between the workshop and the school. Neither newspaper selling, nor in fact any of the street trades, require this continual work and so we have permitted an exception to these laws relating to children; and have allowed their otherwise illegal employment in the street trades. In theory, the child can accomplish both results and not have its work seriously interfere with its schooling.

This relation has never been satisfactorily investigated and it is to be earnestly hoped that the question of the effect of street trading upon the standing, conduct and retardation of children may soon be the subject of more careful study than has here been possible. If, in many cases, street trading causes the one engaged in it to fall behind the proper classes, it should be prohibited. But, on the other hand, it may conduce to rapid advance. The number of cases investigated here cannot posssibly make the results more than suggestive, but it is felt that they are typical and, consequently, that the tabulation of the result will be of value.

Such an investigation should be made from within the school, and undoubtedly would collect information that would throw light on truancy and retardation, and demonstrate the effect of working in street trades upon success at school.
Since, in the opinion of the law, any demands on the child's time and energy should be subordinated to the demand of the school, it was thought necessary to consider the effect of newspaper selling on the boys' standing and also the opinions of his teachers on street trading and its effect on street traders. This was done by means of the schedule, and although the personal equation of the teacher enters into the results, it is hopcd that they will throw some light on this important phase of the street trades problem.
The plan of our school system is that a child shall enter when six years of age and be promoted one full grade each year. This causes it to finish the 8 years of the common school when iourteen. In Milwaukee the grades are divided into two parts, $B$ and $A$, and promotions are made semi-annually. The retardation of strect sellers in the cases investigated is shown in the following table.

|  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: |

The number of these cases, all of which are of street sellers, is of course too small to allow the claim that newspaper selling is a prime cause of retardation in schools on the whole. It would seem safe to say, however, that there ap:ears to be a connection when we find that but 6 street sellers out of 80 are in the classes where their age would make it normal for them to be.
It is impossible to state that there is any single cause of retardation when there is such an immense amount of it in the school. Investigation has not becn made in Milwaukee, but in other cities it has been found that a great amount exists. Studies have been made in Boston, New York, Camden, Philadelphia and Kansas City. Children in grades lower than the proper ones in these cities constitute slightly over $37 \%$ of the total enrollment. ${ }^{1}$ These figures have been carefully worked out and analyzed. ${ }^{2}$ Until a similar study is made in Milwaukee, with a supplementary study of the newsboy problem, it will be impossible to form an accurate estimate of the eflect of street trading.

Another influence that must be considered is that the parents of most of the street boys are not thoroughly Americanized and the importance of the school is not emphasized as it is among our native population. Many children are recent arrivas in this country and it has been impossible for them to be enrolled in the schools, at the regular starting age.
This is shown by the following, still referring to street traders:


This would explain a part of the retardation; but it accounts for comparatively little of it.

One of the determining factors in a child's progress at school is his conduct. This is, of course, a matter of opinion with the teacher. The answers to this question on the schedule regarding street sellers were as follows:

```
Conduct.
```



```
    Fair ......................................................................................
    Poor ...................................................................................
        Total ..................................................................................
```

It is interesting to note that there are practically no boys against whom definite complaints could be made because of conduct. Conduct includes many thingsattention, care, prompt response to orders, helpfulness in the class room. Ninety per cent of the boys were sucecssful in "being good" regularly.

This perhaps seems strange when we consider how far behind their proper classts the street traders are, but it is to be expleined by the ability of the boy to do what is expected of him on the slightest hint.
The complaint in England, ${ }^{1}$ that school masters find difficulty in controlling the children engaged in the street trades, does not seem to be true here. The reverse would almost appear to be the case.
A child cannot be attentive and interested ii it has not had sufficient sleep, and so the question about the drowsiness of the newsboy was asked. But six boys were

[^34]considered by the teachers as drowsy. It has been repeatedly stated that street trading had this effect upon the boy. It is true, this one bad influence is more common among delivery boys, as they are compelled to get up so early in the morning, and have been up and about for at least four hours before school work begins. But the street boys, in distinction from the delivery boys, as a rule sell only in the afternoon and evening, and conšequently obtain sufficient sleep. There is late selling and early morning selling, but in Milwavkee the street boy has, on school nights, stopped work by 9 o'clock.
It would seem then that street trading did not prevent the boys being attentive and apparently awake when in class. The opinion of the teacher as to whether the boy is harmed by street trading is not of great value. In the first flace, she sees him but one term. He may be retarded two years, and yet if he passes her grade with little effort she will naturally think he has not been harmed. Frequently, moreover, the teacher was not aware that the boy was a street merchant, consequently, it is not surprising that she had not considered this as the possible primary cause of his failur? to keep up with his class work. Finally, the question was in many cases not answered. No suggestive conclusions could be reached, therefore. But the teachers feel that in about a third of the cases the boy is injured by newspaper selling. The effects are shown primarily in attendance and standing.

It should be remembered, too, that the opinion of the teacher on some points may be influenced by her liking for the boy. The street boy has learned to ingratiate himself. It is one of the lessons of salesmanship that the street teaches. Sales can be frequently made by appealing to the passer-by in a tactful way. Again, it is possible to receive much help and better treatment from the managers of the distributing offices and from the street men if the boy has learned to make himself popular. He has learned to judge the faces and moods of older people and it is to be presumed that he has been able to judge his teacher and to succeed in appealing to her. The conduct of the street boy is usually good. He does what is desired of him and this means adjusting himself to the wishes of the teacher when the eyes of that teacher are upoli him.
Irregularity and truancy are intimately related, and if the child is irregular and excuses are not received from his parents, the case is, in all probability, one of truancy. A large number of street sellers are regular in attendance, but in all too many cases this is not true. Still, the majority of street sellers attend school, since they fear that they will not be permitted to sell if they fail in this, and, moreover, they are in entirely too conspicuous nositions not to be in danger of being apprehended by the truant officers. Again, the Street Trades law, although not enforecable, has been an inhibitory force and has impressed ubon the boys the fact that it was necessary for them to attend school in order that their selling be not interfered with. The answers to the questions as to attendance of street traders we.e as follows:

| Regular. | $\%$ | Irregular. | $\%$ | Total. |
| :---: | :---: | :---: | :---: | :---: |
| 64 | $\varepsilon 0$ | 16 | 20 | 80 |

The judgment of the teacher, in giving an opinion of this kind, would be reached by comparison with the rest of the pupils, and "regular" would mean equal to the average oi the class.
The schedules showed that seven boys were considered "regular" in attendance, although they had unexcused absences. This would seem to show that there is considerable truancy in these classes, and that unexcused absences of four days in a month do not cause the child to be considered "irregular."
The absentees among street traders were as follows:

The great number of excused absences, when the cause was given, was for sickness, and in these cases the child was usually absent consecutive days.

On the other hand, the unexcused absences were, generally, one day at a time and frequently half days.
r. Non-excused absences of street sellers.

| 4 | had | 2 | absences. |
| :--- | :--- | :--- | :--- |
| 6 | $"$ | 3 | " |
| 3 | $"$ | 4 | $"$ |
| 1 | $"$ | 5 | $"$ |
| 0 | $"$ | 6 | $"$ |
| 1 | $"$ | 7 | $"$ |
| 1 | $"$ | 25 | $"$ |

Average 4.6.
The school month contains twenty days and it does serious harm to the boy's standing if he is absent $20 \%$ of this time. These days that are occasionally missed are a serious menace to the boy's progress, because no attempt is made in these cases to "make up" the work that has been missed, while in the case of a long absence, the child is, if possible, brought up with the work of the class.
It is almost impossible for the truancy force, consisting of ten persons, to keep in touch with the great number of occasional truants, whose families are not aware that truancy exists.
The majority of these occasional absences are probably the result of the attraction of the street, and newspaper selling is frequently the cause. A child learns to prefer the freedom and company of the street to the confinement and regularity of the class room and consequently often fails to attend school, when he finds congenial companions.
The boy who delivers papers, in distinction from the boy who sells on the street, is not far different from the other children in a class, as the influences at work upon him tend to balance each other. He may not get enough sleep, and it is necessary for him to begin work very early in the morning, but it is possible for him to stop promptly in the evening. He is more frequently drowsy in class than is the street seller (see above), but his family is American or at least thoroughly Americanized and they consequently realize the importance and value of an education. They see that the child keps up in his work and feel that the school is of greater importance than the earning of money. The attempt will be made to have the child keep up with his classes and profit by his schooling. English is the language of the home and the full power of the home is exercised to counteract the negative effect that the selling would have upon the child's school career.
The boy who has a morning route and sells on the street in the evening, is seriously affected by his work. His are the longest hours and it is practically impossible for him to be in the physical condition essential for his success in school.
In order that the full advantages of schooling may be obtained by the child, it is necessary that there be co-operation between the home and the school. It is impossible for the street boy to obtain this. He is away from his home the entire day and is only there to eat and sleep. He has not the time nor the inclination to do his "home work" when he returns late in the evening. It is impossible for the home to have much influence upon him as there is no part of the day when it can exert this directly. Moreover, the life on the street makes the boy independent of the influence of the home and he is not likely to heed its opinions, even if it urge his attendance at school and care in his school work.
The home cannot, in the case of the street boy, help the school in training the child. It is not given the time, nor the opportunity, and frequently has not the knowledge to do so.
It would seem from the few cases investigated that newspaper selling has a detrimental effect on the street trader's school standing. The school work of a child is of prime importance and nothing should be allowed to interfere with it. There is considerable retardation, accounted for in part by the foreign parentage, but street trading seems to be a major contributory cause. The figures for the retardation in the Milwaukee schools have not been worked out and it is, consequently, difficult to form a definite comparison. Yet it appears that the children who engaged in street trading are frequently far behind the classes in which their age and school carcer
would require that they should be. The irregularity of attendance, the truancy consisting of an occasional day's absence, is, undoubtedly, the reason for some of this falling behind. The conduct of the children is good in practically all cases, due perhaps to the ability that the boys have developed for ingratiating themselves with older people.

The tendency is that the street trading will cause a weakening of the home influences and consequent carelessness and lack of interest on the part of the parents in the child's progress in school. Moreover in their minds, as well as in the child's, the work and opportunity for earning money are emphasized at the expense of the school.

Consequently, the answers to the question as to the standing of street sellers develop the fact that the standing of few of them is good; at best it is only fair.

## THE NEWSBOY AND THE INDUSTRIAL SCHOOL.

An investigation was conducted in the Wisconsin Industrial School in Waukesha, for the purpose of finding data on the relation between newspaper selling and juvenile delinquency. The investigation was confined to boys from Milwaukee.
At the time of the investigation there were in the school 133 boys from Milwaukee, all of whom had been sent there by the Juvenile Court after repeated offences. The investigator talked privately with each of these boys, ascertaining (1) the boy's name, (2) his nationality, (3) whether he had sold papers; and if he had sold papers, (4) at what age he had begun, (5) how long he had sold, (6) whether he had sold in saloons, (7) whether he had sold late at night, (8) whether he had been accustomed to stay out all night, (9) what his earnings had been and percentage of them he had "turned in" at home, (10) in what part of the city he had sold. The cottage master, the "head of each family," who kenw the boys' personal history, was in the room at a majority of the interviews, and it was felt that the answers were for the most part accurate. The books of the school were then consulted and the previous record as well as the offences of which each boy who had sold newspapers had been convicted, were noted.

Of the 1.33 Milwaukee boys, 76 had sold newspapers, slightly over $57 \%$.
In the writer's opinion this percentage does not fairly represent the ratio between delinquency due to newspaper selling and total delinquency. The delinquency of an inmate of a reformatory can hardly be accounted for by his having been a newsboy if he was a newsboy for only a very short period, or if he sold papers only occasionally. To obtain the true ratio, only those boys should be counted who had been in the business for such a period that they may fairly be presumed to have become corrupted chiefly through their newspaper selling. Of the To who had sold papers, two had sold only extras.

| 1 | ،6 | paper | rs for 1 | 1 night. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3 |  | 6 | ' 1 | 1 week. |  |  |
| 2 | " | " | " 2 | 2 weeks. |  |  |
| 3 | '6 | " | '6 3 | 3 weeks. |  |  |
| 9 | ، | ، | " 1 | 1 month. |  |  |
| 2 | ، | 6 | " 2 | 2 months. |  |  |
| 6 | " | " | " 3 | 3 months. |  |  |
| 26 |  |  |  |  |  |  |
| 2 | sold | only | extras. |  |  |  |
| 28 |  |  |  |  |  |  |
| 13 | boys | sold p | papers | for | r 6 | mont |
|  | " | " | * | ، | 8 | months. |
| 10 | '6 | " | ، | " | 1 | year. |
| 3 | " | " | ، |  | 11/2 | years. |
| 10 | " | '، | '6 | " | 2 | years. |
| 6 | ، | ، | ، |  | 3 | years. |
| 1 | " | '، | '، |  | 31/2 | years. |
| 2 | '6 | ، | " |  | 4 | years. |
| 1 | 6 | ، | '6 |  | 7 | years. |
| 1 | " | ، | ، |  | 8 | years. |
| 48 |  |  |  |  |  |  |

It was found that there were no boys who had sold either four or five months, and so it was decided that those who had sold between one day and three months must constitute one class, and those from six months and upwards another. This division was, therefore, adopted and six months made the length of time required to make a boy a "real newsboy." Moreover, it was found that the boy who had just started selling or who just tried the business, seldom gambled, while the boy who had been working over six months usually admitted that he had.

There were only 48 boys who had sold papers regularly for more than six monthsabout $33 \%$ of the Milwaukee boys in the school.
The writer believes that the ratio cannot logically be placed higher than the percentage; he is inclined to think, for reasons to be given presently, that it should probably be placed lower; but he is sure that it should not be higher.
For comparison, the following statistics are quoted from a pamphlet of the National Child Labor Committee:
In the Industrial School of Rochester, New York, in 1903, $75 \%$ of the Buffalo boys (only these were counted) were newsboys.
At Hart's Island, New York City, in 1906, $63 \%$ of the boys were newsboys.
At the Catholic Protectory, New York City, in the same year, $40 \%$ were newsboys.
At the House of Refuge at Randall's Island in New York City, in $1906,50 \%$ were newsboys.
At the Reform School at Glen Mills, Pennsylvania, in 1910, $77 \%$ of the Philadelphia boys (these only were counted) were newsboys. ${ }^{1}$
In these statistics the term newsboy is not defined; it may include boys who sold papers for only one week or one night, or who sold only extras. It does not appear from these figures, therefore, that in the reformatories with which they deal the ratio in question is any higher than in the Wisconsin Industrial School.
Among the 48 newsboys at the Waukesha school, the average age at which newspaper selling was begun was eleven years and nine months-the beginning of adolescence when a boy is more impressionable than at any other period. And the average length of time during which they continued in the business was one year and nine months.
The chances are, therefore, excellent that the influences incident to newspaper selling would be exercised upon these 48 boys. But even with these facts established, it seems hardly logical to conclude, from them alone, that the delinquency of the 48 boys was due to their having been newsboys. For instance, it should hardly be presumed, prima facie, that a boy who had been arrested for stealing at twelve, sent to the Industrial School shortly after for the same offence, paroled at fourteen and sent back at seventeen, again for stealing, is a delinquent because he sold papers for a year at the age of twelve. This was found to be a not uncommon case. Of the 48 boys in the Waukesha school who had sold newspapers, 20 had discontinued the business before they were sent to the institution.
Boys who carry papers on routes or who sell papers near their homes are less exposed to corrupting influences by the business than boys who sell in the down-town districts. If newspaper selling was a primary cause of the criminality of our 48 newsboys, one would expect the majority of them to be newsboys who had sold in the downtown district. But the investigation showed that three boys had carried papers on routes, 27 had sold near their homes, and only 18 had been regular street newsboys.
Again, the down-town newsboys of Milwaukee are almost exclusively Jewish and Italian. Therefore, if newspaper selling is an important cause of juvenile delinquenes, one would expect a considerable proportion of our 48 newsboys to be Jews or Italians. But the classification of the Milwaukee boys in the institution with respect to nationality was as follows:

[^35]| Race. | Street newsboys. | Newsboys who sold near home or on routes. | $\begin{gathered} \text { Total } \\ \text { newsboys. } \end{gathered}$ | Total Milwaukce boys. |
| :---: | :---: | :---: | :---: | :---: |
| Polish | . 7 . | ${ }^{\text {a }} 10$ | 17 | ${ }_{57}$ |
| German | 3 | 12 | 15 | 48 |
| lrish | 2 | 3 | 5 | 9 |
| Jewish | 3 | . | 3 | 6 |
| Italian | . |  | .. |  |
| Others | 3 | 5 | 8 | 13 |
|  | 18 | 30 | 48 | 133 |

'The large majority of the boys were Polish or German; of Jewish newsboy:, there were only 3, and of Italian boys none. The almost entire absence of boys of these two nationalities is a striking fact.

A comparison of the offences for which the newsboys had been committed with those of the other boys in the institution was found to be impossible because in the majority of cases the official charge was "delinquency" or "incorrigibility," with no mention of any specific offense.
Before there can be any satisfactory investigation of juvenile crime, our records must make more specific statements as to the reasons for commitment, and not content themselves with the vague statement of "delinquency" or "incorrigibility." Meanwhile, we can merely examine the offences of the 48 newsboys, without references to those of the other inmates of the reformatory.
With respect to the offences for which they were committed, the 48 newsboys were classified as follows:

| Offences. | Route boys and boys who sold papers near home. | Down-town newsboys. |  |
| :---: | :---: | :---: | :---: |
| Vagrancy | papers near home. | newsboys. <br> 3 |  |
| Against property | 14 | 6 | 20 |
| Delinquency ${ }^{1}$ | 9 | 9 | 18 |
| Sodomy | 1 | . . | L |
|  | 30 | 18 | 48 |

There seems to be in these data no evidence that the offences of the newsboys were caused by their selling newspapers and might not have been committed if the boys had not been engaged in the business. The data are without significance so long as it is impossible to compare the newsboys' offences with those of the other boys.
'Iwenty-two of the 48 newsboys said that they had not sold or delivered pajers in saloons; 26 said that they had done so. None of the latter believed that visiting saloons had been the cause of any of their trouble. Against none of them was there a charge of drunkenness.
The earnings of the 48 newsboys averaged $\$ 2.50$ a week-a normal income for boys in the newspaper business. Ten of the boys kept all their earnings for themselves; two deposited the entire earnings at home. The average sum said to have been contributed to the family was $\$ 1.60$. The difference between $\$ 1.60$ and $\$ 2.50$, the average income, may point to one cause of the boys' delinquency; for the habit of spending without the parents' knowledge is undoubtedly bad, as has been shown by the investigations of the National Child Labor Committee.
Such are the results of the writer's investigation at the Wisconsin Industrial school. some of them show nothing; some of them-particularly the facts regarding the nationalities of the newsboys-seem to show that newspaper selling played a decidedly minor part in the boy's delinquency.

The writer has no intention of arguing that newspaper selling does boys no harm. He is heartily opposed, on grounds which are not mentioned in this report, to allowing boys under fourteen years of age to sell papers; he believes that newspaper selling by children is a vicious institution which should be abolished. But his investigation has led him to conclude that opposition to that institution can find no useful support in the statistics of reformatories-that the desired reform should be forwarded by means of beeter arguments.

[^36]
## THE NEWSPAPER POINT OF VIEW.

In studying the question of the newsboy it is necessary to take into consideration the interests that utilize his services. The five largest newspapers of Milwaukee have been consulted-one morning, three afternoon, and one that publishes both morning and afternoon editions. From discussions of this problem with proprictors and crealation managers have been derived the conclusions and suggestions in this chapter.

These men realized clearly that there were grave dangers to the boys handling their papers and they were, without exception, in favor of certain minor changes in the law. As one states, "All we want is to be fair. We resent being attacked by prejudiced people who do not understand the whole nroblem. We are willing to have changes, provided that the law is uniformly enforced, so that we shall be equally affected by it."

The statement was made to them that there would, in all probability, be some legislation on the subject of street trading presented to the legislature or the councils that might be exceedingly radical and their assistance was asked, so that the nature of the business might be vut before these bodies fairly. Without except'on, they blamed one or all of the papers that were their competitors, saying that if it were not for the cut-throat competition they would not allow some of the present conditions to exist. This was, especially, the case with two of the competing afternoon papers. "If it were not for 'The _-_, we would not let the little boys sell for us, but if we do not give them napers they will go over to 'The ___ and sell only for them." This remark was made by each, the only change being the name of the paper substituted for the dash.
The managers had all "risen from the ranks." and naturally laid particular emrhasis on the benefits resulting from street trading. They felt that in the matter of delivery in the morning, it was good for a boy to get out early and deliver papers for an hour or two. In the down-town street selling, the business sense and pluck required were the points that annealed to them most strongly. They all mentioned numerous cases of bovs "that had made good." some of whom were still selling and earning from twenty-five dollars a week up. Others had left the business and were holding responsible positions. They frequently mentioned their own cases, as examples of what the boy on the street may become.
One stated that the law was unfair in that it favored the afternoon papers, as is allowed them to have any boy over ten years of age sell or deliver during the entire time of their sales, while it excludes boys under fourteen before $6 \mathrm{a} . \mathrm{m}$. The management of the other morning paper denied that this regulation was a serious handicap.
After the advantages had been discussed, the question was asked as to whether they would like their own children of ten or eleven to peddle at all hours of the day and whether they would want them to hang around saloons, and the answer was negative in all cases. But they argued that it would be impossible to get the boys to sell if it vere not for the tips.
The great difficulty that the newspavers encounter at present is to keep boys on the outlying corners. In many cases it is necessary for the papers to subsidize them to the extent of from 75 cents to $\$ 1.50$ a week bonus to remain on these.
The ovinion of all the papers was that the hours for stopping should be much carlier in the evening. 'Ten o'clock is much too late and there is no need for the boys being out at this hour. Most of the managers felt that the stopping time should be 8 o'clock in the summer and 7 o'clock during the winter months. Very few newspapers are sold after 6:30 in the evening, after the great number of people have returned home from their work. But during the baseball season people frequently wait for "sports," which in some cases do not get to the streets until after that time, and this causes the sales to continue to somewhat later hours than the managers would otherwise favor. Were it not for this exception, a universal 7 o'clock stopping time would be supported.
The suggestion that newsboys under fourteen years of age be kept off the down-town streets was taken up with each and the unanimous opinion was that it was not only impracticable, but would be a great hardship to the boy and his family. It was
suggested that this was the only exception to the Child Labor law which made fourteen the minimum working age and the answer was, that in this business alone was the boy's school career not interfered with, but it kept the boy in the open air and out of mischief. It was conceded that certain messenger service and the delivery of packages would have the same results, but the extent of these occupations would make the comparison of no value.
The circulation department of the largest paper in the city observed that if the change were made gradually and over a period of years, it would be possible to centralize the business in the hands of older people, but that if the change had to be made suddenly it would cause a disorganization that would be serious.
It was generally felt that it would entail great hardship on the boy and his famiiy to have him taken from the street, but that the effect on the newspaper would not be very serious. Most of the papers said that the small boy was in most cases more of a detriment than an advantage to the newspaper and that it would in many cases be an advantage to have the boy under 12 taken off the street entirely.
The little boy is unreliable and often fails to appear if the weather is inclement. Moreover, he cannot often be trusted to turn in the correct amount of money at the end of the day. There would probably be no objection on the part of the newspapers to raising the age limit in the present law two years-making it twelve instead of ten.
When gambling was mentioned, the newspapers felt that the matter was serious, but that it could not be done away with. They had all tried to stop it and even with the most careful watching, little good had been accomplished. The usual method was to throw water at the boys and one newspaper had found that having a policeman about the distribution office occasionally had reduced the gambling to a marked extent. Two of the papers stated that this evil did not exist about their offices, but it was pointed out that, in this, they were mistaken, and they at once said that they had found it impossible to avoid it.
One circulation manager suggested that boys be forbidden to congregate and felt that this was one means of putting a stop to this trouble, and that the boys should not be allowed to make returns at night. The evening papers concurred that this would do away with one of the opportunities for gambling, as the boys would not be permitted to congregate in the offices at that time. But this would not have much effect as, under the present system, there is no need for their being there as they are sunposed to make their settlements with the "street men," and there is no need for their coming to the office in the evening. The statement was made that most of the gambling took place in the alleys around the offices and not in the offices themselves, and so it was almost impossible for the newspapers to put a stop to it.

The newspapers who are in active competition for the business of the street-"the street sales" as opposed to the delivery sales-are apparently at the mercy of the boys. The greater the number of boys selling, the greater the circulation. Consequently, it is necessary to cater to the boys so that they shall not go to the other paners. One paper does not allow the return of unsold papers and as a result practically none of the boys "handle this." The system of trusting is necessary for the same reason.
One of the complaints of the newspapers against the present law is that they are liable to fine, if a child sells during the regular school hours. They claim that most of the very small boys do not receive the papers from them or their employees, but from "older brothers." They see no way of stopping this evil except by proper enforcement of the law on the subject forbidding children under ten years of age being on the street.
In few businesses is it as clear that there should be legislation to protect the good manufacturer and to equalize competition on a higher scale. All the managers claim that they would do much if it were not for fear of the other papers not following and in this way getting the boys.

They agreed, however, that it would be an advantage to limit the hours in the evening and to raise the minimum age.
But this last should not be raised above twelve, as they would not be able to get a great number of boys and would not have the opportunity to allow them to develop into successful merchants and to build up a trade before they left school
and entered other employment. This would more seriously affect the delivery service than the street selling, as but a small percentage of the sales on the street are made by the small boy.
One manager stated that increased stringency should be along the line of higher school standards and that the enforcement of the present law should be stricter in requiring that the boy keep up in his school work. Another was hostile toward the factory inspectors and he claimed that there was prejudice in the enforcement of the law.
To sum up, all the newspapers realize that there are grave dangers attached to the newspaper business and that there is necessity for legislation. It is not felt, however, that it would be advisable for them or for the boy, to raise the age limit to that of the Child Labor law. They would all favor raising the age to twelve years, however, and to limit the hours to 8 o'clock in the evening. They might even be brought to favor a provision forbidding a goy to carry a morning route or to sell on the street in the afternoon.
No matter what the law, they will most certainly help in its enforcement and try to see that the provisions of the law are carried out.
They universally claim that it is impossible for them to really enforce the age qualification. The small boy does not get his papers from the newspaper directly, but through the older boys who deal directly. The investigator, on one occasion, stopped eight boys on the street, between nine and thirteen years of age, and found that but one of this number had received his papers from the street man. The newspapers feel that it is necessary to place this under police surveillance, and to make these officers responsible for its enforcement. A system of badges that shall be conspicuously displayed at all times, is the correct system for recognizing the boys who are permitted to sell.
It would seem that the newspapers could be educated to take the boy off the street entirely, and perhaps to cause them to stop employing boys for the delivery service if a suitable and feasible substitute were suggested.

## PREVIOUS INVESTIGATIONS.

Numerous previous investigations have been made and much helpful information gathered. It would seem that some of these investigations were undertaken with the purpose of showing a definite result and others to furnish material for propagandia literature. The conclusions are unanimous as to the dangers of street trading and the feeling is that the benefits are negligible when compared with the detriments.
The most important of these was that of the English Departmental Committee on The Employment of Children's Act, 1903. ${ }^{1}$ This committee decided to limits its hearing to the subject of street trades and its findings include the Present State of the Laws and their Enforcement; By-Laws; Licenses; the Extent to which Street Trading Exists; the Effects of Street Trading on the Morals, Physique; Economic Position, Future of the Street Trader.

The testimony is in the form of evidence given before the committee. Persons acquainted with various aspects of street trading were given an opportunity to present their views. The committee, in its report, emphasized the dangers surrounding children in the street and urged the prohibition of children in street trades. It desired efficient administration and enforcement of any laws.
Many of the findings are, unfortunately, not applicable to American conditions, as street selling is carried on differently in this country.
The Buffalo investigation is probably the most interesting one in the United States, although it is some years since this was undertaken. ${ }^{1}$ This showed that the dangers of street trading existed in other than our largest cities and that even these may be exaggerated. It showed the extreme youth of the boys engaged and the low earnings, the proportion of those under ten years being greater than in New York City. The lateness of hours was an evil that was pointed out. It was shown that

[^37]the parents of these younger boys were not in need and that many of the boys have bank accounts.

The studies in Philadelphia have shown us the great number of boys who stay out all night and ply their trade in the worst districts of that city, the gambling around the distributing offices, and the dangers of the Tenderloin and Chinatown. The picture of the boy who stays out all night was vividly painted. ${ }^{2}$
In Boston, on the other hand, it was found that the great majority of the newsboys lived at home. They earned between 30 and 50 cents a day. The danger to a young boy in having money were brought out and the fact that they were allowed in all places. The appeal of gambling and the melodrama were emphasized. ${ }^{3}$
In Chicago, $12 \%$ of the thousand boys questioned in the Loop district were found to be under ten years of age. It was found that practically none of the families were on the lists of the Charity Organization Society, and only very few were orphans or half-orphans whose support would be needed at home. The dangerous results of physical degeneracy were found among the boys and the school attendance was exceedingly irregular. ${ }^{1}$

The New York investigation showed the lack of adequate enforcement of the law in that city and the great number of children under ten years of age engaged on the street. It brought out the large number of newsboys who were in reformatory institutions. ${ }^{2}$

The racial divisions, the earnings, and the hours of work were brought out by the investigation in Cincinnati, and the success of a licensing system was shown. Age groups were given, and the boys were divided into school classes. The extreme youth of some of the workers was shown and the difficulty of keeping young children from sclling owing to the efforts of the newspapers to increase their circulations. ${ }^{3}$

## ATTEMPTED REGULATION.

There have been various plans put into operation in several parts of England and America to mitigate the evils of street trading. It is questionable, however, whether regulation, supervision, or a combination of the two, where they have been tried, have been truly successful.

The New York and the Wisconsin laws, in which there are regulation of hours and agès of selling, and where provision is made for badges, have not really brought good results, owing to inefficient administrative features. The law, in both states, fails to provide a suitable penalty, and in both is almost non-operative. The English laws place limits on the same points, and allow municipalities to add further restrictions in the form of by-laws. Some cities have availed themselves of the privilege. The Massachusetts law likewise gives to the various municipalities the right to regulate the street trades, but Boston is the only city that has taken advantage of this.

The usual minimum age is ten years with a provision for licensing children up to the age of fourteen years. The regulation is usually that no selling shall be engaged in before $5 \mathrm{a} . \mathrm{m}$. or after $10 \mathrm{p} . \mathrm{m}$. of any day.

Supervision has been under the direction of school boards, newspapers or private individuals. Manchester, England, has utilized the first scheme and has a special staff of plain clothes men to watch over the children. The license is in the form of a belt with various types of buckles. Boston has created the office of "Superintendent of Licensed Minors," which has started a self-governing organization among the newsboys. A license is issued on condition that the minor live up to certain definite conditions, and can be revoked for cause.
The "Free Press" of Grand Rapids, Michigan, has, for a number of years, beern supervising its newsboys, and has given them a floor of its building for a theater and hall. Classes are held under public school teachers which are in session each day

[^38]during hours that are convenient for the newsboys. The "Newsboy Band," composed of boys of this paper, is said to be the best in the city. This experiment has clearly shown that a newspaper can exert a remarkable influence for good.

John E. Guckel of Toledo has formed the newsboys of that city into a remarkable self-governing association. Its great success seems due primarily to the personality of Mr. Guckel. He has put a stop to gambling and smoking among the newsboys and his influence over them is remarkable. "He does this by the influence of his personality, by the faith of a pure heart, by the power of love. He do:s it by being human, by being humorous, by being gentle, by being kind., ${ }_{1}$

Regulation has not been given a fair trial, as in no cases have the proper methods of enforcement been developed. But even with efficient regulation, it is a serious question if the desired results would be accomplished. It would be a colossal task to watch the great number of boys in all parts of a large city. If we leave our age standards as they are now, we shall continue to have an exception to our Child Labor laws and continue to send children out to be brtad-winners at a younger age than the community has decided shall be the minimum.
Two of the forms of supervision could, of course, not be incorporated in legislation. The newspapers could not be required to take control of this matter, as there would be no possible way of enforcing such a provision. It would be impossible to organize a self-governing plan similar to that in Toledo or Boston, as these schemes are always a success in direct proportion to the personality of the man at their head. Supervision under the school board would be advantageous, s:nce the educational standards set for the children would then be actively enforced.

## CONCLUSION.

This investigation, as was said at the beginning of the present paper, was undertaken in order to provide some of the necessary data on which to base a new street trades law. The facts collected through the investigation have now been presented. What conclusions as to new legislation may now be drawn from them? It has appeared that Milwaukee newsboys are, by the condition of their business, exposed to numerous vicious influences, and are injuriously affected in various ways. The acceptance of tips is an essential part of the business; the average profits are nearly $300 \%$, whereas the legitimate profit is $100 \%$. This fact leads to the frequenting of saloons, where tips are largest; it leads to begging; it leads to a reliance on the bounty of other people. The habit of gambling, resulting from the intermittent character of the business, is prevalent-a habit which fosters an abnormal love of excitement and the waste of money. The newsboy comes home from his work late in the evening and takes his evening meal alone. On the one hand this factinvolving so long an interval between the noon meal and the evening meal- furnishes another inducement for the boy to visit saloons, for the sake of the free lunch; and the irregularity in eating is likely to result in physical injury. On the other hand, the fact that the boy does not join his family at supper is a factor in the separation of the boy from home. The work of the newsboys causes retardation in school, and irregularity in attendance. But the greatest injury it causes is the separation of the boy from the home. The early age at which he begins work, his daily absence for long hours from home during early childhood when he is most impressionable, the opposition between the influence of the street and the influence of the home-these considerations weaken the tie between the boy and his family, and rob him of the good influences which rightfully should surround him.

There are no data regarding the effects that newspaner selling has actually produced in the lives of men who have been newsboys. One can only surmise the probable effects. Children who have been engaged in street selling begin l'fe again in some other field. At the age of fourteen, or shortly thereafter, they enter factories and offices and the effects of the street trading tend to become less strongly felt. They have learned the handling but hardly the value of money. They are certainly better versed in the rules of business than the boys who enter with them into the legitimate

[^39]business world. They can read faces and know many trieks of sefining, learned through intense competition.
On the other hand, they have, in all probability, learned much that will not be of positive value to them. They have learned to know the "seamy side" of iife, which is not as a rule good for a boy to know. Their work has not been steady, and there are long periods during the day when business is slack and they have time on their hands. The selling requires effort and exertion, but this effort is intermittent and there are gaps between.
W. H. Beveridge, the authority on Unemployment, says: "The van boy learns to put in half his time in waiting about, and the newsboy spends all his time in the streets. Neither is learning the lesson of assiduity; each is thus on the way to become a casual by inclination.' ${ }^{1}$
It has not appeared from the investigation that newspaper selling in Milwaukee was a cause of vagrancy or criminality. Indeed the circumstances of the Milwaukee newsboys seem to be less injurious than those of newsboys in many other cities. However, there are certain advantages to be gained from newspaper selling: the boy learns to handle money; he receives training in business; he is taught that the person who gives the best service-quickest and most regular-will win out in intense competition; he is trained to be wide awake and to attend to business. But though the harmful influences have not yet produced very deplorable effects, those influences are at work; and as the city grows they are likely, unless arrested, to result in worse conditions. As for the advantages gotten from newspaper selling, they are insigniflcant when weighed with the injuries inflicted upon the boy.
These facts lead to the conclusion that newspaper selling on the streets by children under fourteen years of age should be prohibited.

That such prohibition would be for the interest of the children has been demonstrated by the facts already adduced.

That it would not work to the detriment of the children's families is indicated by the facts shown in the chapter on the family. It has been shown that, though the newsboy's earnings may be of much assistance to his family, yet the family is in practically every case self-supporting. If its income were temporarily diminished by the withdrawal of the child's earnings, it would find some means of readjustment, as has always been the case with families similarly affected by child labor legislation. The National Consumers' League feels that there are remarkably few families who would sink below the poverty line by the withdrawal of the incomes derived from child labor.
The conclusion has been universally reached that it is of far greater consequence to protect the child and make him into a good citizen, than to allow him to undertake economic responsibilities at too early an age. Society has proved itself able to take care of the family and there is no reason to suppose that it will not continue to do so.
That the prohibition would be constitutional is indicated by numerous judicial decisions in which the state is considered in loco parentis. A municipality has the right to determine who shall sell on its thoroughfares: "It is not one of the purposes for which streets are established, to afford a convenient place to expose merchandise for sale." ${ }^{1}$ It has been held that peddling on the streets may be made dependent or licensed, 2 or entirely prohibited. ${ }^{3}$ If the municipality has this power, then, of course, the state has it.

The prohibition would not interfere with the business of selling papers, for the business could be put into the hands of older boys or of men. The transfer might prove a benefit to certain classes of men, so that the prohibition would effect a double beneflt. For instance, newspaper selling, if taken out of the hands of children, might furnish a means of support to cripples and to tuberculosis convalescents while they should not do any indoor work. Men who have recently been discharged from hospitals as "cured" of tuberculosis, or with the "disease arrested," might bs especially benefled in this way. Outdoor work is what such men reed to complete

[^40]their recovery. Their being engaged in selling papers would not be dangerous to the public health, for the patients dismissed from the hospitals would either be completely cured, or would have been taught how to protect the public from contagion, if the recovery were not complete. Aside from these considerations, the open air would practically prevent any danger of infection.
Newspaper publishers would not suffer by such an arrangement. Only a small percentage of the sales are made to transients-persons who do not buy from the same person at the same corner every day, and a large part of this would go to the men at the corners.
The men at the down-town corners at present make between $\$ 15$ and $\$ 50$ a week. This sum would keep the cripples and convalescents from requiring assistance from the community.
It has been shown that boys who deliver papers on routes are for the most part free from the bad influences that affect boys selling on the street. The prohibitory law recommended need, therefore, apply only to selling on the street.
As for the enforcement of the prohibition, this should be accomplished by placing the responsibility for violation upon the newspaper companies and upon the parents, just as our child labor laws place the responsibility on the employer and upon the parents. Newspaper companies should be penalized for selling papers to children under the lawful age. This provision, however, would not be sufficient, because children under age might obtain papers from a third party. Therefore, penalties should also be imposed upon parents who allow their children to violate the law; the provisions for such penalties may be modeled after those of the compulsory education laws.
In case the passage of a law prohibiting newspaper selling by children is not practicable, the following measures should be taken to mitigate the evils of the business:
Boys under fourteen should be forbidden to sell on the down-town business streets. They should not be allowed to vend within a mile of the City Hall.
Boys should not be allowed to sell after 7 o'clock in the evening during the winter months and 7:30 during the baseball season, when the last edition of the papers is frequently late in getting on the street.
Boys insufficiently clothed should be forbidden to sell on the streets. This regulation would lessen the opportunity for begging.
The present law forbidding children to "linger or loiter" in saloons and making owners, managers and barkeepers liable to fine and imprisonment for violations, should be enforced.
An effective licensing system should be provided. Every boy engaged in selling parers should be required to have a permit and to wear a badge. Before any permit is issued, all information regarding the applicant should be obtained; this information should be recorded in such a way that it will be at all times available. Also, no license should be issued before it is clear that the applicant understands thoroughly all the regulations concerning his business. The badge should be a large one, with the number clearly marked so that it could be recognizable from a distance. The law should require that the badge be displayed conspicuously at all times and that no child not properly so provided be allowed to sell.
In order that such a system be enforceable, the responsibility for violation of the law should be placed on the newspaper publishers and the parents, as, mentioned above.
Further, a system of supervision should be incladed in the law, with provision for the services of "plain clothes" to assist in this. There should be at least on: offlicer whose sole duty it should be to supervise children in street trades. He should have the privilege of obtaining from the local police department plain clothes men to assist in the enforcement of such a law. The issuing of badges should be under his charge, and he should be in touch with the children and with their families as well as with the school authorities and the newspapers. He should be empowered to organize the street sellers into self-governing organizations, to assist him in enforcing the provisions of any such act.
He should be a member of the Bureau of Labor or of the truancy foree, and his first object should be to see that the work does not interfere with the important duties of the boy-regular attendance and satisfactory standing in the school.

This officer should have the power to forbid the sale of newspapers to a child whose work became unsatisfactory and his decision should be final in such matters. He should be compelled to keep a record of all street sellers under 16 years oí age and receive from the principals of the schools a monthly record of each boy's standing.
Not only newspaper selling, but all street trading should be prohibited or adequately regulated. Street traders, with the possible exception of newsboys, have no place in our economic system. Boys who vend matches and chewing gum and black boots should be kept from our streets entirely.
The same may be said of girls. It will not be long before women and young girls will use the street trades as a cover for begging and it would be advisable, looking forward to this contingency, to keep girls out of the street trades entirely. Twentyone years should be made the minimum age for girls. The danger to morals, in the narrower sense, are much exaggerated between the ages of sixteen and twenty-one and after arriving at maturity, girls should be able to take care of themselves and our ordinances against "street-walking" would protect the community.

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PART IV.

RULES FOR SAFEGUARDING IN FACTORIES

## NOTE BY INDUSTRIAL COMMISSION OF WISCONSIN.

(Successor to Bureau of Labor and Industrial Statistics.)

These rules for safeguarding in factories have been adopted by the Bureau of Labor and Industrial Statistics as a guide to factory inspectors and employers. The Industrial Commission, which succeeds the Bureau, will hold public hearings on these and other suggested rules before adopting them under the authority of Chapter 485, Laws of 1911. They are sent out with the request that they be carefully examined by employers, employes and others interested, and that criticisms and suggestions be made to the Commission in order to make them fully effective and practicable.

C. H. CROWNHART,

Chairman.

## RULES

For safeguarding of dangerous machinery and places; adopted at a series of conferences in the years 1909 1911, in Milwaukee, Wis., betwéen employers, representatives of labor, casualty insurance companies, and officers of the Bureau of Labor and Industrial Statistics.

## INTRODUCTORY.

The laws of the State of Wisconsin require that, in all manufacturing establishments, proper safeguards shall be provided for all dangerous machinery and places. The question as to where a guard is necessary, also as to what is a proper guard, rests with the Factory Inspector whose duty it is to see that the Laws are complied with. Naturally, difference of opinion frequently arises between the owner of a plant and the Factory Inspector as to the necessity or practicability of a guard and with a view to overcoming this annoying situation for both parties, the Bureau of Labor and Industrial Statistics has compiled these rules to be used as a standard in the providing of safeguards.

In gathering the information for forming these rules, it was necessary to get representatives of all those interested in this subject to attend different meetings, where suggestions were offered on the necessity or application of a safeguard.

Among those who attended these meetings were:
Mr. Otto H. Falk, Pres. M. \& M., Milwaukee, Wisconsin.
Mr. Robert W. Campbell, Chairman of Safety Committee and Attorney, Illinois Steel Company, Chicago, Ill.

Mr. R. J. Young, Safety Depariment, Illinois Steel Co., Chicago, Illinois.

Mr. W. J. Fairbairn, Secretary, Milwaukee Metal Trades \& Foundries Association, Milwaukee, Wis.

Mr. C. W. Price, Inspector, Protection and Sanitation, International Harvester Co., Chicago, Ill.

Mr. Alfred Kieckhefer, National Enameling \& Stamping Co., Milwaukee, Wis.

Mr. Richard Marter, National Enameling \& Stamping Co., Milwaukee, Wis.

Mr. Charles Paeschke, Jr., Geuder, Paeschke \& Frey Co., Milwaukee, Wis.

Mr. Phil. Kempter, Supt., Geuder, Paeschke \& Frey Co., Milwaukes, Wis.

Mr. Fred. McKee, F'airbanks-Morse Co., Beloit, Wis.
Mr. Coddington, Wisconsin Bridge Works, Milwaukee, Wis.
Mr. T. J. Neacy, Filer-Stowell Co., Milwaukee, Wis.
Mr. T. F. Gaines, Wisconsin Bridge Works, Milwaukee, Wis.
Mr. F. R. Lane, Berlin Machine Works, Beloit, Wis.
Mr. F. L. Sprague, Allis-Chalmers Co., Milwaukee, Wis.
Mr. Hugh Rensford, Inspector, Maryland Casualty Co., Milwaukee, Wis.

Mr. James T. Murray, Inspecior, The Travelers Insurance Co., Milwaukee, Wis.

Mr. V. H. Bartholomew, Inspector, London Guarantee \& Accident Co., Ltd., Chicago, Ill.

Mr. F. A. Barker, Inspector, Aetna Life Insurance Co., Accident \& Liability Department, Milwaukee, Wis.

Mr. Emil Vilter, Vilter Mfg. Co., Milwaukee, Wis.
Mr. John W. Maple, Pfister-Vogel Leather Co., Milwaukee, Wis.

Mr. Paul E. Thomas, The Kempsmith Mfg. Co., Milwaukee, Wis.

Mr. S. F. Shattuck, Kimberly Clark Co., Appleton, Wis.
Mr. J. Y. Jocelyn, The Mayer Boot \& Shoe Co., Milwaukee, Wis.

Mr. W. E. Magie, Mr. C. J. Simeon, Mr. G. Kent, The Bucyrus Co., Milwaukee, Wis.

Mr. C. F. Schoedde, H. Zohrlaut Leather Co., Milwaukee, Wis.

Mr. C. P. Bossert, Pfister-Vogel Leather Co., Milwaukee, Wis.
Mr. W. J. Muckle, Rich Shoe Co., Milwaukee, Wis.
Mr. Louis Steelway, Trostel \& Sons, Milwaukee, Wis.
Mr. A. Gallun, Gallun Tannery, Milwaukee, Wis.

Mr. E. T. Bradley, Bradley \& Metcalf, Milwaukee, Wis.
Mr. Joel Tuttle, The Travelers Insurance Co., Milwaukee, Wis.
Mr. J. J. Heelan, Inspector, Aetna Life Insurance Co., Chicago, 111.

Mr. F. G. Gelentine, Adjustor, Aetna Life Insurance Co., Milwaukee, Wis.

Mr. J. D. Beck, Com. of Labor, Madison, Wis.
Mr. Fred Brockhausen, Secy. State Federation of Labor, Milwaukee, Wis.

Mr. Jos. Gressle, Machinists' Lodge No. 66, Milwaukee, Wis.
Mr. George Krogstad, Pattern Makers' Assn., Milwaukee, Wis.
Mr. E. Kleiman, Federated Trades' Council, Milwaukee, Wis.
Mr. Arthur Martin, The Ocean Accident \& Guarantee Corp., Milwaukee, Wis.

Mr. J. R. Bloom, State Factory Inspector, Neenah, Wis.
Mr. D. D. Evans, State Factory Inspector, Racine, Wis.
Mr. A. L. Kaems, State Factory Inspector, Sheboygan, Wis.
Mr. August Lehnhoff, State Factory Inspector, Milwaukee, Wis.

Mr. Ira Lockney, State Factory Inspector, Milwaukee, Wis. Mr. J. A. Norris, State Factory Inspector, Madison, Wis.
Mr. H. P. Peterson, State Factory Inspector, Superior, Wis. Mr. C. S. Porter, State Factory Inspector, Fox Lake, Wis.
Mr. William Straub, State Factory Inspector, Milwaukee, Wis.
Mr. J. E. Vallier, State Factory Inspector, Milwaukee, Wis.
Mr. T. A. Walby, State Factory Inspector, Hudson, Wis.
In the discussion which followed the suggestion of each rule, it had to be shown that the guarding, in the manner described, was in practical use, at some plant, before the rule was finally adopted as a standard. This position was taken for the purpose of avoiding the adoption of a rule as a standard as the result of a suggestion which would be purely theoretical. We, therefore, believe that these rules should be of great value as a guide to the owner of a factory as well as to the Inspector.

If the owner of a factory is interested in the prevention of accidents and wishes to obtain the best results, he should establish an organization at his plant, composed of the heads of different departments and employees actively engaged, to deal with this subject with a view to obtaining perfect discipline, proper instruc-
tions regarding the dangers of employment, proper selection of help for different occupations, the co-operation of employees in locating dangerous conditions and having them promptly remedied and the use of safeguards, which have been .provided, at all times.

While the Law requires that all dangerous machinery and places be properly safeguarded and imposes the duty upon the owner of a factory to provide a reasonably safe place for his employees, to perform their duties, there are many owners of factories who, from an economical as well as from a humanitarian point of view, desire to have everything in their plant as safe as possible, and if they will co-operate with this department, every possible assistance will be cheerfully rendered towards accomplishing this end.

Bureau of Labor \& Industrial Statistics.

RULES.

Adopted for Safeguarding Dangerous Machinery and Places, at a Series of Conferences Held in Milwaukee Between Employers, Casualty Insurance Companies, and Officers of the Bureau of Labor and Industrial Statistics, Covering the Years 1909-1911, Inclusive.

## Stopping Machinery:

1. Means shall be provided in each department for stopping machinery in such department.

## Shafting:

2. All shafting in work rooms or in main passageways leading to work rooms and located within reach of a person standing on the floor or platform, excepting platforms or walks provided for oilers, shall be guarded.
3. Where shafting is located under a table which can be reached by the hand or foot of a person working at the table, it shall be guarded.

## Clutches:

4. All friction clutch pulleys on main line shafting within twenty inches of any bearing shall be guarded.

Couplings:
5. Wherever the bolt or bolt ends of any shaft couplings are exposed, they shall be guarded.

## Beit Shifters:

6. Permanent belt shifters shall be provided for shifting belts on tight and loose pulleys.

## Belts and Pulleys:

7. All belts and pulleys, chains and sprockets within reach of a person standing on the floor must be guarded.

## Rope Drive:

8. All rope or cable drives shall be guarded where they pass through the floor.

## Flywheels:

9. All flywheels shall be guarded.
10. Whenever there are exposed or dangerous flywheels and other parts of gasoline engines, particularly on the testing fioor, proper guards shall be provided.

## Setscrews:

11. All protruding revolving setscrews shall be removed or covered, except setscrews in hubs of small pulleys with rim extending beyond the hub.

## Gearing :

12. All gearing, wherever located, must be covered, except as specified in 13 and 14.
13. All gears on cranes shall be guarded except, however, that where a safety switch is provided on the trolley or overhead part of the crane, it will not be neces. sary to cover gears at this location.
14. Proper pipe railing shall be provided to surround all machines used in manufacturing wire rope instead of covering the gears.

## Friction Drive:

15. All friction drives shall be guarded in the same manner as gears.

## Oiling:

16. Safe means shall be provided for oiling all shafting and machinery.

## Ledder:

17. All ladders shall be provided either with hooks at the top or with some other device at the bottom to prevent the same from slipping.

## Light:

18. Proper light shall be afforded at all places.

## Stairways:

19. All stairways shall have hand rails.

## Platforms.

20. All elevated platforms and tramways shall have handrails.

## Floor Openings:

21. All openings in floors shall be guarded.

## Revolving Parts:

22. All revolving parts of machines operated by female operators and all punch presses operated by female operators shall be properly guarded.

## Saws:

23. The weights for swing saws shall be either boxed in or provided with a safety chain.
24. All swing or circular saws shall have a hood guard covering at least the top half of the saw.
25. Circular saws should have a hood guard provided except in such cases where a hood would interfere with the work in hand. Whenever there is a feed attachment for a rip saw, the toothed wheel for feeding the stock shall also be guarded.
26. Swing saws shall be provided with a stop to prevent them from traveling beyond the table.
27. Every band saw shall be covered below and above, allowing sufficient clearance for largest material.
28. A splitter is necessary on circular rip saws and should also be used on other saws where inspectors consider it necessary and practicable.
29. All saws for cutting metal and run at a high speed shall be guarded.
30. All saws in packing plants shall be guarded the same as those in wood working establishments.

## Wood Shapers:

31. Shapers should be provided with guards suitable to the work to be done.

## Jointers:

32. All jointers shall be provided with guards of some lind and inspectors should suggest cylinder heads also.

## Stickers:

33. On stickers, the hoods of the exhaust system should be extended so as to catch all dust, chips and slivers to prevent the same from flying into the face of the operator.
34. On stickers, the heads shall be guarded or enclosed.

## Wood Planers:

35. Sectional foed rolls should be used on planers instead of the solid rolls, to avoid material from being kicked back.

## Sanders:

36. A guard shall be provided on the take away end of the sarder to protect the operator's hand from end of stock coming out of the machine.

## Tenoners:

37. All tenoner heads shall be guarded.

## Dove Tail Machines:

38. The spindles and cutters on dove-tailing machines shall be guarded with suction hoods or otherwise.

## Chain Mortiser:

-39. The upper part of the chain on a chain mortiser shall be guarded.

## Steam Vats:

40. Steam rats in veneer mills should be guarded.

## Felloe Saw:

41. The lever for a felloe saw in a wagon plant should be provided with a locking device.

## Logging and Saw Mill:

42. All chains used in the binding, loading and unloading of logs shall be annealled at least every six months.

## Logging and Saw Mill-continued.

43. A link and hook shall be provided for locking the carriages in any saw mill, this carriage to be locked in case of repairs or change of saws.
44. Sufficient apron guard shall be provided over slab saws to protect the operator from flying slivers and other pieces of wood.
45. Toe guards shall be provided around the openings for saw dust conveyor.
46. A minimum space of thirty inches shall be allowed between the foot board of a saw mill carriage and any fixsd object.
47. A hand rail thirty-six inches high shall be provided along and fastened to the outer edge of the passage way along side of carriage.
48. A guird shall be provided for the head block of a saw mill carriage, in the way of an extension upward of sufficient height to prevent logs from being thrown over same.
49. A wire srreen shall be hong from above and down in front of the edgers to protect employees from fiying chips and spinters.
50. On trimmers a guard shall be suspended from the timbers above, down over the saws.
51. A fixed guard shall be suspended down in front of the slasher saws.
52. A guard of sufficient height shall be provided at the - back of the slasher saws where there is a shingle machine or other operations in the rear of the slasher saw.
53. A band resaw is considered very difficult to guard and manufacturers shall furnish sufficient space for a man's safety around such machines. Where stock is less than three feet in length, guards should be placed in front of the feed rolls.
54. A lever shall be provided for holding or locking the bolt holder of the carriage of a lather bolter.
55. A saw of a lather trimmer shall be guarded on both sides, over the top and back as far as possible.

## Logging and Saw Mill-continued.

56. The rear of any bolter saw should be guarded as well as possible.
57. The rear of a lather trimmer saw should be guarded as well as possible.
58. A board should be suspended down in front of the knee bolter saw and where advisable a leather flap to be fastened to the lower end of this guard to protect the operator's face.

## Elevators:

59. Wherever elevators are found to be hoisted by means of a chain Inspectors should recommend that cables be substituted for the chains.
60. The proper guard for a freight elevator entrance is semi-automatic gate.
61. A beveled shield should be placed underneath ail protruding floor ledges of elevator shaft to prevent injury to a person's foot which might extend over the edge of the platform. These beveled shields shall be set at an angle of not less than 60 degrees with the floor level.
62. Where freight elevators have no regular operator, safety lock should be provided and also signal bell.
63. It is a good idea to have a warning bell for an elevator.
64. All sides of elevator car not used as an entrance shall be guarded.
65. A speed governor shall be provided for safety device which will operate at $50 \%$ increase in the speed of the car.
66. Elevator hoistway and counterweight rack shall be boxed in for sufficient height from the floor.
67. A slack cable device shall be provided on elevators controlled by the winding drum type of machine.
68. Covers shall be provided for all freight elevators, except where hoistways are provided with automatic hatch closing doors. Such covers for top of elevators shall be so constructed that it will raise should

Elevators-continued.
it accidentally come in contact with a person's head while reaching over the gate.
69. Where hatch closing doors are provided for elevator hoistways, a railing shall also be provided around the opening at each floor.
70. Wherever the gates of an elevator entrance are not sufficiently high to prevent a person leaning over same into the hoistway, a tell tale device shall be attached to under part of the platform.
71. A device shall be provided at the top of Humphrey Elevators in flour mills to stop same in case a man is carried to the top of the elevator.
72. The openings on each floor for Humphrey elevators shall be guarded with a railing.

## Emery Wheels:

73. The end of the arbor of an emery wheel should be guarded or covered with a metal cap.
74. A guard shall be provided for emery wheels or where guards cannot be used, flanges $3 / 4$ of the diameter of the wheel, or safety flanges shall be provided.
75. Wherever guards are ordered on emery wheels, they shall be so constructed as to conform with the sections of the law relative to exhaust system.

## Metal Planer:

76. Where the bed of a pianer runs out to within 18 inches of a fixed object the space at the end of the planer shall be guarded or railed off.
77. The space over the ribs under the bed of a planer shall be provided with a screen guard.

## Boring Mill:

78. A guard shall be provided for the weight of the cross slide on a boring mill, to prevent it from dropping on anyone.

## Metal Shapers:

79. Shapers with the adjusting nut traveling close to the frame of the machine shall be guarded at this danger point.

## Turret Lathe:

80. Where there is danger with a man's hand getting between the turret stop and the feed stop on head of a turret lathe, a guard shall be provided over this danger point.

## Punch Presses:

81. Inspectors should suggest the use of non-repeating devices on all punch presses.
82. All punch presses should be guarded.

## Shears:

83. Where the treadle or trip device of shears is so located as to be accidentally tripped and start the machine, guard shall be provided to remedy this condition.

## Trip Hammer:

84. A device shall be provided on treadle of trip hammer to prevent same from being accidentally moved.
85. This same device shall be provided for guarding against accidents to the operators of trip hammers while their hands are under the hammer.

## Bull Dozer:

86. A guard shall be provided on the side of a bull-dozer to prevent persons from being caught between the dies.

## Cranes:

87. Wherever the crane track is located so that a person can reach it from the floor or from an elevated platform a guard shall be provided to prevent persons getting on the crane track.
88. A fender shall be placed in front of truck wheels of a crane.

Cranes-continued.
89. On overhead trolley systems, a guard, or its equivalent, shall be provided to prevent trolleys jumping off the track.
90. All locomotive cranes shall be provided with automatic couplers.

## R. R. Crossings:

91. Wherever railroad crossings, within the grounds of a manufacturing establishment are so located as to be dangerous to employees, some means of protection shall be provided.

## Motors:

92. All motors within reach of a person shall be properly guarded on all sides.

## Switchboards:

93. Where there is a passageway in the rear of switch boards located in power plants or machine rooms, a guard shall be provided to prevent persons going to the rear of the switch board.
94. Rubber matting shall be placed on the floor in front of all switch boards.

## Foundries:

95. All gangways and passageways in foundries shall be kept clear of molds, chills or obstructions during pouring time.
96. Where there are tracks in foundries they should be planked over between the rails.
97. All tumbling barrels that are located within the rooms of a foundry shall be properly enclosed or so arranged as to admit of exhaust system being attached.
98. Inspector should advocate that smoke stacks over the charging hole of malleable iron furnaces, should be at least four times the area of the charging hole to remove accumulation of smoke.
99. Where men are employed in sand blasting rooms and exposed to the dangers of this operation, means of ventilation shall be provided.

Foundries-continued.
100. A plate or other substantial guard shall be provided on the charging floor of the cupula to prevent material from being thrown over on to anyone below.
101. Wherever the drop for breaking up castings is not enclosed in a house, a bell or whistle or other warning device shall be used.
102. Wherever there is a drop situated close to the side of a building, where there is danger of pieces flying through the windows, heavy iron screens shall be provided for such windows.

## Slitting Machines:

103. A guard shall be provided for slitters in can factories to prevent the hands from getting into the knives.

Cold Roll Mills:
104. A guard shall be provided for mills for turning out cold roll shafting and similar stock.

## Tanneries:

105. A lock or other means shall be provided for locking the drums in tanneries.
106. A guard shall be provided around the strap of glazing jacks in tanneries.
107. Where the shaving machines in tanneries are set so close together that it is dangerous for a man to pass between the same when they are running, space between the machines shall be railed off.
108. An iron strip shall be placed on each side of shaving machines and fastened to the wood, extending down on the side of the frame to prevent the hands getting into the knives.
109. All protruding parts on drums shall be guarded.
110. A screen guard shall be provided to prevent the operator of a Leighten unhairing machine reaching over the bolster.
111. Paddle vats in tanneries shall be provided with a guard rail and toe board, and the guard rail shall be made portable where necessary.

Tanneries-continued.
112. A guard shall be provided against anyone being struck by the crank, or injured by the wheel of jacks in tanneries.
113. Proper guards shall be placed on the feeding and taking away sides of a boxing machine in tanneries.

## Splitting :

114. A strip guard shall be placed in front of the roll of a splitter or roll machine in shoe factories, also in harness factories.

Die Machine:
115. Die machines for cutting leather in belt factorics shall be equipped with non-repeating devices.
116. Where the treadles of the die machines in glove factories are so located as to be accidently tripped, same shall be properly guarded.

Rubber Mills:
117. All mills for grinding rubber in rubber plants shall be provided with a device for instantly stopping the machine.

Rell Machines:
118. A strip shall be placed in front of the roll on a roll machine in a fur factory.

## Drums:

119. The drums in fur factories shall be covered in the same manner as those in tanneries.

## Pickers:

120. An extension shall be made to the rear of excelsior pickers to prevent anyone reaching into the cylinder and a break should also be provided for stopping the cylinder should the power be shut off.
121. The table for pickers shall be extended out far enough to keep persons away from feed roll, or a conveyor shall be provided, or a strip shall be used in front of roll.

## Pulp and Paper Mills:

122. Guard rail shall be provided for head gates in pulp mills and paper mills.
123. All conveyors in pulp and paper mills shall be properly guarded.
124. All paper cutters should be of non-repeating type.
125. In pulp and paper mills proper means shall be provided for making the operation of oiling machinery safe, and either platforms, or pipes, or cups should be provided where necessary to remove the dangers of oiling.
126. Wherever there are pits for the pumps in paper or pulp mills with exposed drive gears, belts and pulleys, they shall be guarded.
127. The openings in the floors of digesters shall be properly guarded.

## Linotype Machines:

128. Proper ventilation shall be provided in rooms where linotype machines are in operation.

## Electrotyping:

129. The trimmer knives in electrotyping plants shall be guarded in such a manner as to leave only a small portion of the knives protruding.

## Printing:

130. Proper ventilation shall be provided in printing shops.

## Paper Box Machinery:

131. On corner staying machines in paper box factories guards shall be provided, or thimbles used, to prevent the fingers of the operators being injured.
132. A guard shall be provided for single corner cutting machines in paper box factories to prevent the operator's fingers getting under the knives.
133. A guard shall be provided in front of cutters of a slitting machine in paper box factory.

## Cotton and Woolen Mills:

134. All transmission parts of cotton and woolen mills such as belt pulleys and shafting in the rear of mules, jacks and jinneys shall be properly guarded.
135. The conveyor table of picking machines in woolen mills shall be extended far enough out to keep the operator from reaching into the picker roll and a guard shall be placed in front of the picker roll also.
136. A guard shall be placed at each end of the loom in a woolen mill to prevent accident caused by flying shuttles.

## Chemical Plants:

137. The walks in acetate room of chemical plant shall be made sufficiently wide and provided with guard rails on both sides to the height of 34 inches.
138. All tar tanks in alcohol distilleries shall be provided with guard rails.
139. The walks along the pipes, in wood alcohol distilleries, from the kilns to the plant, shall be provided with guard rails on both sides.
140. Guard rails shall be provided around all vats and tanks in wood alcohol distilleries and boiling vats in acetate departments and also in the retort room.
141. Proper ventilation shall be provided in all distilling rooms of wood alcohol distilleries.
142. A warning signal shall be provided for retorts which will be sounded when the bottom of the retort is to be dropped.

## Tanks:

143. A guard rail shall be provided around all tanks where there is a chance for employees to fall into same.

## Glue Slicing Machine:

144. A guard shall be provided for the knives of slicing machines in glue factories.

## Fans:

145. All disc fans shall be provided with screen guards.

## Conveyors:

146. Worm conveyors in all establishments shall be properly guarded.

## Churns:

147. All protruding parts on drums and churns in dairies shall be properly guarded.

## Candy Plants:

148. Where gas plates are used in candy plants for heating pots, etc., requiring the operator to stand close to the same, a shield of suitable material shall be provided to protect the operator from getting burned.
149. A shield shall be provided in front of the rolls of drop machines in candy factories.
150. The rotary knives or cutters in candy factories shall be provided with a hood over same except for that portion necessary to operate machine.

## Bottle Machinery:

151. A screen shall be provided around machines for filling bottles in mineral and soda water establishments.
152. Bottle filling machines in breweries shall be provided with guards.

## Laundry Machinery:

153. A device shall be provided on all laundry machinery for immediately stopping same.
154. All mangles in laundries shall be properly guarded and feed roll attachment should be recommended.
155. The top or openings to extractors in laundries shall be properly guarded.
156. All protruding, revolving parts on washers in laundries shall be guarded

Cement Mills:
157. The roller bearings of cement mills shall be guarded.

## Tramways:

158. The overhead tramways in lime manufacturing establishments shall be guarded where possible.

## Oxygen Equipment:

159. Oxygen equipment should be recommended by inspectors for gas plants, also in establishments where ammonia is used for refrigerating purposes.

## R. R. Tracks:

160. A "D" rail shall be provided for each track in establishments where railroad cars are being repaired or rebuilt.

## Baking Machinery:

161. The rolls of a dough brake should be guarded with a cover of metal sheeting which will leave enough space open for feeding the dough but not enough to allow the hand to come in contact with the rolls.
162. The rolls of a dough brake shall also be fitted with metal scrapers so that the hands need not be used to clean them.
163. A break shall be provided for the flywheel of a dough brake to stop the same when the power is shut off.

## Valves:

164. A lock or some other device shall be provided for the header valve of a boiler to prevent steam being turned into the boiler while same is being cleansed out or inspected.

## Iron and Steel Plants. Blast Furnace:

165. Platforms must be installed at the oil cups at the top of skip hoists, and at all points where cups on the hoists cannot be reached from the main stairway.
166. Platforms must be provided at the air cylinders for the bells and at the crawford valves. All such platforms, when exposed, must be roofed to protect the men from slips. Stationary iron ladders must lead to these platforms and to bustle pipes.

Iron and Steel Plants. Blast Furnace-continued.
167. In the handling of stock from pockets, the bottom of which are formed by drums, gates must be installed over the drums to prevent material from falling on car operator.
168. Ore bridge trolley cabs must be equiped with brakes, air whistles, and with safety switches located on top of cab. Safety switches should also be installed at each end of bridge between trucks to cut off all power from each set of truck gears respectively. Trucks must be provided with automatic brakes.
169. The casting holes where ladles are loaded under the floor must be grated or railed.
170. The elevated floors of the cast houses must be properly railed.
171. A steel roof should cover all points where men work around a blast furnace.
172. A small house should be provided on top of a furnace or runway by a furnace to protect mẹn from slips.
173. Hoisting machinery, cranes, etc., near a blast furnace in operation must have a roof over them to protect men working there.
174. All stoves should be connected by runways, provided with railing and guard plates.
175. The opening in trestle made by skip hoist must be guarded.

## Charging Cars, Crane and Gantrys:

176. All overhead cranes and gantrys must be provided with runways for the use of oilers, the entire length of the crane bridge, and with safety switches situated on the bridge of the crane, the safety switches being such that, when pulled, all power is off.
177. All exposed trolley wires entering the crane cabs must be insulated.
178. All overhead cranes and all charging cars must be equipped with foot gongs, and all gantrys with auto mechanical bells.

## Charging Cars, Crane and Gantrys-continued.

179. Charging cars must be provided with guards over the track wheels and each car must have a foot gong. The gears must be properly covered, each car must be equipped with a safety switch, a guard must extend along both sides of a traversing carriage runway, and a bumper must be placed on the traversing carriage track of each car to prevent carriages running back too far.
180. Truck wheels of gantry cranes must be provided with guards or fenders.
181. Locomotive cranes must be equipped with warning whistles or bells.

## Coupling Boxes, Spindles and Wabblers:

182. All coupling boxes, spindles and wabblers must have shields over them to prevent men getting caught in the same.

## Counterweights:

183. All counterweights on doors, gas valves, etc., must be situated or guarded that they cannot fall on anyone should something break.

## Converting Work:

184. Bells must be placed at the base of the vessels to be rung from the flat roof when scrap is put in the vessels.
185. In the cupola building, on the dumping floors, protection must be placed to protect the men dumping the cupola.
186. A gong must be placed under the mixer, to be used when iron is poured.
187. Whistles must be provided, to be blown as a warning when the vessels are turned.
188. When soft steel is made, the uncapping stand should be equipped with sliding doors to protect men when removing caps from molds.
189. Screens must be provided to be placed in the cupola, over men working there, to protect them from falling material.

## Embankments:

190. All ernbankments, runways, platforms, etc., over five feet high, must be railed.

## Excavations:

191. All excavations that are liable to cave in must be shored up. These excavations must be protected by barriers, and at night by lights.

## Exhaust Pipes:

192. All exhaust pipes within seven feet of the ground or in such a position as to endanger a passer-by, must lead into exhaust pits, which pits must be covered with metal covers.

## Foundry:

193. A locking device must be provided for the brass cupula. When heavy with skull it will tip over if not locked.

## Gas Producer:

194. Provision must be made so that when a producer is shot off from the main pipe, or when a soaking pit or furnace is cut out the gas cannot be accidentally turned on again.
195. All explosion doors on gas pipes must be provided with weights or with bars across them to prevent a back pressure forcing them open.

## Ladders:

196. All ladders used in getting to and from platforms, cranes, etc., must be stationary iron ladders. The rungs must be at least eight inches from the wall or columns to give proper foot hold.

## Levers:

197. All levers controlling the movements of machinery must be so constructed that they can be locked when on center.

## Open Hearths:

198. When rebuilding a furnace, a tight board fence must be built on the charging floor, to prevent material falling onto men working in the furnace or ports.
199. The hydraulic jib crane shall be provided with a cable running over the sheave at the inner end of the boom and attached to the floor at the base of the crane, to draw the runner back from over men working at the tapping hole.
200. Provisions must be made so that, when a furnace is down for repairs, the gas cannot be accidentally turned onto the furnace.

## Plate Mills:

201. A padlock must be provided so that the lever operating the large shear tables can be locked when men are working under the table.
202. Safety switches must be installed in turntable pits so that men in going into a pit can cut all power off from table.
203. Bumpers should be placed at the dead end of all roller tables to prevent material from over-riding end of table.

## Runways:

204. All runways used for barrows or walks must be at least twenty-four inches wide, with cleats nailed on under side. They should be properly braced to avoid danger of spreading and teetering and also have cleats on the top at the sides to prevent slipping of workmen.

## Rail Mills:

205. A steel arm must be placed at the outside ends of the skids of all loading beds to prevent the rails falling from the bed.
206. A plate guard must be placed between the last hot saw and the first hot bed, to prevent rails being run back over the edge of the bed.

## Safety Gates:

207. A safety gate must be placed on all points where tracks cross. A box, to hold a lantern, should be placed on this gate over thê center of the track.

## Sewers:

208. No hot water or steam sewers shall be allowed with only plank covering.

## Shafting:

209. All drive shafts on roller tables must be covered with hinged plates over the top of shafts and with hinged aprons extending down from the outside edge of the plate covers. These aprons may be made of wire, screen or steel frames.

## Structural and Blooming Mills:

210. The space in which tilting tables work must be kept railed off, to prevent men getting among the tables.
211. See that the subways are roofed to prevent hot scale falling upon workmen or others.
212. Stairways must be provided to enable men to pass over the table rollers in the mill and in the finishing end.

## Tracks:

213. All frogs, switches and guard rails must be blocked.

## Valves:

214. Platforms, stairs or stationary iron ladders must be provided by which to reach emergency valves higher than an ordinary man.

## Yards:

215. All material, when possible, must be piled at least six feet from the rail. Where it is impossible for this to be done a warning sign must be placed at each end of any pile of material, calling attention to the fact that it will not clear a man on the side of a car.

At a conference held at the Republican House, Milwaukee, Wisconsin, February 20, 1911, the following addresses on the subject of safety were delivered by Robert W. Campbell, Chairman of the Safety Committee of the Illinois Steel Company, and C. S. Price, inspector protection and sanitation of the International Harvester Company, which are eminently worthy of: reproduction here. These addresses cover the whole subject of safety for employees and show the benefit of the kind of work these men are doing, not only for employees but for employers as well. Mr. R. J. Young of the safety department of the Illinois Steel Company gave a most instructive lecture illustrated by lantern slides. This talk was in the nature of an explanation of showing the results of accidents, dangerous machinery and the methods of guarding the same.

## I.

## ADDRESS BY MR. CAMPBELL.

## Gentlemen:

Of all the problems in connection with indusirial conditions of today, probably the most important and yet most neglected is that of industrial accident prevention. It has only been in recent years that either employer or employee, or even the economist oi legislator, has given serious consideration to the subject. It is true that in many states there have been adopted factory inspection laws and other accident and safety regulations, all of a more or less general character and, largely on account of this, difficult of enforcement. Mr. John Calder in an article entitled "The Mechanical Engineer and Prevention of Accidents," appearing in the February, 1911, number of the Journal of the American Society of Mechanical Engineers, has stated that the "legal obligation to safeguard thoroughly has not succeeded in preventing avoidable accidents to any great extent except in the relatively few cases where persuasion and enlightenment have accompanied it."

In looking at our American experience along these lines, it would seem that the greatest obstacle in the way of the successful enforcement of such laws has been the lack of interest on the part of the employer and employe alike; for some of the
most serious opposition to safety devices and measures comes from the employe himself in whose behalf such provisions are enacted and sought to be enforced. He has used the machine or worked under certain conditions for many years and it seems to him nonsense to hamper and retard his work by the use of what he believes to be unnecessary guards or other protective devices or measures.

In contrast to the general condition in this country respecting accident prevention is the work of a number of industrial concerns which have been for some years seriously engaged in practical safety work. The writer previously quoted from says:

On the strictly practical side, the broad-based safeguarding work initiated in all its plants at a large outlay by the United States Steel Corporation has received deserved publicity. At the same time the successful operation of thorough prevention measures has been going on unnoticed for years at some relatively few individual works, but these have formed quite a minority among the many plants incurring accident risks which were imperfectly safeguarded.
Among the subsidiary companies of the United States Steel Corporation, the one which has probably been the pioneer in accident prevention, is the Illinois Steel Co., of whose safety work it is my purpose to speak today.

To understand properly the purpose and effect of measures taken toward accident prevention, it is necessary briefly to analyze accidents. An accident, according to the Century Dictionary, is "anything that happens or begins to be without design or as an unforeseen effect; that which falls out by chance; a fortuitous event or circumstance ; a happening without intentional causation." Its industrial meaning has come to be any unintentional and unforseen happening resulting in physical injury in the course of industrial work. Accidents are of two kinds, the preventable and the non-preventable. In the preventable accidents there are two principal causes: The first, the failure of employer to provide and maintain proper working conditions and proper and efficient safeguards upon dangerous machines or appliances; the second, ignorance and carelessness on the part of the employee.

As to non-preventable accidents, the cause is of course not important, but while there may be no known method of preventing
them, such accidents can still be anticipated, and the effect diminished or modified, as in the case of an emery wheel, where the serious danger may be prevented by the safety collar and guard.

These classifications have been made without reïerence to legal definitions and without regard to the question of legal liability or responsibility, for it might well be that some negligence or carelessness of certain employees would be the negligence of the employer so far as legal liability is concerned. In stadying the problem of accident prevention, the legal phase of the situation is not important as it is the physical, mental and psychological causes which are the elements that must be considered and provided against.

It would seem, therefore, that the industrial plant which seriously takes up the problem of accident prevention must undertake first, to provide and maintain proper working conditions and proper and efficient safeguards upon dangerous machines or appliances and, second, to educate its employees and inculcate in them habits of caution. This, it will be seen, requires a definite plan and a comprehensive organization to formulate and carry out such a plan. It is not appropriate here to enter into the details of mechanical and physical protection which can be provided in industrial plants, as these naturally vary with the character of each particular industry. That branch of safety work is, of course, of great importance, but it must be conceded that no effective practical work can be done without a definite and organized effort being made. It is, therefore, my purpose to confine myself hereafter to that more important question of organization as applied to both of the branches of safety work mentioned, dealing particularly with the organization as it exists in the United States Steel Corporation and the Illinois Steel Co.

In the month of May, 1906, a meeting of the casualty managers of all of the subsidiary companies of the United States Steel Corporation was called by the general solicitor of the corporation and held in New York for the purpose of discussing ways and means of better safeguarding the life and limb of the employees of the several subsidiary companies of that corporation at their several plants throughout the United States. At this meeting ideas were exchanged and many valuable suggestions offered. At a subsequent meeting in May, 1908, called for the same purpose, a further comparison of conditions and exchange
of ideas was had and it was at this time that the safety committee of the United States Steel Corporation was organized. This committee has been actively at work ever since and is composed of the general solicitor of the United States Steel Corporation, a safety engineer having general supervision over safety matters in the corporation, and seven members, each one being a representative of some one of the subsidiary companies of the United States Steel Corporation who is engaged in safety work in such company. This committee meets quarterly, and acts as a clearing house for the subsidiary companies as to safety devices and measures, sending to the several companies such new ideas or improved devices as may from time to time come to its attention. It also causes to be made from time to time thorough and rigid inspections of the plants of the several subsidiary companies for dangerous conditions. Reports of any such conditions found by its inspectors are by the committee submitted to the proper officials of the company involved, together with any recommendations for the improvement of any such conditions that may be named. After ample opportunity is given to such company to consider these recommendations, a return is made to the committee showing the recommendations accepted, together with a statement of objections to any that may not be accepted, with the reasons for the rejection of such recommendation. The safety committee gives these objections its further consideration and thereafter will take them up with the proper official of the company involved, either by letter or by personal representative. It has developed that but a very small proportion of the recommendations made upon any of these inspections is objected to. The work of this committee has been very valuable in the disseminating of accident prevention information throughout th: several subsidiary companies of the corporation.

All of the subsidiary companies of the United States Steel Corporation have accident prevention departments. The organization of these different departments in the several companies is not the same. The accident prevention organization of the Illinois Steel Co. is the only one with which I am familiar and my further remarks will therefore be confined to the work of that company. To understand better the work of this organization it might be well to state that the Illinois Steel Co. is composed of five separate and distinct plants, each one of which is in charge of an executive officer known as general superintendent, under
whom is an assistant general superintendent. These executive officers are responsible to the general officials in the main office of the company in Chicago, but each plant is practically a separate entity. These plants comprise the South Works, located at South Chicago, Ill., employing on an average of from 8,000 to $10,000 \mathrm{men}$; the Gary Works, located at Gary, Ind., employing on an average from 8,000 to $10,000 \mathrm{men}$; the Joliet Works, located at Joliet, Ill., employing on an average of from 4,000 to 5,000 men ; the Milwaukee Works, located at Milwaukee, Wis., employing on an average of from 2,000 to 3,000 men; and the North Works, located in the northern part of the city of Chicago, employing on an average of from 1,000 to $2,000 \mathrm{men}$. The first four of these works or plants are engaged in the manufacture of iron and steel, while the fifth, the North Works, is engaged in fabricating these materials.

The Illinois Steel Co. has for a great many years been providing safety appliances and precautions necessary to protect its employees from the dangers incident to the use of complicated machinery and growing out of the general operating and working conditions at its various plants. In line with this general policy there has been for over 16 years at each of these plants what are called safety departments with safety inspectors in charge thereof. It is the duty of these safety inspectors and their assistants to inspect from day to day the plants under their jurisdiction for dangerous conditions and to recommend protection and precautions, where feasible, to avoid every possible accident. Their recommendations are communicated to the superintendents of the several departments wherein the safety work should be done and as soon as possible thereafter are adopted and the necessary work performed. The safety inspectors also keep records of all accidents and deal directly with injured employees in making settlements under the relief plan now in operation.

The company some years ago found that its individual plants or works had been at various times greatly benefited by the experience of the other plants in the prevention, by safety precautions, devices or rules, of accidents, the source of which was common to all. Contemporaneously with the organization of the United States Steel Corporation safety committee, and to the end that the greatest benefit from such individual experience might be obtained, a central committee of safety was some two years and a half ago organized. This committee consists of the
safety inspector and assistant general superintendent of each of its plants, together with the general attorney, who acts as chairman of the committee, his assistant in charge of accident matters in the law department, an official from the statistical department, who acts as secretary of the committee, and a stenographer, who takes a record of the proceedings of the committee. This committee meets at the main office of the company in Chicago every two weeks for an all-day meeting. At these meetings all accidents occurring at the several plants of the company, which are anywise serious in their results, are discussed and ways and means devised for the prevention of the occurrence of similar sccidents at the same or other works, wherever this is possible. Gencral conditions are likewise examined into and if, in the observation of any of the members of the committee, any safety precautions or devices seem to be desirable or necessary, the committee considers the same and makes appropriate recommendations. The recommendations of this committee are accepted and put into force at all plants without question, unless some special circumstances make it impossible so to do.

In considering the questions that come before this committee. it does not depend solely upon the judgment of its members, but it is the practice of the committee to obtain the advice and judgment of the men at its several works, who are specialists upon the particular branch of the work that may be involved in the question under consideration. All matters that are considered, except possibly some minor ones, are first made the subject of discussion and consideration at meetings of the department superintendents at the several plants and are gone into by the members of the committee at each plant very carefully and thoroughly with the heads of the departments in which the particular situation may exist and are also gone into where possible and advisable with special committees, such as of blast furnace superintendents or chief electrical engineers, etc., and the permanent and workmen's committees, which will be mentioned later. All of this is done for the 'purpose of obtaining the very best judgment that is available in the consideration of the more important questions that come before the committee, and to the end that when any action is taken and a recommendation made by the committee, it may be sure that the best results will be obtained. This procedure of conferring with the department heads and others at the several plants also aids much in facilitating the early
installation of any device that may be decided upon, as the same are more often than not the result of the thought of the men themselves.

The safety committee, since its organization, has been and still is engaged in standardizing safety measures and devices. After careful consideration it adopts and recommends for use at all plants of the company such devices as seem to be most efficient and likely to best prevent accidents. A book of plans for devices for safety has been prepared under the direction of this committee, for the purpose of standardizing the safety appliances and precautions necessary to protect employees from the dangers incident to machinery and unsafe working conditions and to insure the provision of efficient safeguards and proper working conditions at the time construction work is planned and machinery is installed, as well as to show the conditions to be maintained during operation. This book has been prepared in loose-leaf form so that additions or amendments may be readily made to it. The following are the principal subjects covered in that volume : Belts and Pulleys; Blast Furnaces; Boiler Houses; Charging Cars and Gantries; Flange Collars and Set Screws; Coupling Boxes, Spindles, Wabblers, Pinions, etc.; Subways and Housings; Counterweight Guards; Trestle Walks and Railings; Rail Bed Guard; Safety Rim on Cinder Ladle; Manhole Covers; Converting Works; Safety Gate; Emery and Other Abrasive Wheels; Engine Room; Fly Wheel Guards; Railing Sockets tor Movable Railings; Gear Guards; Ladders, Stairways, Platforms, Railings, etc.; Locking Device for Levers and Valve Chains; Water Gauge Glass Guards; Mill Tables; Shafting and Coupling Guards; Cranes; Cranemen's Ladders; Walks on Cranes and Runways; Hooks; Electrical Work; Signs; Now Buildings; Elevators; Turn Tables; In Placing Machinery; Smoke Stacks; Guard Rails at Buildings; Open Hearths; Gas Producers; Foundries; Yards; Scaffolds. The plates in this book are reduced drawings of actual construction and are intended to be used by the engineering department as examples only. The dimensions shown are not required to be followed unless they are made obligatory in the text of the specifications which appear upon the page opposite to each plate. This descriptive matter is taken from the construction rule book, which will be mentioned later and incorporates all of the requirements appearing in that book in an abbreviated form. On all plans or
specifications for new construction or work by way of replacement it must be shown that a check has been made for safety and it has been made the duty of superintendents of plants to see that safety devices and precautions provided for in our book of standard safety devices are complied with before machinery or plants are put into operation, and that they are thereafter maintained; no new machinery or new plant may be put into operation unless the same has been first approved for safety by the safety inspector, except upon the specific order of the general superintendent or assistant general superintendent of the plant. No machine tools may be ordered unless it has been shown that the plans and specifications therefor have been checked for safety.

This committee has also prepared with great care a book of rules respecting safety in operation. This book is gotten out in two forms. The first for the use of superintendents and foremen, printed in the English language, includes general instructions from the president of the company, regulations respecting co-operation of workmen, rules governing the construction and installation of machinery and the physical conditions to be maintained (which covers the same subjects as those mentioned before as being covered by the book of standard safety devices) and operation rules for the safety of employees. The second for the use of employees printed in the several languages spoken by the employees, is distributed to all employees of the company, who may not be superintendents or foremen, and contains the same matter as the other form except that the rules governing the construction and installation of machinery, etc., are omitted. These rule books, as stated, are placed in the hands of all of the employees of the company and each employee is required to read the same and to satisfy his foreman that he has read it and is familiar with its contents and both the foreman and employer are also required to sign a statement to that effect upon a form provided for that purpose. All men when placed at work upon new jobs entailing any hazard at all must be fully instructed by the foremen in charge as to all dangers incident to the work, and when the foreman is satisfied that such workman understands and is aware of all such dangers, he is required to so certify to the department superintendent upon a form provided for that purpose, upon which form the workman also states that he has been instructed, knows the dangers, and will be careful of
his own and others' safety. The signing of such statements practically insures against perfunctoriness in these details.

The safety committee has also prepared and had printed rules governing the use of high explosives, copies of which rules are placed in the hands of all persons having anything whatever to do with the handling of dynamite, or other high explosives.

For the purpose of educating the men and inculcating habits of caution on the part of the foremen and the men under them, a number of different plans have been devised. From time to time the foremen are examined by the safety inspector, department superintendent and assistant general superintendent of the plants as to their kncwledge of, and familiarity with, the safety rules, and foremen who persistently fail to show familiarity therewith are either discharged or given other work. To stimulate or interest the foremen and workmen in the study of these rules, safety buttons or badges are distributed to any foreman or workman who is able to pass a satisfactory examination upon the safety rules.

A bulletin has been issued at the plants of the company, requiring the reporting by superintendents of departments, foremen of divisions and other foremen, of failure to use safety protection provided and infraction of rules, a form for such report having been prepared. If there is any failure on the part of any of these men to make the reports required, they are given cn opportunity to explain the cause of such failure to the assistant general superintendent of the plant. This watchful. ness for failure to use protection provided and infraction of rules has been largely influential in causing both foremen and men to be more strict and more careful in their conduct.

At some of the plants of the company, for the purpose of further stimulating interest in safety matters, where a department has not had any accident during the month incurring a loss of ten days' time or more, a recognition is made of this record by the presenting of boxes of cigars for distribution among the foremen and men, these cigars being called 'Boosters'" and having a "safety" band upon them. Congratulatory letters are also sent to the superintendents of such departments by the chairman of the safety committee.

Safety bulletin boards have also been placed in conspicuous places in and about our plants, upon which boards bulletins that may be issued by the plant management respecting safety
matters, are posted, as well as lists of departments having a record of no ten days' or more accidents during the month, and other safety data. Newspaper clippings are also used, which show the occurrence of industrial accidents in other plants, throughout the United States, together with photograph of the device in use, or the rule in effect at the plants of the Illinois Steel Co. which should prevent the occurrence of a similar accident. These bulletin boards seem to interest the men greatly and in good weather, when the men are spelled or at the lunch hour, many of them will be found reading the items upon these bulletin boards with great care.

It is the aim of the company, as far as possible, to keep its motto, "Safety first," before the eyes and in the minds of its. employees at all times In furtherance of this plan, all printed forms which are used by foremen or men in and about its plants have some safety motto or emblem upon them.

For instance, on "loan slips," i. e., orders for men loaned from one department to work in another department tempor"rily, the motto appears in red: "Tell the men of the dangers of this work and how to avoid them."

On repair orders for repairing machinery is shown the motto: "Replace all safeguards before leaving the job."

For the purpose of further increasing the general inicrest among the men in safety matters, some two years agn two different committees were organized at each of the larger plants of t the company, the first a workmen's committee, the second a department or permanent committee.

For the purpose of organizing the workmen's committees the several plants have been divided into from three to four divisions each and three workmen in each of such divisions areselected to act as a committee to look for dangerous places and consult with the men at their work to get suggestions from them as to safer methoảs and incidentally to sow the seeds of caution. These men serve on the committee two months and spend one day every week inspecting their divisions. When a committee is organized, all of the superintendents of the departments making up that division meet with the committee and the safety inspector. At this meeting the nature of the work is gone over with the men composing the committee, thus impressing upon them the interest taken in safety work by their superintendents. A large number of recommendations are constantly being made-
by these committees. It is believed that this committee work is causing the men to take more of an interest in their own and cthers' safety.

Department or permanent committees are provided for by the organization in each department at each of our larger plints of a committee of foremen called a permanent committee because the personel of the committee does not change. It is the duty of this committee to make monthly inspections of their departments, see that all safety devices approved by their superintend. ents are installed, and investigate accidents. In making an investigation, they report how the accident occurred, what they think can be done to prevent a similar accident, whether in their opinion any one had been negligent and what discipline they think should be meted out to the negligent person. This inquiry into the alleged guilt of a party by a "jury of his peers" has a very salient effect and has done much toward reducing the number of accidents. Care is taken by the superintendents to see that the investigation made by the committee is not merely perfunctory and their reports are very satisfactory. Where the injured man himself has been careless, the committee does not overlook this fact, but lets the man understand that it does not approve of his actions.

The inspections which have been mentioned are made for the purpose of discovering any unguarded conditions or any safeguards already installed, which may be out of repair, or upon which any improvement may be made. In addition to the plant inspections which are made by the safety inspectors and workrien's and department committees previously mentioned, other inspections are from time to time made. Special workmen's committees are frequently selected at a plant and sent to other plants for the purpose of inspecting that plant for dangerous condi-. tions which may come under their observation and also for the purpose of observing the precautions and devices that may have been taken and provided at that plant. This also is a very tffective means of educating the workmen. The central safety committee from time to time spends a day at each of the plants, making an inspection thereof. The chairman and secretary of the safety committee also from time to time visit and inspect all of the plants. There is also an annual inspection made by all of the safety inspectors jointly of all the plants of the company. The results of all of these several inspections mentioned are reported
to the central safety committee, and by it referred to the plant inspected. After the particular plant has had an opportunity to consider the recommendations thus made, it makes return to the central safety committee with regard thereto and good cause ruust be shown as to why any of the recommendations made are not adopted and put into effect.

All machinery at all plants is likewise inspected with great frequency by experts skilled in each branch of the work or in the operations of the particular machine or appliance. This inspection is for defective and bad order conditions as well as zafety devices. Electric crane operators, locomotive crane operators, and narrow gauge or plant railroad engineers are also required to make daily reports as to the condition of the cranes or engines in their charge. All of this is done in order to keep machinery and appliances in as safe a condition as possible.

The safety inspectors at our larger plants are sent every yoar to a number of other subsidiary companies of the United States Steel Corporation, and to the plants of other steel and manufacturing institutions throughout the United States, including the navy yards of the United States government. These trips are made for the purpose of obtaining new ideas on safety matters and educating our safety inspectors generally.

The Illinois Steel Co., simultaneously with other subsidiary companies of the United States Steel Corporation, on May 1, 1910, put into force and effect its voluntary relief plan. This relief plan provides for compensation to the injured employees irrespective of the question of negligence. The company aiso, simultaneously with other subsidiary companies of the United States Steel Corporation, on January 1, 1911, put into force and effect its pension fund, which provides for the pensioning of its aged employees. These two relief plans are, of course, but incidental to the accident prevention and my limited time forbids that I go into any detail with re pect to them. You are, of course, familiar with these plans, as the public press has given much publicity to them.

It must be borne in mind that human nature is fallible and that to err is human. Responsible foremen will at times be careless in selecting the proper and safe methods of performing the work. A workman will do the wrong thing at a critical moment, or in the over confidence of long association will grow careless in the handling of his machine or the performance of
his task, and the accident follows, causing injury to himself and others.

It is also often extremely difficult to overcome the prejudice and opposition of the men themselves and cause them to realize the importance of utilizing safety devices provided or exercising the proper degree of care for their own or others' safety.

These considerations lead the observer to the inevitable conclusion that while the gear guard, the railed walk and safeguards, in general, are important, yet by far the most important element in the successful prevention of accidents is the elimination of carelessness. It is this element in the cause of accidents which is being fought the hardest in the Illinois Steel Co. Constant education and instruction and the strongest of disciplinarian measures are the only weapons available and it has been for this purpose that the various methods previously mentioned for securing the co-operation of the workmen have been put into effect. Eternal vigilance is the price of safety and education, and inculcation of habits of caution must be the creed of every industrial plant which seeks to do effective work in accident prevention.

It is also common knowledge that in every trade or industry there are a large number of injuries which are purely fortuitous, accidental and non-preventable in the most literal sense, no klame being attachable to any one. These represent the unavoidable trade risk of each particular industry. This so-called trade risk is necessarily large in the iron and steel industry where molten metal and heavy materials are constantly being handled with large and cumbersome machinery actuated by steam and electrical power.

We all have, therefore, recognized the fact that in every trade or industry, either by reason of carelessness or on account of the trade risk, accidents are bound to happen and injuries to follow. The Illinois Steel Co. has therefore made ample provision for the care of its men when injured. At its South Works and Gary Works, well equipped hospitals have been built, located on the plant, which are in charge of an efficient corps of graduate doctors. As its other plants emergency rooms or dispensaries are provided. At Joliet Works graduate doctors are on duty night and day at its dispensary, and at Milwaukee and North Works at their dispensaries during the day, with doctors within easy reach of the plant at night.

At all plants stretchers and hand ambulances are located at convenient points and at Gary and Joliet Works horse drawn ambulances are used to bring the injured men to the hospital or dispensary. At the plants where dispensaries only are located, public hospitals near the works are used for the care of those more seriously injured, or men are cared for in their own homes. All such surgical attendance and hospital care is furnished by the company without cost or expense to the injured employee. Oxygen tanks and Draeger helmets are also located at points about the plant for resuscitation and rescue work.

Satisfactory statistics are not yet at hand, but from those which are now available it develops that since the organization of the central safety committee in the Illinois Steel Co. the percentage of serious accidents has been cut in half. This is extremely significant, and the company feels therefore amply repaid for all of the time and energy and thought that has been expended upon this subject.

The Illinois Steel Co. has found that this work has been given some publicity as a result of which manufacturing and industrial plants of all classes and sizes have been in the past year making requests for information and data as to its safety organization and work. Representatives of a number of large concerns have made personal calls upon the president of the company and the chairman of the safety committee seeking aid and advice. It has been the great pleasure of the Illinois Steel Co. to provide these inquirers with all the data and help at its command, and it is our understanding that in nearly every case the companies which have made inquiries of us have to a greater or less extent immediately taken steps to improve the conditions at their plants.

If the experience of the Illinois Steel Co. is in any wise indicative of the signs of the times, we who are looking for greater progress in the field of industrial accident prevention should not he discouraged, as everything seems to point to a brighter future ir this great work.

## II.

## ADDRESS BY MR. PRICE.

You were fortunate in having Mr. Campbell and Mr. Young, of the Illinois Steel Company, present their work before this conference yesterday, because I consider them two of the best men in the country, and I consider that no company has done better work or realized better results than the Illinois Sieel Company.

I wish that I could add a word of emphasis to what was said by Mr. Campbell in regard to the value of organization. I agree fully with Mr. Campbell in all that he said, but I wish to also speak of the value of guards, which was not emphasized in his remarks, and it may be possible some of those present were impressed, as I was, that he did not place a great value upon guards. In conversation with Mr. Campbell last evening he asked me to make this correction and to say that he considers guards indispensable in the work of protection and that he omitted to properly emphasize this point because he was talking upon the subject of organization.

In our experience we have found that mechanical guards cover, in a large percentage of cases, those points of danger where serious accidents or fatalities may happen and, therefore, they are exceedingly important, because one serious accident amounts to more in suffering, loss of time, and loss of money than many hundreds of minor accidents.

At our Champion Works at Springfield, Ohio, a few days ago, we had a striking example of the value of a guard. A man was working on an emery wheel which exploded. A guard made of a piece of flat steel 4 inches wide, $5 / 8$ inches thick and 30 inches long saved the life of the man, and the saving in money to the company was enough to equip the entire plant with safety guards.

You cannot talk organization to foremen and superintendents until you have done some guarding of machinery and have been able to prove to them the value of safeguards by actually reducing accidents.

I wish to outline briefly the organization in the International Harvester Company along the line of protection and sanitation. About a yeir and a half ago all of the superintendents of the eighteen works were called together for the first time to discuss ways and means of beitering conditions in our factories. At this meeting an organization was perfected which made the entire body of superintendents an advisory board, and out of this advisory board was appointed an executive committee consisting of five members which should be the active body between meetings of the advisory board. This advisory board has met at regular intervals, and the executive committee has meetings at such times when there is business of importance to transact, and the whole proposition of promoting safeguarding and sanitation has been put on a dignified and business basis.

At each of the works there is a factory inspector who makes regular inspections of the various departments and reports to the superintendent. I think one point should be strongly emphasized: namely, that an inspector can do very little without the co-operation of the foremen along the line of inspection. The foremen are on the job ten hours a day, and if they are alert and interested they can find many points of danger which arise in the course of the work which an inspector can not see.

In organizing and promoting protection against injury we have endeavored to profit by the experience of others. We have gathered a large amount of information in the form of pamphets and books, especially photographs and blue prints showing the most practical types of guards which have been used in America, and also in Europe. We have gathered together in two large volumes blue prints and photographs showing the various guards which have been designed and found satisfactory at each of our nineteen works. We have had duplicates made of these books and have placed one in the hands of each of the superintendents. In this way we give each superintendent the benefit of the experience of all the other works. These books have also helped to foster a spirit of friendly rivalry and to stimulate interest all along the line.

One of the first things winich we did was to compile a complete book of rules and instructions and have it printed in ten languages and placed in the hands of every employee in the works. A book was also published for the foremen including
the rules and instructions for the workmen and also including about 150 specifications in regard to points of danger which should be guarded. The book of rules for the workmen was divided with regard to departments, and thus it is necessary for a workman to read only the two or three pages which pertain to his department. This book of rules was compiled after very thorough and exhaustive study of the experience in our own works with regarä to the causes of accidents. For instance, the fifteen rules for the twine mill operators were compiled after four hours of consultation with all of the foremen of the twine mills and after going over some fifty specific accidents.

These books of rules have served a valuable purpose: First, in placing before the foremen and workmen in black and white the high standard which the officers of the company have set and which they propose to have estabished; second, the book of rules places in the hands of the workmen definite instructions in regard to his conduct while at work and leaves no opportunity for him to afterward make the excuse that he did not know or was not instructed. These books of rules accomplish in a forcible way what cannot possibly be accomplished by any instructions given by word of mouth.

Each month a complete report is issued from the general office to each superintendent giving a comparative statement of accidents in all the works. This report shows the total number of men injured and percentage, and also the percentage of men who lost̀ time. It also includes detailed information regarding the causes of injury.

In the successful promotion of safe guarding I think that one of the most valuable helps is to have regular monthly meetings of all the foremen, at which meetings the superintenednt will pre:ide. Such subjects as the following should be discussed:

1 st. Specific caces of accidents.
2nd. Points of danger which have been overlooked.
3 rd . Instruction of the workmen.
4th. Discussion of various types of new guards.
At several of our works where foremen's meetings are held, it has been found that the superintendent can reach his foremen in more forcible manner through these meetings than he can by going to them personally. When you get foremen together there is a certain spirit of rivalry and it is possible to foster
a certain enthusiasm and interest which cannot be done by approaching each foreman individually.

Before showing the photographs of various guards which we have found successful in our works, I wish to speak of a few types of guards which I think are exceedingly important. The first thing I wish to speak of is congress shoes for the use of foundrymen. We have lately adopted the plan at all of our works of purchasing these congress shoes and selling them to the men at cost. These shoes cost us $\$ 1.55$ per pair. This plan enables us to enforce rigidly the rule regarding the wearing of congress shoes, because it enables us to supply at once new men with shoes and also to replace any shoes we may find which are defective: The most experienced foundrymen emphasize strongly the importance of wearing congress shoes, because this type of shoe sheds the molten iron, and also because the workmen can quickly remove the shoe if molten iron happens to drop into the top of the shoe.

Another point which the foundrymen emphasize is the importance of wearing good pants which come down over the shoes. Pants made of jean cloth have been found to be the best.

About a year and a half ago we adopted the plan of requiring all operators of emery wheels to wear large spectacles. The lenses of these spectacles are about an inch and a half in diameter, and the cost is $121 / 2$ cents per pair. We have found that where these spectacles are worn eye injuries from emery dust are practically eliminated. Before adopting these spectacles we tried various types of goggles, but found they were not successful because they were too confining to the eye and the men did not like them. We find these spectacles very acceptable, and in many cases the men, after they have worn them a few days, do not wish to work without them.

When we made our book of rules we specified that each landing of an elevator should be equipped with an automatic gate which should come down flush with the floor, and should be of sufficient height so that men could not lean over the top. This gate should also be screened up part way so that parts cannot fall through or under. The sides of the car should also be screened. We also specified that a heavy screen should be placed over the top of the car to protect parsengers if any parts should fall from the floor above. The importance of this screen is em-
phasized by an accident which occurred at one of our works a few months ago when nine hundred pounds of castings fell from the third floor above, and the screen saved the lives of three men who were standing on the elevator at the first floor.

Some of the most serious accidents occur on punch presses. We specify that all punch presses shall be equipped with locks on the trips so that when the die is being changed or the machine repaired or adjusted the trip may be locked and thus make it raechanically impossible for the machine to be accidentally tripped.

Another guard which we have found useful consists of a latch attachment connected with the trip rod which prevents the press from repeating when the foot is accidentally held on the trip. The foreman of one of our punch departments states that this one guard will eliminate ninety per cent of his more serious injuries.

I wish to speak of hoods for emery wheels. The best type of hood which we have designed thus far consists of a channel iron about $\frac{1}{4}$ inch thick placed over the top of the wheel, with the sides of the hood made of heavy sheet iron. To the bottom of this hood the exhaust pipes are attached.

We have also designed a lock for belts on emery wheels which have cone pulleys. This lock is designed to prevent the workmen from changing the speed of the wheel and thus making it liable to explode.

There have been many guards for jointers designed and the majority of them have been failures. If you will go into the average shop you will find the guard on the jointer is out of commission. This is largely because the average jointer guard works with too much friction and therefore interferes with the operator. The guard which we have found most successful is similar to what is called the Badger guard. It consists of a board made in the shape of a wing, about $11 / 2$ inches in thickness, which is fastened to an upright shaft on one side of the machine. To this shaft is attached a collar which prevents the board from touching the table of the machine, and thus the board is allowed to move easily and freely, with but little friction. To the upright shaft is attached a spring or a counterweight which holds the guard in position over the knife. When the man is operating and is passing a piece of lumber over the knife, the
guard swings to one side, but the knife is entirely covered at all times by the board or the guard.

We have adopted a guard for vertical spindle shapers which has proven very satisfactory. It consists of a bell-shaped cage made of malleable iron which is attached to an upright pipe. 'This pipe is attached to a pipe arm. This guard can be adjusted up and down and swung out of posistion when desired. When this guard is kept in proper position and close enough to the table to just allow the work to pass under, it makes the shaper, which is one of the most dangerous machines, almost "fool-proof."

Our Company has recently printed a circular letter which it has sent to all manufacturers of machinery with which it does business. This letter calls attention to the recent awakening along the line of protection, and urges the manufacturers to co-operate in every way posiible to equip their machines with the best types of guards.

Mr. Price made the following statements in answer to the inquiries:

We have visiting nurses in several of our works who visit the homes of the workmen and attend to the needs not only of the injured men, but of the members of the families.

We also have an Employees' Benefit Association which provides half wages when men are sick or disabled from accidents off duty, and provides one year's wages to the family in case of dieath from sickness, and two years' wages in case of death from accident. Each member of the Benefit Association pays $11 / 2$ per cent of his wages each month, and the Company contributes $\$ 50,000$ per year, which covers all running expenses and leaves about $\$ 25,000$ to be added to the fund.

We also have an Industrial Accident Department, to which the employees pay only a nominal assessment of 6 or 8 cents per month. This department provides half wages for all employees injured while in the course of employment, and three years' wages in case of death from accident.

Every new man who is employed is given a physical examination. This is found to be exceedingly valuable in weeding out undesirable men who may be suffering from some malady which would make them liable to accident. The foreigners accept the physical examination very much as they do the other requirements of the factory.

An annual report of the Benefit Association is issued, giving complete information regarding every dollar which is received in the form of assessments from the employees, and every dollar which is paid out in the form of benefits or running expenses. Each member is entitled to a copy of this report. At the quarterly meetings of the trustees of the Benefit Association each trustee is furnished with a complete financial report covering the quarter. This board of trustees consists of one-half of the members appointed by the Company and one-half elected by the members of the association. It is absolutely democratic in every way, and the representatives of the workmen take a very active and prominent part in all discussions.

There was some discussion of safety appliances for corn shredders. It was stated by one of the inspectors that cotton gloves are responsible for many accidents on corn shredders. Leather hand protectors should be used.

I am just now making an investigation along the line of factory ventilation, and am endeavoring to find some simple and inexpensive way in which factory rooms can be ventilated practically. The average factory room is about fifty feet square, and there are usually no more than fifteen or twenty men working in a room of this size. Compared with an audience room or a school room the problem of ventilation is a very simple one. It is imporsible to make a cut and dried standard of ventilation which will apply to all rooms. The proposition must be worked out practically in each plant. A simple means of ventilatio: which has been found practical is to place a 12 inch board in each window around the entire room, and then to raise the winduw and lower it from the top, say one-half inch to two inches. Good business men are awakening to a realization that good vertilation has a practical bearing on the factory output. In many shops in the winter, about three o'clock in the afternoon, the men become stupid and languid from the close, hot air, when, if the rooms were supplied with fresh air and the temperature was kept down to, say, $60^{\circ}$, they would work with very much better spirit. Experiments have recently been tried in one or two schools in Chicago in which the children are allowed to work in a temperature of $58^{\circ}$ to $60^{\circ}$, with very remarkable success. If the children can sit in a room with this temperature, certainly rugged men, working at heavy, active labor, would not find it uncomfortable after they had become accustomed to it.

We have recently spent considerable time making an investigation of shop lighting, and have adopted as our standard an 80 -candle power 100 watt Tungsten lamp with a bowl-shaped reflector $16^{\prime \prime}$ in diameter, made of white enameled steel. These lamps are suspended about $101 / 2$ feet from the floor. This reflector and this type of lamp give better results than any type of lamp with which I am familiar, for the average machine shop with ceilings from 12 to 18 feet in height. In foundries with ceilings over 20 feet in height, and forge shops, we have used the flaming arc with good success. However, we have tried clusters of the same type of Tungsten lamp with very satisfactory results. The Tungsten lamp is much more economical than the old type of carbon lamp. It requires only $11 / 4$ watts per candle power, while the old carbon lamp requires about $31 / 2$. By installing the new type we have been able to increase our light about three-fold without increasing the cost of power.

It is probable nothing is more neglected in the average shop over the country than the artificial lighting. From a manufacturing standpoint, and from the standpoint of cafety, too much cannot be said in regard to the practical value of good lighting. After a superintendent once installs good lighting in any department in his shop, he can never be induced to go back to the old conditions.
Mr. Price then distributed about one hundred blue prints and photographs showing the various types of guards which are in use by the International Harvester, and a general discussion, with questions and answers, followed.

## PART V

## BASEMENT TENEMENTS IN MILWAUKEE

## INTRODUCTION


#### Abstract

A report on housing conditions among the poor of Milwaukee was published by the Bureau of Labor in 1906. The facts therein portrilyed were considered conclusive evidence that a law should be enacted to improve the sanitation of existing houses and to prevent the erection of tenements without sufficient fire protection, light, air, water, and closets. Such a law was enacted in 1997. Effort on the part of the state factory inspectors to enforce the law brought it before the Supreme Court where it was declared unconstitutional.

Crowded districts thereafter had two years in which to become more densely pcpulated. Old tenements had two years in which to become more dilapidated and filhy. Disease centers had two years' extension of time in which to reap their annual harvest of human lives. Those property owners who care only to collect rents had two years' extension of time in which to erect apartment, tenement, and lodging houses with narrow courts, dark rooms, damp basements, and poorly ventilated closets and halls: two years in which to secure a hold on helpless future generations.

Before the meeting of the legislature of 1909 the Bureau of Labor was again appealed to by citizens of Milwaukee, to make a limited inspection of the larger cities of the state to determine to what extent tenement legislation might go and yet be constitutional, to study the tenement laws of other states and cities, and to draft a bill which would reach the unsanitary houses, and prevent the erection of new ones with objectionable features. The inspection was made and the report was published. The cooporation of The Architects' Association and Real Estate Men's Association of Milwaukee was secured, with the able assistance of Attorney, Norman L. Baker, a bill was drafted which became a law June 16, 1909.

Nearly two years more have passed by and conditions continue to grow worse. Those who care have urged law enforcement. Others say there is no need for action,-nothing can be done yet,-conditions are not as bad as they are in Chicago and New York.

Conditions are not improving because the law is not enforced. For the enlightenment of those who believe action to be unnecessary and to convince them that conscientious officers are needed to enforce the law, another limited inspection of Milwaukee was thought advisable.

At my request, the Commissioner of Labor assigned Miss Perdue to make another limited survey. Through the cooperation of the Wisconsin Anti-Tuberculosis Association, Miss Sarah Ryder, expert tenement investigator, was employed to assist Miss Perdue for six weeks. After the appointment of Miss Edna Finch by the Department of Health of Milwaukee, several days of her time were given to the investigation. Acknowledgment is also made to Dr. F. I'. Dallert and Messrs. Gustav Prahl and William Polacheck for their generous contributions of time and talent in taking views of unsanitary places.

The object of this investigation was not that of determining what should be an ideal law, but rather to ascertain to what extent the existing tenement house law is actually enforced. The law as it stands and as it appears in Appendix $I$, was adopted following the decision overthrowing the law referred to above.


After looking over the field, it seemed that in investigation of basement dwellings and of aparments or houses having basement dwellings, would be adequate to determine this question. It was estimated that there were about two thousand houses in Milwaukee answering this description, but as the investigation proceeded it was discovered that scarcely any of the houses reached the requirements of the existing law; consequently, the investigation was discontinued after about 400 houses had been inspected, and the report is herewith submitted, showing conclusively that the tenement house law of Wisconsin is not enforced in the city of Milwaukec.

At the time when this investigation was made, in December 1910, there were two authorities responsible for the enforcement of the law,- the State Bureau of Labor and the Milwaukee Health Department. When the State Bureau was transferred to the Industrial Commission in July, 1911, its authority to enforce tenement house laws was withdrawn by the legislature, and since that date the enforcement has been the duty solely of municipalities. The duplication and conflict of authority stood in the way of effective enforcement.

The conditions described are those of the winter of 1910-11. The report does not enter into the question of recommendations for more effective enforcement of the law. It deals only with conditions as they were found to exist.

## Basement Tenements in milwaukee

Since the distinctly foreign groups have located in particular wards, Milwatrkee may be studied by races at the same time that housing conditions are considered by wards. Milwaukee has ten wards in which housing conditions are a menace to health and morals, and other wards in which isolated cases are seriously in need of attention. The ten are the first, second, third, fourth, fifth, sixth, seventh, twelfth, fourteenth and eighteenth. The third ward is distinctly South Italian. The twelfth, fourteenth and southwestern part of eightenth almost entirely Polish. The congested parts of the second and sixth are Jewish. The crowded and unsanitary parts of the fourth, fifth, seventh and first wards are not so distinctly marked by one nationality, their tenement dwellers being recent immigrants from Russia, Slavonia, Austria, Greece, Roumania, and other countries of Southern Europe.

## Third Ward

Since the entire thitd ward has been long and generally known to be most seliously in need of attention it received the most thorough investigation. It is bounded on the north by Michigan street, on the east and south by the Northwestern railroad yards and on the west by Milwaukee avenue. It comprises nine blocks in all. This is one of the oldest sections of the city. Conditions in this district could not be worse than they are. On every hand are old frame houses of the village cottage type, one and two stories high, many with hasement or cellar apartments. Occasionally a brick house standing somewhat alone can be seen above the others. These have either cellar or basement apartments. There are regularly from two to three houses on each lot, together with a motly collection of outhouses, and an occasional stable. There are two "double-deckers" in the district.

A few of the houses are survivors of the third ward fire, which occurred October 28 , 1892. On the other hand, there are several new houses. Some have made way for office buildings or factories which tower many stories above their humble neighbors, and sometimes almost surround them.

The houses are, for the most part, in an extreme state of dilapidation, and a description of one is virtually a description of all. By a reasonable standard, scarcely two dozen would be left standing, so hopeless would be the task of renovation. The cellar walls, always of wood, are rotten and settling, buildings leaning, clapboards off in places, shingles and blinds loose, eaves troughs hanging, porches leaning, steps and platforms unsafe, and stair railings frail.

The cellars have long since ceased to be used as storage places for vegetables and fruit. The better ones have been altered a very little and serve as dwelling places for large families. The others are filled or strewn with rubbish, old wood, and rags,-all inevitably laden with disease germs. They are dark, unventilated, and floorless, and receive the seepage from the yards in rainy weather. The cellar almost invariably contains the water closet,-always dark, ill ventilated, filthy, in a sad state of repair, and frequently used by several families. The odors from this, together with the damp and musty odors from other parts of the cellar, rise and fill the living rooms, even to the second story,
thus constituting a menace to the health of the occupants. Almost every apartment has one dark room, and sometimes two, not because there are no windows, but because the houses stand close together on the lot line, with eaves touching, leaving a space of only 8 or 10 inches between them. Courts between the houses are rarely wider than 5 feet, the average being from $2 \frac{1}{2}$ to 3 feet, never coming within the requirement of the law. Thus, no matter how much window space there may be, the rooms are dark, compelling the use of a lamp even on bright days for any kind of work. Children reared under such conditions cannot possibly be strong.

In most of the houses, the plaster on the ceilings and walls is uneven, and worn almost to the lath, which is exposed in spots where large quantities have fallen off. In some instances large pieces of paper can be stripped from the walls, which gives conclusive evidence that none has ever been removed. The floors shake at every step and slant toward the center, the usual point to which the buildings have settled. They are unsafe, boards being loose, worn and broken, some floors having been patched by nailing heads of boxes over the holes of the worn spots.

In many instances the staircases are so narrow and steep that it is with dificulty one makes his way, and it is rare indeed to find any that afford a good foothold. The tread is usually short and much worn, especially at the edge, and nails protrude. These stairways afford the only exit for families above. Such houses are regular fire traps. Many of them, which were originally built to accommodate one family, now shelter, according to size, from two to four families, or groups of single men. The rooms have been divided for sleeping purposes by wooden partitions, through which stove pipes sometimes run, thus adding to the danger from fire.

Of 34 premises visited in the Italian district, 28 were basement and cellar apartments. In a few instances the basements were used for cooking and living rooms only, while the family slept up-stairs. Repeated visits to four other premises did not result in finding the family at home. Some other basement apartments were doubtless missed. A greát many were unfit for occupancy, and had been abandoned, apparently quite recently, which accounts for the sm:all number found. In the course of the search for basements, a few houses were inspected from top to bottom. Of these, the worst examples found in the district were A, B, C, and D Jefferson St. A faithful description of this group has been given above. The conditions could not possibly le' worse anywhere,cellars floorless and wet, buildings extremely dilapidated and settling, floors broken and teetering, and with a dizzy slant quite conducive to seasickness, plaster falling from walls and ceiling, sinks in a bad state of repair, inside and outside steps unsafe. The rear house at $D$ has neither sink nor water closet. I'he water closets are hoppers located in the yard. The one at $C$ is located in the cellar, and is just about as hopeless as it can be. The brick stable in the rear No. 3 is 15 feet from one house and 12 feet from another and shelters six horses and two goats. The odor in summer must be dreadful. The income from these two houses is $\$ 504.00$ per year, less taxes. Apparently no repairs have been made for years. A picture is appended. At $A$ and $B$, the same conditions prevail, and there is in addition a very unsanitary watercloset in the cellar, which is flushed from the kitchen. The income from these two houses is $\$ 456.00$ per year, less taxes. At the rear of $B$ is the cellar stable described above.

At A is another unsanitary dwelling, of which the worst feature of many bad ores, is the water closet located in the open cellar. The seat is very close to thr floor. It has an old hopper which should have been destroyed long ago. The odor from this pervades the entire house. No amount of care could make it sanitary.

In this ward the investigation discovered 30 inhabited dark rooms in about as many tenements. Five of the dark rooms were without windows. There were in addition 10 gloomy rooms. Of the 9 houses completely inspected, there were two dark rooms and 13 gloomy rooms. The largest number of persons sleeping in one room was 7 .


No. 1.
Stairway $21 / 4$ feet wide at A Jefferson street showing the rough and worn treads. The back of the top step has been knocked out and the foot catches as one steps from it to the sill above. Nails protrude in a dangerous manner. The picture was taken from a $21 / 2 \times 21 / 2$ space at the foot of the stairs, with a long focus camera, and does not show the real steepness. These stairs are typical of conditions throughout the house.

The water closets, like the sinks, were sanitary in only a few instances. The tank closets were well lighted, ventilated, and clean; but many were of the hopper variety located in dark, unventilated apartments in the cellar, and very much in need of repairs. Pipes were broken or frozen, hoppers filled, seats broken and filthy, and floors wet. Occasionally a closet was found placed in the open cellar.


No. 2.
B. Jeffersen street. The shed bairn at the right contains three horses. The bain next in view contains six horses and two goats. The house in the center of the picture is full of Italian families and presents no redeeming feature. On the left are other tenements full of families.

## KIND OF CLOSETS IN THE ITALIAN JISTRICT.



The sinks in a few instances were porcelain lined with open plumbing, trapped, vented, and clean; but most were of the old unsanitary cast iron tray variety, uneven and rough, surrounded by a wooden frame-work, much worn and rotting and sometimes settling away from the walls, the cracks and worn places completely filled with foul, greasy material, the direct result of years of neglect and lack of repair, and most are in closed boxes. Of the 37 sinks found,


No. 3.
C and D Jefferson street. The light intended for the house furthest north is obstructed by the tall factory building and on the south by the adjoining house. A brick barn is only twelye feet from one and fifteen feet from the other house.


No. 3a.
C Jefferson street: There are two windows, opening into a passageway two and one-half feet wide, looking into next house. A lamp must be used on bright days for any kind of work. The room contains a table, a barrel, th.. family trunk, a stove and a bed. On a board covered by a white cloth is some freshly baked bread. The bit of stove-pipe runs through upper half of door into chimney of next room. Father, mother and infant sleep here.


No. 4.
This rear cottage was remodeled during the time of inspection for fear state authorities would not allow it to be done after the report was published.


No. 5.
View of one corner of court at rear of A and B Detroit street, showing heaps of garbage and ashes, (typical of Italian district) with square top of opening to drain close by. Closet one of the dirtiest and filthiest in district. Outside rear stairway of house next door showing in picture.


No. 6.
This picture taken from outside stairway of court in rear of A and B Detroit street, showing congestion and condition of rear yards. Sheds, etc., typical of Italian district. Church in background.
only 2 were porcelain lined, smooth, and without cracks. The rest were of the type described above, of which six were in bad repair, 27 were indescribably ulsanitary, and in varying stages of dilapidation. In two the waste was not trapped, or the trap was not visible. There was no water in the house in five instances.


No. 7.
This picture shows a sink in basemant at B Huron street. It does not do justice to the dilanidated, condition; larce pieces of framework are literally rotted off. A piece of zinc has been tacked over base at back, which is worn at lower edge, behind which is an offensive collection of grease and dirt. Trap is leaking, and tub has been placed beneath oo catch dripping. Landlord ha, refused to make repairs.

Stables are situated in entire disregard of the law, anywhere from within : few inches to 15 feet of the houses. Some are sanitary, while others are not. One stable, located at A Milwaukee street, is the cellar of an old cottage and shelters three horses. The man who takes care of them lives in the front room of this cottage. Another house with two families is 2 feet 8 inches north of this stable. The space intervening is a dumping ground for manure, decaying apples, and pumpkins.

Another stable is located in the rear of B Jefferson street, and is nothing but an ancient and dilapidated shed, the roof of which is not much more than S or ? feet above ground. The floor of this stable is several feet below the surface and two horses are kept there. Last summer one horse was very sick, the condition of the stable being directly responsible.
The manure boxes, like the garbage cans, are very often not more than half full, but there can be seen all around them for a distance of some feet scattered heaps of manure, and the ground immediately around the house is covered. In this instance, the Health Department is directly responsible, for a regular patrol of the district would result in a discovery of these conditions and an effort towards remedy would undoubtedly be made. Not a health inspector was seen
by the investigator while the survey was being made in this district, but inspectors were seen in other districts where they were not nearly so much needed.

The situation in the Italian district in regard to the disposal of garbage is a serious one. Very few of the yards are clean, but the inspector was told that cans are emptied and ashes taken away twice a week, whereas under former administrations garbage and ashes have been left to accumulate two and four weeks at a time. The receptacle provided for garbage is a barrel or box quite as often as a covered can. The garbage cans or barrels are generally placed in the yards, but a few are in the alleys. Occasionally a garbage can is seen with the cover drawn down tight and the ground around the can for some distance strewn with apple and potato parings, banana skins and macaroni. Most of the alleys and many of the yards are filthy and strewn with rubbish, garbage and manure.

## Other Illustrations Below the Law.

L Jefferson Street-1, Front room in basement, not enough window space, . only 1-16 of floor area.


No. 8.
A Milwankee street.

2-Window space $1-5$ plus superficial floor area, but one window opens into a narrow court and receives almost no light, while the other window opens into a front room and receives but little.

3-Rear bed room. window space 1-9 of floor area, but both windows open into same narrow court and are absolutely dark. Walls and ceiling are wet.
4-Water closets of hopper type in bad shape, no ventilation, illy lighted, pipes broken and leaking, and floors wet.
5 -Sink of poor type and in bad shape.

6-Floors worn and damp.
F Jefferson Street, 1, Floor area of 56 sq . ft., no window, sleeping room for two boys.

2 -Other rooms poorly lighted, kitchen window space only 1-20 of the floor area, bed room in which 6 persons sleep has window space 1-3 of floor area but poor light at that.
3-Water closet in yard, hopper old and dirty, pipes broken.
4 -Floors, walls, and ceilings in bad shape; plaster falling off, and that which remains, filthy.


No. 9.
Wall of basement room at E Jefferson street, showing sacking tacked up to keep water and cold from bed. Springs shown in picture are rusty from dampness. Window, a cornor of which shows, opens into a narrow court between two houses. Lamp must be used even on bright days.

A Jackson Street. Room 2, window space 1-9 of floor area, but dark because window opens into narrow court between houses.

Room 3 has one window 1-15 of floor area which opens into an inner room having a window.

Room 4-Window space 1-5 of floor area but poor light because windows look into a narrow court.

C Huron Street, window space in two rooms 1-13 and 1-11 of floor areas respectively, rooms gloomy, windows looking into a narrow court. Window space of front room 1-6 of floor area, but one window opens into a narrow court. Floors, walls, and ceilings in bad state of repair. Water closet in the cellar of the enclosed, hopper variety, seat very close to the floor, odor from this all through the house. Cellar absolutely dark. A man is sick in the house.

B Huron Street, rooms 3 and 4 windows 1-26 of floor area, rooms dark because windows open into a narrow court, sink below requirements of the law, other rooms dark because they open into inner courts filled with stairs and platforms which exclude light. Floors are damp.

A Jackson Street, basement. This house is new and in good condition, but inuer rooms dark. One room with inside windows is practically dark when doors are closed into adjoining rooms.

B Milwaukee Street. This house needs a vigorous and a thorugh mending. Plaster is falling off walls and ceiling, floors rock with every step, there is no water and no water closet. Window space legal in room one, but only 1-13 of the floor space in room two. In the first floor front window space is $1-16$ of floor space. There were a couple of setting hens in one room. Stairs are unsafe.

D Huron Street. Kitchen opens directly into a barn in which are stabled two horses, window space is ample and above requirements of the law, but walls and floors are damp, plaster falling, and sink is of antique type and in need of repairs. Water closet is in the cellar of the next house, is of the hopper variety, is very dirty, and the floors are wet.

I Huron Street. Barn built last spring, is continuous with the kitchen. The door entering this barn is within three feet of the kitchen door.


No. 10.
B Jackson street. Interior view.

The house at B Jackson Street is within a few yards of Lake Michigan and beggars description. It is $351 / 2$ feet long and 12 feet wide. The roof in the center is 8 feet above the ground and slopes to ${ }^{\circ} 4$ feet at the sides. The outside walls are bulging. The house is divided by papered one inch board partitions into three rooms. The ceiling in one room is 7 feet high in the center sloping to 6 at the sides. The ceiling in the other two is just 6 feet above the floor. There is a window in each room $31 / 4$ feet by $11 / 4$ feet. There is very little light from the fact that most of the panes are broken, their places being filled with brards, shingles, and rags that keep out the cold. The floor is laid directly on the ground, and presents a corrugated appearance caused by the expansiou from freezing of the ground below it. The doors open and shut with difficulty
on account of this bulging of the floor. At the rear are the ruins of sheds whose stairs are leaning, and whose doors are absent. The fence is leaning also. In this house a poor old woman and her son were found. They are said to keep lodgers but none were present at the date of the investigation. A view is appended.


No. 10.
B Jackson street. Exterior view.

## Seventh and First Wards

The seventh and first wards, being east of the river and joined with the third ward on the north, are so much alike in character of their inhabitants and nature of the housing problem that they may well be considered as one.

The first ward, bounded on the north by Brady street, on the east by the lake, on the south by Juneau avenue, and on the west by Milwaukee river; and the seventh ward, bounded on the north by Juneau avenue, on the east by the lake, on the south by Wisconsin street, and on the west by the river contain handsome residence districts near the lake, and the business section comprising Jackson, Broadway, and Milwaukee streets, but a very serious housing and moral problem on the west. Each ward includes a part of the long River street line of shame. Nearly all of the houses in this street have basements with dark and gloomy rooms. But on account of the desire of tenants to render. their establishment attractive, and of the landlord to draw exorbitant rents, these houses are painted and kept in fairly good repair. The real tenement problem of the first and seventh wards is from Market street west to the river. Stores, lamdries, and factories occupy the greater part, but the most miserable ola frame tenements crowd between, and huddle behind them. Because owners expect to build factories or sell the lots for factory and store purposes, old tenements are occupied and used without repair. Many lean from their wooden


No. 10 a.
This picture is typlcal of housing conditions in the Italian district, showing the leaning of the buildings, bulging walls, loose blinds, etc.


No. 10 b .
G Jefferson street.


No. 10 c .
C Milwaukee street. A court thren fent six inches wide between two-story brick tenements, the only source of light to the families living in interior rooms.


No. 10 d.
A court five feet wide originally intended to light interior rooms, but a neighbor has been permitted to build an additional brick building directly against the open end of the court entirely shutting out the light except that which comes directly from the sky.
foundations, floors are worn and patched, halls are dark and filthy, the plaster is falling from the walls, the paper is worn and in many places mouldy. The* rooms are rendered dark by towering new factories, stores and business houses. Crowded districts are becoming more crowded by the moving of old houses into the rear end of lots otherwise occupied in the front. At A East Water street remodeling contrary to law has been done this year.
At A Market street is a little cottage having three basement rooms, two of which are occupied by a Slavonian family of eight, six being little chiliren. The cellar is eight feet from floor to ceiling. The ceiling is only three feet above the ground. The inspector was attracted to inspect the place by the conspicuously filthy yard, of which a view is appended. No receptacle is pro-

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No. 10 e .
A family group in their windowless basement kitchen and bed room.
vided the two large families for either garbage or ashes which are, therefore. thrown in the yard. The garbage along the west fence is augmented by a pile $o^{f}$ rabbit skins, while that next the barn gives evidence of the last chickens stripped of their feathers. The one remaining hen sick with the gapes shares the dark, damp rear hall leading to the overcrowded rooms occupied by the family with clothes hanging up to dry, and an old dog and her puppies. The water lying in the yard seeps towards the house which, being lower, is always damp. The walls are mouldy and the floors quite wet. The closet used by this family and the one above, comprising 15 persons in all, is located in the rear hall. This is so hard to flush that it is full the greater part of the time and the odor pervades the entire house. The third room of the basement is used as a kitchen for the family above. The sink is of the old style tray variety with wooden fastenings, decayed, filthy with grease and the accumulated dirt of generations. Members of both families look as sick and worn as possible. The only creatures which look well are the old dog and her puppies. Every basement of this district is dark and damp. The worst ones inspected were found at B, C, and D Market street. At B the cellar is occupied by two fam-


No. 10 f .
One of the two dark rooms in interior basement, D Milwaukee street, both used as bed rooms.


No. 11.
A type of First and Seventh ward tenement overshadowed by a factory and crowded by other buildings; out of repair; manure, ash, and garbage piles concealed by the fence.


No. 12.
This backyard is a dumping ground for the garbage of two families. No receptacle is provided fo: their garbage or ashes.
ilies living together, making 9 persons in all. The cellar is 7 feet 6 inches from the floor and 1 foot 6 inches above the street and yard. This admits very little light, and the front and rear rooms are too dark to enable one to read in the middle of the day without a lamp. The inspector found a light burning in the kitchen at $10: 30$ in the morning. The middle room has no window to admit light, a small square space being left open for ventilation only. The three members of the family were in bed in the room when a flash light view of the interior was taken. This family with 18 other families, 52 persons in all, go to two closets in the rear yard. A third closet is present but not in condition for use.


No. 18.
B, C and D Market strect. The two black spots at the bottom of the picture are the doors to dark apartments in the collar now occupied by four families, all of which have little chitdren. The open door to the shed leads to the two closets frequented in common by members of fifty tenements besides men of the alley.

At C Market street two families occupy a cellar 7 feet 6 inches from floor to ceiling and 6 inches above the street. The front room is occupied by a woman and 2 children. One window is 2 feet 7 inches by 4 feet 10 inches. It is against the wall of the street and only 6 inches of glass receive the light of day. The rear rooms are occupied by a family of six. The lamp was found burning at 10 A. M., in the front room which received no light from the exterior. The other two rooms were in interior darkness and so filled with vermin that the tenants had sought to kill them with drugs which so nearly proved fatal to a baby that the vermin are now endured without attempt to resist. Floors and walls are damp. The back yard is filled with closets, stables, garbage, and ash bins.

The third basement, at D, duplicates the above description. None of them are fit for horses, yet young human lives are being sacrificed there. These cellars have been occupied for years within two blocks of the city hall,

The houses of the first ward needing immediate attention are along North Water street extending from River street to the 18 th ward and the north ends of all streets leading into North Water street. These tenements are occupied by Greek and Slavonian lodgers.
Children reared in the west ends of the seventh and first wards are handicapped by poor health caused by unsanitary houses, but there is a worse poison to character which they ignorantly imbibe. The homes of the prostitutes are not confined to River street. Establishments filled with this type of women were found in the west ends of both wards. The worst feature of this condition


No. 14.
The kitchen in which the pictere was taken was found with the lamp burning at $10: 30 \mathrm{a} . \mathrm{m}$. The black square baok of the lamp is the only light or ventilation for one interior dark room. I third dark room is now occupied with clothing hanging up to dry. These three dark rooms are the only home of a family of six, the youngest heing ouly one year old. This is the cellar of a modern brick building two blocks from the City Hall.

Lies in the fact that little children of the district are becoming familiar with the ways, and fall an easy prey to the example of their neighbors. Employers of labor who wish to keep their places of business clean, hesitate or refuse to employ girls who most unfortunately have been reared in the west ends of these wards.

Open barrels and boxes are common receptacles for both garbage and ashes. Many of these have the bottoms knocked out, and serve simply to keep garbage collected in a pile, while liquids seep through, and create filthy spots. This garbage can scarcely be removed often, for in one yard four barrels and a box were found full, and the overflow was scattered on the ground. At this place a manure box from a stable in the back yard added to the general unsanitary surroundings. The garbage and manure piles along the alley between Market and East Water streets in the first and seventh wards were in condition to breed enough flies to scatter disease over the entire city.


No. 15.
A cellar bedroom. No window admits light, two adults and an infant are sleeping here, their heads are concealed by the open door. The pictures and statuary on the wall are never seen except by lamp light.


No. 16.
An alley scene between East Water and Market streets.


No. 16 a .
Horses, manure box, earth closet, a junk and rag pile, chickens and their ac cumu'ated filth all in the same yard in which is located a well from which all water is procured.

## Eighteenth Ward

Though the eighteenth ward includes all the territory between Lake Michigan and the Milwaukee river from Bray street to Keefe avenue, only a small portion of the southwest part of the ward has a housing problem. This section is known as the Polish district. The Polish district in the 18th ward is bounded by Brady street on the south, Warren avenue on the east, the river on the north, and North Water street on the west. The most congested block was selected for the survey. This is bounded by North Water street on the north, Sobrieski street on the west and Pulaski street from northwest to southeast. This triangular block contains 64 front houses and 59 rear houses. The location is high, and North Water street overlooks the river. All of the lots slope from the rear to the front having a fall of from three to five feet in some instances. In general there are from two to four houses on a lot. The houses are as a rule one and one and one-half story cottages, although there are a number of double two story frame houses, sometimes two on a lot, each house sheltering four families. Dark rooms are usually found in these large houses, which are built quite close to the lot line, leaving only a narrow passage-way between. A few of the houses are in a state of dilapidation which would do credit to the Italian district, but the majority are in a fair state of repair and appear to be well built. They are mostly frame a few having brick or stone foundations, but a majority of the foundations are of wood. The lots are cut up in such a way that it is almost impossible to find the joining lines. They vary in depth from 50 to nearly 300 feet. There is no alley. It is not uncommon to find a house on a lot owned by one occupant who pays ground rent of from $\$ 10.00$ to $\$ 24.00$ per year for that part of the lot upon which his house stands, the landlord, owner of the other house and the lot, generally living in the other house. If he is not on the premises he is in the neighborhood,--perhaps a grocer or saloon keeper. Rents are low as compared with the Italian district. The Polish landlord does not exploit his poor countrymen to the same extent that the Italian does his. In this block were found six basements and seven cellars. There were nearly as many more into which admittance was refused, or where the people were not at home. In the entire neighborhood there were 37 basements and 21 cellars. This does not include a number of houses whose first floors were on a level with the street, but which had dark rooms and other had features. Some of the basements are basements in front and cellars in the rear, while others, a few only, are not basements in the front, being on a level with the street, but are basements in the rear. There were nine gloomy and two dark rooms found in this block. In the entire neighborhood there were found ten dark rooms and twenty-five gloomy ones. This number would easily have been doubled had the entire house in each instance been investigated. Some of these gloomy rooms are really dark on dull days, it being impossible to see anything without a light. The largest number of persons sleeping in one room was eight. The yards are for the most part clean. Although there are a few dirty ones, there were none like those found in the Italian district. Receptacles are provided for ashes and garbage in most instances, although few come within the limit of the law as to kind. Boxes and barrels take the place of the covered galvanized cans. Where there are no provisions made for garbage ducks and chickens are everywhere in evidence to take care of the refuse. Many of the drivers of city garbage and ash wagons live here, which may account for the general cleanliness, but the neat and thrifty habits of the Polish housewife of this district are largely entitled to credit. Opinions as to the frequency of the visits of the garbage and ash men vary from every other day to a week and one-half.
It was difficult to get any information as all were on the defensive, guarding their property. All were suspicious and disinclined to believe in the right of the investigator upon the premises.
Most siuks in this district were clean, though a few were dirty and needed repairs. Most of them were porcelain lined and in good condition. The waste pipe of one sink instead of being $11 / 2$ inch lead was an ordinary iron drain pipe,
not trapped, and made apparently direct connections with the house drain. The water closet was usually the bad feature, the worst falto of many being that they were placed in the dark corners of the cellars and had but little, if any, ventilation. A few had either broken or frozen pipes, but none were as filthy and altogether hopeless as those in the Italian district. The majority were hoppers, but there were a good many tank closets located within the house or a partments. The largest number of persons using one water closet was 24.
At A Pulaski street, the water closet in the middle house is used by 16 people. It is located in the cellar, and while it is not ventilated according to the requirements of law, it is ventilated from the fact that the cellar walls are of poor construction, and therefore there is plenty of air. The water closet in the front house is located on the second floor, off the hall; 13 persons of different families using this one. The rear middle house and rear cottage get their water from the front middle house. This is not in compliance with the law, which requires that water be supplied to any house which is located in a street or alley supplied with water. The rear cottage is not fit to live in. It is poorly constructed, is damp, and needs repairs to make it habitable. The front room of the cellar is only $61 / 4$ feet from floor to ceiling. The floor dimensions are 141-3 feet by $123-4$ feet and the window space is only 1-13 of the floor area. It is occupied by five persons, men and women. The cellar of the front middle house is occupied by two women. It is $143 / 4$ by $143 / 4$ by $61 / 4$ feet. The window space is only 1-15 of the floor area.

At 936 Pulaski street the rear cottage should be condemned because it is full of accumulated filth and rubbish, and in such poor repair that it cannot possibly keep out wind and weather. The man who lives there drinks and has had rheumatism for several months. The front house on the lot needs a few repairs $1 \%$ make it habitable. It is not exactly dangerous to life and limb but the front stairs and hall are filthy. The owner lives in a front room on the first floor. The main room of the basement in which the family sleeps is not sanitary. The cleanout of the house drain is in this room.

B Pulaski street. The middle rear house on this lot is in very bad condition, floors are cold and damp, no water is in the house and no sink.

C Pulaski street. The window space is only 1-47 of floor area. There is no water in the house and no toilet.

At the corner of Pulaski and Sobieski street the barn is within three feet of the house and the back yard has considerable manure scattered over it. The water closet in the basement is used by ten people.

D Pulaski street. The water closet in the cellar is used by 24 persons. Water closet in the hall is used by 19 persons. These are both below the requirements of the law that there shall be a separte closet in the compartment for each eight persons of the members of the same family.

E Pulaski street. Two water closets are used by 31 people. The light is poor and the only ventilation is into the cellar.
F Pulaski street. The house is sadly in need of repair. The basement is damp and cold. There is neither water closet nor water supply. The toilet is in the cellar of 1104 North Water street; the water also is carried from there.
The house at $G$ Pulaski street is a mere shell, having neither water nor toilet facilities. The water closet and water supply are in the cellar of the next house in Franklin street.

## Twelfth and Fourteenth Wards

From the northeast corner of the 12th ward, Greenfield avenue and the lake, southwest to Forest Home avenue on each side of every street or avenue is an almost continuous line of basements, miles and miles of gloomy, poorly lighted, damp, unventilated, overcrowded rooms, thousands upon thousands of homes fatal to infants, debilitating to children, suitable cultures for tuberculosis, the rickets, and typhoid fever. These houses are also largely chargeable with the quarrelsome, anarchistic temperament as well as the pale, sickly appearance of the average inhabitant of the neighborhood. The description of one such base-
ment is a description of all, so nearly are they alike in construction. They are nearly all less than 8 feet from floor to ceiling, nearly all less than 4 feet above the ground. They either have less than 1-10 of the floor area represented in window space, or the windows are obstructed by other houses. They are mostly damp and if old are filthy and in ill repair, and invariably poorly ventilated. The 12th and 14 th wards are more than any others the region of the modern cave dwellers. The basements are occupied from choice and long fixed habit, as well as, in some cases, to reduce the cost of living. In many cases well-to-do owners of property are found living in the basement when the first floor rooms are vacant. The only excuse for such living is ignorance. They prefer to live in the basement in the summer because it is cooler and in the winter because it is warmer. In fact the basement has a musty, sour, human-smell that they like, and it is dark enough without pulling curtains and closing the blinds as would be necessary if they were on the upper floor.
The 12th ward is bounded on the north by Greenfield Avenue, on the east by the lake, on the south by Lincoln Avenue and Kinnickinnic River, on the west by Beecher and Grant Streets. The entire ward is in need of strict supervision. Along Barclay, Clinton, Reed, Hanover and Orchards Streets, unsanitary old cottages, rear apartments, and saloons are being made into cheap lotging houses. Overcrowding, and night and day shifts are common.

At A Orchard street there is a lodging house of only two rooms, which gives shelter to a family and a large number of lodgers. At the time of inspection a man and wife were in the kitchen, while 8 Greeks slept in one other room. The man admitted that the rooms were filled again at night. In this section bands of petty thieving are organized, and girls are unsafe in the streets, unless under police protection. The part of this ward most carefully inspected was the block including Grove and Garden Streets from Grant Street south to the city limits. In Grove Street 57 apartments were analyzed, 33 of which were basements. In Garden Street 98 apartments were analyzed, 57 of which were basements. Out of 165 apartments in all, 90 were basements. Of the 33 bisements in Garden Street only six were 8 feet from floor to ceiling and of these six only one complied with the law in every respect. They were either less than 4 feet above the surface, or had several families in each house using the same unventilated closet, or had an earth closet in the yard, or no water supply, or very poor light, were overcrowded, or had some other defect which milde them legally unfit for occupation.

## Examples.

A. Garden strect. Ceiling only $31 / 2$ feet above the ground, one cellar room 13 by 8 feet occupied as a sleeping room for 4 adults, the only ventilation being one window 2 feet by 1 foot opening on a north court. There is just enough room for two. The sun never shines in the room. The 5 youngest of the 12 children in the family are girls. They are thin, pale, and sickly looking. The boys look better because they spend much of their time in the street.
B. Garden street. Two families including 15 persons use the same cellar closet, which is poorly lighted and ventilated. A lamp was found burning in the living room at $9: 30$ in the morning because neighboring houses obstructed the light to the windows.
C. Garden street. The stairway leading from basement rooms to those of the first story is so narrow that a person can hardly make the transit. A wedding was recently held in this house and the bride not wishing to spoil her wedding dress went out the front door of the basement and came in the rear door of the first story to avoid this stairway.
D. Garden street. The basement is 6 feet from floor to ceiling. The stairway is too narrow for the occupant, who seldom passes from the basement to the upper rooms. If she does, she must leave the front door of the basement and go in the rear door of the upper apartments.
E. Garden street. Well water only is provided for the family use. The owner has been ordered by the city health department to provide city water.


No. 17.


No. 18.

Iforefuses to do so, and three fimilies still use the well water in this densely crowded district.
F. Garden street. Four families, comprising 24 persons, use one cellar closet.
G. Garden street. Four families are paying rent to the landlord, but neither wsiter nor closets are found on the lot.
$H$. Garden street. A man, wife and four children sleep in one room 11 by 8 by 9 feet, while they have another room on the same floor empty. Ignorance is the only excuse. This gives 400 cu . ft. of air space for the adults but the children do not get a breath of pure air.

At. I Garden street the basement is occupied by two families. Only one closet is provided, and that is in the combined kitchen and bed room of one family in which a man, wife and three children sleep. The odors were so rank that the inspector could hardly endure them long enough to take measurements.
At $J$ Garden street the rear rooms of the basement are respectively 5 feet 7 inches, and 6 feet, from floor to ceiling. One of these rooms receives its light from two windows 2 feet by 2 feet, the other from a window 2 feet by 2 feet, which is obstructed by porches. No sunlight can reach the interior of this basement in which an old couple cook and sleep. The woman was washing when the place was inspected. The steam condensing on the walls made them wet and the floors were always so. No wonder this woman wheezes with the asthma.
K. Garden street. The back yard filthy with manure, and full of crowded chicken houses. An earth closet adds to the filth which seeps into the basement which is damp, dark, and unventilated. The walls are so wet that the musty, water-soaked paper is falling off.

At $L$ Garden street is a little cottage, consisting of basement and first story. It is over 40 years old, and the only wonder is that it stands. Thanks not to the owner but to the industrious little grandmother, who rents the place, two rooms of the first story are rendered habitable. She has scrubbed and patched the old floor to snowy whiteness, has painted what woodwork there is, and patched the plaster. She has not the means to repair the front rooms, so they remain unhabitable. She takes care of two infants and pays $\$!$ a month rent. The steps of the cottage are rickety and the porch leans. The basement beggars all description. It must be seen to be comprehended. There are 4 rooms, $71 / 2$ feet from floor to ceiling, $31 / 2$ feet above the ground. Ii the two sleeping rooms the window space is only $1-11$ of the floor area and that space is closely covered by shutters and dark curtains to keep out the light and cold. The ice is left around the window sash so that no air can get in until spring. Walls and floors are wet with water trickling. In one room a piece of wood was found burning in a pan to dry out the damp and musty atmosphere. The tenants have lived here. for seven years. The poor mother is twisted out of shape with rheumatism, and her stiff and knotted fingers render it impossible for her to work longer. The little children play alsout the floor in December, with bare feet. The father spends all his earnillgs at the saloon. The closet for all is located in the kitchen. It is enclosed, and has no ventilation except that into the kitchen.

At A Grove, the mother is sick, worn out with excessive child bearing and poor care. Three children are just recovering from scarlet fever, two are well but frail looking, while six children died in infancy. The filthy back yard accommodates a large number of chickens. The basement floors are worn and damp. Two families, comprising 12 persons use the same filthy cellar closet.

At B Grove street, the basement is $61 / 2$ feet from floor to ceiling and $31 / 2$ feet above the ground. The window space is $1-33$ of the floor area, yet a woman and children are permitted to live there.

At C Grove street 11 persons from two families use the same unsanitary hopper closet in the cellar. Potatoes are stored in a bed room. The basement roome are only $61 / 2$ feet from floor to ceiling.

At D Grove street eleven people use the closet located in the basement bed room. The mother here has been sick for eleven years. All the rooms are damp and gloomy.

At E Grove street, the basement is $61 / 2$ feet from floor to celling and $31 / 2$ feet above the ground. Two families use one closet and one filthy wooden sink. One room has no light.

At $F$ Grove street two families embracing 16 persons use one closet in a poorly lighted and ventilated basement.

At G Grove street, 14 members of two families use one poorly lighted and poorly ventilated cellar closet. The basement is only $7 \frac{1}{2}$ feet from floor to ceiling. Garbage is simply thrown out for chickens to consume what they wish, the remainder to decay. The inhabitants of the 12 th ward are anxious to have something done. While inspection was being made in Garden street a property owner called attention to a closet belonging to his neighbor, saying: "I have water closets in each flat; but why must I, when right under my window that man on Rogers street has a filthy earth closet that stinks. like If_l?" The earth closet was inspected and found to be used by three families or 11 persons. As there are no alleys between Garden street and Grove street and First avenue in the part of the 12th ward inspected, the removal of garbage, ashes, and other refuse is rendered most difficult. Such refuse is therefore thrown in the back yard to be consumed by checkens, ducks, and geese. The presence of these scavengers partly accounts for the absence of garbage cans in this district. Where a receptacle is provided it is an open box or barrel to which tenants seldom care to resort, preferring to throw refuse from the kitchen door.

The 14th ward includes the densely populated Polish residence district lying between Forest Home avenue and Maple street on the west and north, First avenue on the east, and the city limits on the south. The greater number of houses were originally planned for two families with occasionally one for three or four families. During the limited survey, only one was inspected which was originally planned to contain 6 families. There are two types of tenements-one the flat housing one family on each floor, the other dividing the house perpendicularly, giving each family a part of the basement for kitchen and dining purposes, and a part of the first floor for living and bed rooms. Houses in this ward are newer than those of wards more centrally located and have not the accumulated disease germs of many generations. Homes built for two families are often sublet until four families occupy them. Bed rooms with sufficient air space to allow 400 cu . ft. to two adults are mostly occupied by two beds containing four persons and a cot for an infant between the beds. To make the matter worse Polish people sleep between feather beds and do not admit any more fresh air than can possibly be avoided. If a well is within reach, they prefer well water to city water. Nearly all families keep a few chickens and ducks, and occasionally geese and a goat or two. Dogs are almost indispensible. In the limited survey of the 12 th and 14th wards only two bath tubs were discovered. The woman in whose house they were objected strenuously to their presence, saying she could put the slace to better use. The houses in most cases are painted and kept in fair repair because the landlord is there himself and simply sub-letting other rooms to pay off the mortgage. Such owners are ignorant of the laws of health and of the laws of society intended to preserve health. They feel that vo one has a right to interfere with their private affairs. Old dwellings are now being drawn into back yards and remodeled into rear tenements in defiance of law. Others are being constructed to occupy all the lot space. I'he time for action is here. If the low is not enforced this section will become as crowded as the central wards. Now the redeeming feature is that the houses are mostly cottages and give some space at least for the circulation of air on the outside. The houses that need most attention are those that were built to be rented and are therefore allowed to go without repair or the necessary provisions for preserving health. The parts of the ward most carefully inspected were 42 apartments, of which 22 were basements,
in Dighth avenue between Russell and Rogers streets, six apartments in Seventh avenue and seven in First avenue. Only one of these complies with the law. Some of the worse deficiencies were found at the following places:

Three houses in Eighth avenue, A, B, and C, have only a filthy old cistern, with dead rats and mud in the bottom, from which to receive water supply, so the tenants have sunk three barrels in the back yard into which surface water runs. This water is used for drinking and cooking purposes by all tenants in the three houses. Inasmuch as these houses are located below the level of the street, and below the railroad and vinegar factory. and near an open surface drain and earth closet, the water in the barrels must be contaminated and liable to produce disease. Ignorance cannot excuse this unsanitary condition of water supply for the property is said to be owned by a physician.

At $D$ Eighth avenue a family of six live in three basement rooms, one of which has an earth floor. This room is used as a bed-room and a washingroom for a mother and four children. The mother makes the greater part of the living by taking in washing. The closet opens directly into the kitchen, which has no other ventilation.

At W Fighth avenue, a grandmother nearly 100 years old is confined to her bed in a basement room 10 by $71 / 2$ by $71 / 2$ feet. Three little children at this place were very frail.
At $F$ Fighth avenue in the rear basement cottage three children were very sick with measles. The basement is six feet from floor to ceiling, $21 / 2$ feet above ground. The street sewer is above the level of the sink drain, so a bucket is kept under the sink to catch the drippings. The sink with this make-shift drain is alone sufficient to cause illness. One dark room is lighted only by windows into other rooms. In the front basement of the same lot the mother of the family was suffering from combined asthma and consumption and the father had died of dropsy.

At A First avenue is an old rookery covering all the lot except a lot line court eight feet wide, necessary to permit people to move in and out of the rear apartments. The only redeeming feature lies in the fact that the surrounding houses are not high and hence the upper apartments receive light and air. The building is part brick and part frame, having been built in instalments. It is falling apart and the wind whistles through the openings. Stairways on the outside are rickety and dangerous, and on the inside are too narrow to be safe. Treads are worn back, and stairs are filthy with the dirt of many years. In one cellar apartment a very frail girl appears to have tuberculosis. A high board fence so obstructs the light to her window, that the sun never penetrates. In another apartment, so dark one could hardly see in write, five small children were seen in the filthy, cold rooms. Four were girls, and the other a boy with kidney disease, hardly able to walk. They a: looked like frail plants in the darkness. The plaster was falling off in patches. The open chute in the hall, into which tenants generally throw garbage and slops, admitted foul odor enough to keep every one sick. The entire apartment was in the same filthy and dilapidated condition. A man has been sick there for 8 years. Even in the gables, back rooms were said to be occupied by a group of men. They were not home at the time of inspection. The rickety old stairs and roof of this part of the rambling old place are strewn with feathers and garbage, which have been thrown out with no regard to the preservation of health. A dovecote also perches on the corner of the stair and porch, and provides its share of filth and vermin. All tenants resort to five dark, unventilated closets in the basement. Near these closets is a small open space to which the children from all the cold, filthy rooms above resort for play. No better school for vice could be imagined. The owners of this property live on the premises in more comfortable quarters.


No. 19.
A First avenue.


No. 20.
A crowded tenement district in Hannver street. All the basements of these and neighboring houses are crowded with Slavonians. Dark, unventilated rooms, filthy closets, damऐ floors and walls are common.


No. 21.
Rear of a brick tenement, B and C First avenue. Outer walls are cracked, roof sags in the middle, the porch and stairs in front are rickety. Black spots in view show doolways to the cellaf apartments of two families having little
chiddren.

## Fifth Ward.

The fifth ward is bounded by Milwaukee and Menominee rivers on the north and east, on the south by Greenfield avenue and on the west by First avenue. It is rapidly becoming a factory district. A few residences in good repair are occupied by their owners, but the parts of the wards not so occupied are crowded with old dwellings and tenements. As the owners expect to replace them soon by factories, or sell the land, the old tenements are in bad repair. Rickety old barns crowd the lots and dispute place with rear tenements. The worst districts are South Water and Barclay streets and all north of South Pierce street to the North Menominee river. Many of these old tenements have unsanitary, deep, dark basements, as well as leaking roofs and filthy walls. Even in this ward, one of the oldest in Milwaukee, houses without water in the apartments, and with closets in the yard, are to be seen. Limited time forbade careful inspection of more than one house.

At $B$ and $C$ First avenue is a two-story brick tenement, with cellar rooms now occupied by two familes. The brick walls are cracked, allowing the entire building to sag in the middle. The walls have settled so that the worn old basement floor bows up in the middle, and, when is stepped upon, acts like a spring board. The water from the soggy ground penetrates the walls keepirig the floor wet all the time. Walls are mouldy and wet in patches, to within two feet of the ceiling, which is only 6 feet 4 inches above the floor. The ceiling of the south cellar is only 2 feet 6 inches above the adjoining ground, and the windows on the south side 2 feet 3 inches by 2 feet 4 inches, being below the legal $1-10$ of the floor area. The rooms are filthy and gloomy. The kitchen of the south cellar has no window, but has a small opening into the adjoining bed-room, which has windows, and another into the dining-room. The sink in this dark kitchen is rotting and filthy. This cellar is inhabited by a Polish family of three with two boarders. The north basement is unfit for habitation, but a Slavonian, his wife, three children, and three boarders stay there. The ceiling in the north basement is 6 feet 9 inches from the floor and 2 feet 9 inches above the street. The living room has no unobstructed window. The front room has two windows, but they open under a porch which obstructs the light. The bed-room has one window with the same obstruction. One rear room has a window 2 feet, 6 inches opening on a north court 3 feet wide. This is obstructed by a board fence at the end and therefore admits no light. The sink with its filthy and decaying frame is in a dark corner.
The two flats above have no light except that from the front and rear, the middle rooms having windows opening on the three foot court are so dark that print cannot be read in them without light. The walls are dirty and need repairs. In the entire house there are 6 totally dark rooms besides the 4 gloomy ones. The rear rooms have each only one window 2 feet by 6 inches in the transom over the door. In the entire house there were 40 tenants and only two old closets in the cellar to which they were assigned. These tenants are Greeks, Slavs, and Polish families.

## The Ghetto.

The Jewish Ghetto comprises the southwest corner of the sixth ward, the sontheast corner of the ninth ward, and the greater part of the second ward. The most unsanitary basements, dilapidated buildings and filthy back yards and courts in the Jewish district are found in the sixth ward in the block bounded on the east by Sixth street, on the north by Cherry, on the west by Seventh street, and on the south by Vliet street. The interior of the block, bounded on all sides by tenements, is crowded with rag shops, where disease germs of the city are collected.

The worst basement is at A Sixth street. There is only one feature in which this tenement complies with the law. It is not overcrowded. It is only 7 feet, 6 inches from floor to ceiling. The front rooms are less than 4 feet above the
surface. There are two dark rooms, and one light room has lost two window panes, their places being filled by boards around which the cold wind whistles. Rats scamper around the filthy old sink, the plumbing of which is out of repair. The floor of the kitchen is always wet, either from the leaking sink or from the water which lies under the foundation. An old cot, with uncovered mattress and filthy comforter, devoid of the attribute implied by the name, indicates that a man sleeps there when other living creatures permit. The closet used by two families is located in a dark compartment, which opens upon a dark room, which in its turn opens on another room rendered gloomy by the walk directly above its window. The situation of the closet compels all foul gases to penetrate the entire basement before finding its way to outer air. Three calls were made while the closet remained frozen. At each visit


No. 22.
A living room. A 6th strent. The lloors are thoroughly water soaked, worn and rotten. Rat holes plainly show why bread loaves are suspended from the
ouly one little girl, assumed to be 5 years of age, was at home. The fire in the front room burned low; rye bread and beer were provided on the table. The child's sad, pinched face, and apparent unconcern at the presence of a stranger showed plainly that habitual neglect had hardened her. As the rear dark rooms were so filthy and cold it is probable that they are not used, but that both families live and sleep in two front rooms and the kitchen. The paper on the walls was so damp and filthy that it was easily pealed off, and probably disease germs enough to infect all Milwaukee were breeding there, from whence the tenants were carrying them out for distribution every day. This basement can never be made fit for human habitation. The rooms which have windows are in a state of semi-darkness because on the south the distance is only 4 feet, 11 inches to the next house, and the stairway covers this passage, while on the north the space to the adjoining dilapidated, unoccupied building is only 4 feet, 4 inches. Adjoining the basement described is another occupied by a group of five Slavonians. In this basement the ceiling is less. than 8 feet from the floor and the front rooms are less than 4 feet above the
adjoining sidewalk. Walls and ceiling are wet, the paper mouldy and wearing off in patches, no room has as much as $1-10$ of its floor space represented by windows. The floors are worn out, sinking in places, and always wet from the water which stands under them.
The space on this block from this basement to 603 Cherry street is not inhabited because the city has condemned it.
At A Cherry street the basement is not fit to be inhabited, and the upper rooms are in serious need of attention. A Jewish cobbler, his wife, and five children occupy four rooms and keep shop in the adjoining front room. In the latter room the plaster is loosening in patches, threatening to fall on the heads of the tenants. Neither of the bed rooms is large enough to permit 400


No. 23
1: Sixth street, a windowless dark room of a basement inhabited by a group of Slavs. A lamr flame testifies to its constant use for the flash light was taken about $3 \mathrm{p} . \mathrm{m}$. The men while out of employment collect wood from the railway tracks. Bottles under the bed, one man explained, were to revive their spirits when neither wood nor coal were to be found.
cu. ft . of air space to its adults or 200 to the children. The sink is the old style wooden kind with frame-work decaying, and dark with grease and dirt. The old cobbler is now unable to work on account of rheumatism. The landlord demands $\$ 12.00$ a month rent and says if the tenants want whitewashing, piastering, painting, or other repairs they must do it themselves in addition to the rent. An old closet ventilates into the kitchen, and the seat is in need of repair. The sink is decaying and the walls and ceilings of every room show wet patches from melting snow.
The next house, B Cherry street, is only three feet from its neighbor. The middle rooms of both houses are so dark as to require lamp light in day-time to do any work. The poor widow who lives here uses her front rooms, which get a little light from the street and the rear room, which secures light from the filthy back yard, as sorting and storage rooms for second hand clothing. At this work she supports a family of five children and, with heroic fortitude and ambition common to the Jews, keeps the oldest girl in High School.

At C Cherry street the basement front rooms are only 2 feet 4 inches above the surface of the street, while the rear part of the house has light from the south and west. It receives no light from the east because it is built close to the next house. The bed-room has no window whatever, but opens on a room which has a west window. Two men sleep there. The water closets have been placed under this house in little more than a hole in the ground. The mud from the excavation is thrown against the wooden wall. The five closets have no light or ventilation, and are used by at least seventeen men, nine of whom are in this building and eight from the next building owned by the same landlord. A picture of one of the five closets is here appended. In the flat above this basement two families use one closet.


No. 24.
C Cherry street, one of five hopper closets in a hole in the ground under a three-story tenement.

The basement at D Cherry street has three rooms in total darkness. One of these rooms in which two men sleep is 7 feet, 6 inches by 7 feet 6 inches by 8 feet 4 inches. It has no ventilation except the door opening into the kitchen. The walls are filthy, and the odors of bed and working clothes were strong enough to drive the inspector from the rooms, and only with renewed effort were the measurements taken. On a little shelf suspended by wire, a loaf of rye bread was kept safe from the rats and roaches. In the interior room, 3 feet 9 inches by 7 feet by 8 feet 4 inches, intended for a clothes closet, one man sleeps with no ventilation except that the door opens on another room in which four men sleep. The third dark room once had a window 4 feet by 1 foot wide but it is now three-quarters covered by old clothing, baskets, and otler trash on the outside. This window is frozen shut, so there is no ventilation for the two men who sleep there except when they open the door into the next bed room which contains the four men. The ceilings of both rooms are level with the street. Walls are damp, mouldy, and entirely unfit for habitation. There is no closet in this basement, the men all going to the filthy group of closets under C. These men are Russians, six being unemployed and two working. As though those who do not work could not eat,


## No. 25.

1) Cherry street, a windowless, dark hed-room for two adults, 7 feet 6 inches high by 7 feet 6 inches wide, and $\&$ feet 4 inches long. The burning lamp reveals attempt the filthy walls with pictures. The bread box hangs by wire to keep food fiom the rats.
each man had his bread suspended over his own bed. One man who was unemployed appeared bewildered and almost insane. In a room on the floor aiove this basement, a little Greek girl of 18 years keeps house for six Greek men. She may possibly be the wife of one of them. The other room is totally dark and a light was kept burning after 4 P . M. The old closet had no light or ventilation except through the living room. On the floor above this a woman kecps transients, the men professing to be actors. They were in bed at noon. In order to make room for the lodgers, the woman aud four children, all over 12, sleep in a single room, 9 by 10 by 8 feet, giving each person 144 cu . ft . of air space instead of 400 as the law requires.


No. 26.
D Cherry street. A clothes closet used as a sleeping room for a man. The narwow floor space is entirely covered by a filthy cot and small iron chest. The coat hanging on the north wall and the skirt on the south reveal that the closet through the don than the door. There is no window and no ventilation except persons.

## Castle Garden.

The largest unsanitary, old building on the north side is Castle Garden, located in Seventh street. It is a frame building having 150 feet of street frontage and is two stories above the basement, and in addition three attic gable rooms. The elevation of the street has caused the front rooms of the basement to become dark cellars. Between the elevated street and the front cellar room there is a cut 8 feet deep, 150 feet long and 4 feet 8 inches wide. This is the only source of light and air for the front cellar rooms. Since this is closed at both ends, and obstructed by walls and porches, the cellar apartments are afforded very little light. The bottom of this court, being the receptacle for all kinds of waste matter, is a source of polluted atmosphere instead of pure air. In one room of the south basement, having no source of light and air excent this court, a man, wife and four babies are now living. They rent from a family occupying the other basement rooms. No sun light ever reaches them. The rooms are always damp. In addition, the family from whom they rent wash in the adjoining rooms, and the steam condenses


No. 27.
A section of Castle garden. The stairway is rickety and unsafe. The braces intended to secure it are loose and leaning. The white snow at the right shows the alley level and that the lower rooms are under ground on three sides. The yard at the rear is literally covered with rags, junk and peddlers' wagons, a closet and rag shop.


No. 28.
A Fourth street. Filthy closet under porch at the side of the front door of a lodging house. This clnset is used by three families and numerous lodgers. There is no light or ventilation and the door is so small that one must stoop to enter the filthy compartment.
on the cold wall. As the closet to which they are assigned is frozen, they must throw excrement in the back yard.

In the series of five basements which become cellars at the front, three families and two gangs of Russians, recent immigrants, and one group of Slavonians live. These basements are filthy from every cause. The accumulated filth of the tenants who have inhabited them for years clings to the walls and woodwork; roaches, fleas and other vermin fill the cracks about the broken woodwork and torn filthy paper and plaster; and rats scamper through holes in the floor, and about closets and halls. Floors are so worn that in some cases they are patched, and in others they sink when trodden upon. Tenants, discouraged by the neglect of the landlord, feel no incentive to be clean in their habits, while those who do try are imposed upon by the fact that other tenants throw garbage and excrement under stairs and in the rear


No. 29.
A Fourth street. A sower pipe in the clothes closet of a basement rooming house. The closet with mud and water covering the floor opens on a bedroom, the floor of which is sometimes covered with water. As the ceiling of the room is level with the street, water pours in every time it rains.
yard. The male tenants of the basement are assigned to filthy, frozen closets in the hall, while women and children are assigned to the equally unsanitary closets under the stairs in the halls. Families from the first, second, and third stories are assigned to five closets located under the stairways leading to the second story. On the day of inspection two of these closets were frozen and frozen urine lay on the hall floors before the front doors of all apartments. These closets are without light or ventilation, and in halls for public use. The enclosures cannot be occupied without leaving the door open. Girls, men, and women are assigned to closets according to the flats they occupy. In one case 24 persons were using one such closet. Nothing more conducive to immoral relations and disease could have been planned. The apartments on the first, second, and third floors are in no better condition than the basement, except that being higher up they have more light and air. Floors are worn and patched. Plaster is falling off and paper hangs in patches. Roofs are old, plumbing leaking from one floor to another, doors hanging on single
hivges, sinks decaying and patched with old grease, infested with roaches and fleas. Castle Garden on the day of inspection was tenanted by 77 persons, 25 of whom were children under 12 years of age. There were Russians, Greeks, Slavonians, Poles, Jews, Germans, and Irish, mostly recent immigrants. They were ignorant of the fact that they could secure better quarters at lower rents in other parts of the city. The basement and second story tenants pay $\$ 7.00$, those on the first story $\$ 8.00$, and in the gables from $\$ 3$ to $\$ 5$. When tenants ask for repairs they are told they may move if not satisfied. As though the crowded conditions and promiscuous use of closets were not demoralizing enough to the children compelled to live at Castle Garden an unmarried Irish couple were found together in the gable apartments, and the children of the lower apartments detailed the story of their debauches while the picture of the interior was being taken.


No. 30.
"The Municipal Stables" with tenements in the back ground.
At C Sixth street a Slavonian, having a wife and four children rents a cottage with four first floor rooms, two basement rooms, and a cellar. The closet is in the wall of the cellar. It has no light or ventilation. For quarters which could not be sanitary for one family, the tenant pays $\$ 15.00$ a month rent and sub-lets the four first floor rooms to two families, each of which pays $\$ 3.75$. The cellar, used as dining room and kitchen, is 6 feet 11 inches from floor to ceiling and at the back only 2 feet 7 inches above ground. Into this cellar orens the closet used by the three families and their boarders. The two basement rooms are fitted with beds for the family and for a variable number of lodgers. Apparently four in addition to the family were sleeping in these two rooms at the time of inspection. The cellar used as a kitchen is deep, dark, and unventilated. Opening into it is another small cellar containing rats, vegetables and mouldy furniture. In this basement apartment scarcely a section of the sanitation law remains unviolated.

The yards of this district are as filthy as those in the Italian ward. Very few receptacles for garbage and ashes are provided. When one is provided it is usually an open box or barrel easily turned over by the dogs in the district. Garbage and all kinds of waste material are thrown where the moment suggests, - in the back yards in the alley, under the rear stairs or porch, or in a narrow court between the houses.
Many Jews of the Ghetto are peddlers and must have horses to draw their carts filled with rags. A. horse may be found in almost any yard, or in any old shed which is wide and long enough to contain a horse. So large a number of such shed-stables are found in the interior of the block bounded on the east by Sixth street, on the west by Seventh, and on the north by Cherry street, that the block has been termed the "Municipal Stables." About these stables, and in the passage-way to them, rags and junk are stored, and all over and around this germ-collecting rubbish little children play.
Thirty-seven apartments, fifteen of which were basements, were carefully inspected in this ward.

## Second Ward.

The second ward is small and compact, and is very much like the sixth and ninth on the north, and the fourth on the south, in the nationalities of its population, and in the nature of its tenement problem. The second ward is bounded on the north by Vliet street, on the east by the river on the south by Cedar, and on the west by Thirteenth street. On the northeast it embraces a part of the Ghetto where there exists great need for general sanitation. At the east end its crowded tenements, lodging, and boarding houses are similar to those


No. 31.
The cottage at the left of the picture contains a man, wife, baby and three lodgers. They, with the tenants of three other houses frequent the closet at the right. Both the alley at the rear and the street in front have been elevated. When it rains the vacant space is an interior lake, wetting the floors.

$+=-2=-$

No. 32.
A beauty spot unseen by garbage collectors. A convenient culture for disease nerms.
of the fourth ward, crowded with all foreign nationalities,-German, Russians, Slavonians, Austrians, Roumanians, Fins, Maygars, Bulgarians, Hungarians, as well as Negroes. Basement apartments which once received light have been made dark by the erection of additional buildings too near to the windows. The blocks in the second ward selected for inspection were those on both sides of State street between 5th and 8th streets. These were investigated because they presented a problem of darkness caused by street elevation more serious tlean in any other part of the city. State street has been so elevated that basements have been transformed into dark cellars and first story apartments have become basements with gloomy rooms abutting on the street. Ceilings are in many cases level with the street and in others one or two feet above the street. More dark and gloomy rooms were found in these three blocks than in all the other wards together. In this ward 63 apartments were inspected 35 of which


No. 83.
The windows at the left of the picture are all that is scen of three successive cellars occupied by Bulgarians and Austrians. In one deep, dark and damp apartment a man is dying of tuberculosis.
were basements. Among these, 19 absolutely dark, and 14 decidedly gloomy, rooms were found, it being impossible to distinguish even large print in any, of them. In as many other rooms there was dim light. Such rooms are suitable culture for tuberculosis and rheumatism. Courts between these houses are too narrow to admit light. Between A and B Cedar street the court is 50 feet long and only $13 / 4$ feet wide. All rooms whose windows open on this court are gloomy. This is given only as a type of the majority. All the lots are 25 feet wide and 160 feet deep. While the front apartments are outwardly respectable many shabby little frame cottages at the rear of the lots dispute space with stables and sheds, At the rear of B Cedar street there is a little cottage with wooden foundation which appears ready to fall to pieces. There is no water in the house. At the time of inspection, a white man was spending his time with three unemployed negro women, one of these women said she was the wife of the negro porter in a barber shop in Racine. She was about to become a chamber maid in a hotel. A German family with eight children living in the front house must go to the same closet, in the basement of a saloon,
to which the negro women in the rear cottage, and the men who frequent the saloon also go. This closet is dirty, dark, and poorly ventilated.

At A Cedar street is the home of a Bohemian teamster. The window is 81-3 feet below the surface. The court on the east of the lots is $13 / 4$ feet wide and admits no light. All the rooms are very dark or gloomy. The closet is not flushed except by pouring water from a pail; the sink is in a most unsanitary condition; the floor is uneven and-it is said-always wet when it rains; the house is filthy. The poor mother is sick-perhaps feeble minded. Neighbors say someone is sick here all the time. The husband beats his poor wife cruelly.

At A State street, the home of a Slavic family of seven is $71 / 2$ feet below the street level. The building is settling to the center, the floor slopes decidedly making furniture tilt. There is one gloomy room and two dark rooms. The gloomy room has a window that opens directly against the brick wall. The water closet opens into this room, and is not ventilated except through it. It is of the hopper variety, with seat broken. The sink has the usual worn and broken frame, coated with grease and dirt. Mouldy and musty odors are quite overpowering. Garbage boxes are overflowing, and the yard between the houses is strewn with waste materials thrown out by families of both houses.

B State street has three rooms so dark that it was impossible to write notes in them without a lamp. All have windows opening into narrow courts.

At C State street, are two rooms entirely below the street and only two feet above the lot. The only window opens on a court 8 feet deep, $131 / 2$ feet long and $31 / 4$ feet wide next to the street. Needless to say the rooms are dark and damp. The walls on the first floor are made damp by the laundry. The rent was formerly $\$ 7.00$ but was recently raised by a real estate agent to $\$ 9.00$.

At D State street three families of twelve persons use an unlighted and unventilated hopper closet under the sidewalk. This apartment is entirely above the lot, but six feet below the sidewalk.

At A Seventh street is a privy vault in the cellar used by six families.
At E State street are two basement rooms with a story of extraordinary misfortune. In these basement rooms plaster is falling from the walls in patches, and a damp. and mouldy odor prevails. Only near the window it is light enough to read. The father came from Germany eight years ago. He is now in the insane hospital at Wauwatosa and a daughter is now in the Home for Feeble Minded at Chippewa Falls. The poor wife scrubbed to support her family of five children until at this work she injured her knee cap, and she is now in the county hospital. Because of the mother's temporary inability to support the family three children are at present in the Home for Dependent Children at Wauwatosa.

## Fourth Ward.

The fourth ward is bounded on the north by Cedar street, on the east by Milwaukee river, on the south by the North Menominee canal and on the west by twelfth and Sheridan Lane. With the exception of the business houses along Grand avenue and that part of the ward east of Fourth street and the good residence district about the public library, the fourth ward is occupied by lodging houses, rooming houses, and boarding houses. In the northern part of the ward the keepers of these houses are commonly German or IrishAnuericans. Occasionally a Jewish landlord is found. The greater number of licuses south of Clybourn and east of Sixth street are owned and occupied by French, Austrian, Russian, Fins, Slavonians, Bulgarians, Bohemians, Roumanians, Syrians, Magyars, Armenians, Negroes, Greeks and Poles. Many groups of men are found keeping house for themselves in the rambling old shells of cottages, or in basements. The most dilapidated old houses on the southern side of the ward were found along Hinman street, Hill Place, Hibernian, and St. Paul avenues. A few of these old cottages have neither water nor closets in the apartments, houses having a common owner having a common hydrant and common closet in the yard. The only closet accessible to the sixteen tenants of - and —Hill Place, is also accessible to many men who pass the alley, and is indescribably filthy and frozen.

The old cottage at A Hill Place is no longer fit for human habitation, hav$i^{\prime} 1 g$ been racked by being moved to its present location. The floors are uneven, and the paper is tacked on unplastered walls.

B Hill Place might be repaired and made fit for habitation, but at present dees not comply with the building law in any respect except that the space west of it is large enough to admit light to the west window. It is inhabited by a Hungarian family of five and five boarders. The walls are filhy, and the old paper and plaster are broken and falling off in patches. The floor is worn and unsteady. This house is one of eight of the same pattern owned by the same landlord.

At C Hill Place is an old cottage used as a lodging-house for thirteen Bulgarians of the non-family type. It does not comply with the law in any respect except that light reaches each room. The floors are worn and patched, and filth of many generations has accumulated on the walls and wood-work. Six of the thirteen tenants were moving away on the day of inspection because the rooms were no longer fit to live in. The remaining seven were looking for a better place. Garbage and ashes were thrown over the yard, no receptacle being provided.

At A Lighth street a series of four cellars, the first inhabited by eight Greeks, the second by eleven Poles, the third by an Austrian, his wife, and seven boarders, the fourth by an Austrian, his wife, and four, boarders. Though these cellars are 8 feet from floor to ceiling the ceilings are level with the rear lot line court. The garbage is thrown in this court. When questioned the tenants explained that the landlord owned metallic garbage cans, but put them away for safe keeping and told them to throw the garbage in the yard. The cellars are always damp because the galvanized iron drainage pipes, once made to conduct water from the roof to the sewer, have lost the lower sections and now convey water into the cellar. Sinks in the kitchen are of the old closed type decaying, sagging, and alive with roaches. The plumbing in one of them is out of repair. Floors are worn and wet, and ceilings are black with smoke. In a middle cellar a man is dying with consumption. His physician has told him that ine can not get well there in the midst of dampness. The poor man complained to the inspector that the "house boss, he no fix nothing, house all dark, rotten, man die, no care," while the poor wife shed tears as she made bread for the lodgers and the two children clung to her. The water closets are in the rooms adjoining the street. These rooms are too deep and dark to be inhabited, but contained wood, coal, vegetables, and cast off clothing. The closets themselves are of the hopper variety with wood-work broken and decaved. The upper rooms are at present crowded beyond the limit of the law. The paper on the walls of rooms and stairways has been there so long as to be either filthy or worn off. The upper rooms could readily be put in lawful condition, but the cellar is too deep and damp to make it fit for habitation.

Adjoining the garbage-strewn rear court is an old stable constructed of strips of boards, iron, and tar roofing. Though the law forbids that horses be stabled within 20 feet of a dwelling, this stable, containing two horses, joins walls on the east with the house, the rear of which is occupied by the owner. On the other side the barn joins walls with a building, the front of which is a clothing store and the rear a tenement. The small house east of this stable is joined on the soouth by another containing a horse, a dog, and chickens.

On the north side of the ward, the blocks bounded on the east by Fifth street, on the west by Eighth street, on the north by Cedar street, on the south by Grand avenue were inspected. Eighty apartments, thirty of which were basements, were analyzed. Many of the apartments, not originally basements, have all the objectionable features, especially dark and gloomy rooms, and damp walls and floors, because of street elevation, and because other buildings have been erected directly against windows from which the rooms originally received licht and air. In these eighty apartments, twenty-eight dark rooms were found. Some of these had no windows, while the light which might have reached the interior through the windows that there were was obstructed by closely abutting buildings. In this part of the ward tenements occupying the entire lot


No. 34.
fiarbage and nuanure thrown from the kitchen doors and stable windows. Snow partly conceals the unsanitary conditions.


No. 35.
Stable containing two horses in contact with houses at both sides. A second shed at the right is leaning against the house. This shed contains one horse. The manure is piled high.
are found in many instances. Middle and rear tenements are numerous. The front part of the lot is usually occupied by a fairly respectable looking flat, while middle and rear houses are in the worst stages of dilapidation, tenants being compelled to use closets in the basements or front building or on adjoining lots. Water pipes, where there are any in such little frame shanties, are bursting and hopper closets are frozen.


No. 36.
Brown row, condemned by Milwaukee authorities, but long protected by court injunction. Night lodging 25 c .

As in the first and seventh wards it is again quite evident that prostitution is not confined to River street. Families with growing, impressionable children are found neighbors to groups of women with no visible means of support. Men were coming and going while some of the houses were being inspected. In this limited survey, with no design to discover such places, six disreputable houses and five questionable ones were inspected. At D Sixth street all possible objectionable features of a large flat were found. It is a brick building, having two stories, and also cellar apartments. On account of the settling of the building it was condemned six years ago. Some repairs were then made, but the settling has continued to grow worse. In one apartment, only 7 feet from flcor to ceiling, a group of eight Greeks keep house for themselves. As the ceiling of this cellar is below the street level and the window rooms open on narrow courts, four of the rooms are decidedly dark and gloomy. They are damp and filthy, and smell musty. The hall is perfectly dark. It has a window but no light.

In flat 5 a French woman hesitated to admit the inspector to what she called her rooming house. She had a little girl three years old, whom she pretended to have adopted.

The darkest den of all was flat 6 . Even the hall was lighted by gas during the day. The four rooms were all so gloomy that records could not be made
without gas being lighted. German, Irish, and Jewish girls were there entertaining their male companions who were going and coming in the presence of the inspector. The closets in all these flats are located in the public halls.
Flat 8 has the same sagging in the floor, and four gloomy rooms. Gas light is necessary all day. The woman of the house said the man with whom she was playing cards was a traveling man. There was apparently no family.

In flat 9 the hall is dark and four rooms are gloomy. The closet opens on the hall. This dark, damp, unsafe, disreputable old flat brings to its owner $\$ 196.00$ per month rental.

At A Wells street is an old house below the law in almost every respect even to a privy vault. It is said to have been condemned by the city authorities, but the tenant fears to move out because he is told by an attorney that if he does he will be compelled to pay two years' rent.

At $A$ Fifth street the house is unsafe for occupancy. The court between $A$ and $B$ is $381 / 2$ feet long and only $21 / 2$ feet wide. The houses have windows, but receive no light from this court. The rear porch is unsafe, the kitchen sink on the second floor has settled from the wall, leaving a crack which is filled with grease and dirt. Plumbing leaks at the trap. The ceiling of the cellar apartment is below the street level. The hopper closet in the cellar was found frozen and dirty. The cellar walls of wood are rotten and broken through in pla ces.

At C Fifth street, the tenants from the small cottages in the alley as well as inhabitants of B Fifth street frequent the same closet.

At D Fifth street, the second floor hall is dark, and the cellar sink is located there. The cellar apartment is only $73 / 4$ feet from floor to ceiling and that ceiling is entirely below the street. Ventilation and light are both very poor.

At B Seventh street is a cellar apartment, the ceiling of which is only one fcot above the street. Four families use the same closet in the yard. In this ward 87 apartments, 35 of which were basements, were investigated. Insurance companies have found that risks incurred upon basement dwellers are not profitable investments. For example, the family at B Wells street were refuced insurance because they were living in a basement.

TABLE i.-SHOWING NUMBER OF TENEMENTS OLASSIFIED ACCORDING TO THE . CONDI'ION OF S'r'REETS, ALLEYS, AND YARDS.

| . | Paved. |  |  | Unpaved. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Clean. | Unċlean. | Total. | Clean. | Unclean. | Total. |
| Streets. | 178 | 1 | 179 | 52 | 12 | $(4$ |
| Alleys . | 37 | 13 | 50 | 5 | 35 | 40 |
| Yards . |  |  | 5 |  |  | 199 |

TABLE Ia.-NUMBER OF ALLEYS CLASSIFIED AS TO WIDTH.


 WHICH OONSTRRUCTED, NUMBER OF STORLES AND APARTMEN'S.

| Materials. |  |  |  |  |  | Stori s. |  |  |  | Apartments. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Front. |  | Middle. |  | Rear. |  |  |  |  |  |  |  |  |  |  |  |
|  | $\begin{aligned} & \dot{\sim} \\ & \text { 总 } \end{aligned}$ |  |  |  |  | 1 | $1{ }^{\frac{1}{2}}$ | 2 | 3 | ¢ | 1 | 2 | 3 | + | + |
| 213 | 33 | 10 |  | 65 | 4 | 8 | 12 | 91 | 11 | 254 | 387 | 204 | 22 | 750 | 13 |

- Note 3.

IABLE III.-TENEMENTS CLASSIFIED ACCORDING TO THE GRADE OF THE LOT.


TABLE IV.-NUMBER OF TENEMENTS CLASSIFTED ACCORDING TO THE DRAINAGE OF THE LOT.

|  | Kind of drainage. | Number of lots. |
| :---: | :---: | :---: |
| Sewer |  | 235 |
| Surface |  | 31 |
| None |  | 2 |
| Total |  | 268 |

'TABLE V.-TENEMENTS CLASSIFIED ACCORDING TO LOCATION OF YARDS.

|  | Location of yards. | Number of tenements. |
| :---: | :---: | :---: |
| None |  | 2 |
| Middle | . . | 67 |
| Side |  | 27 |
| Front |  | 115 |
| Rear | ... | 149 |
| Total |  | 360 |

I'ABLE VI.-TENEMEN'S'S ULASSIFLED AUCURDING 'TU SIZE UF YARDS.

| Size of yard in square feet. | Number of tenements. | Size of yard in square feet. | Number of tenements. |
| :---: | :---: | :---: | :---: |
| Under 100 | 1 | 2,100 to $2,299 \ldots \ldots$ | 10 |
| 100 to 299. | 11 | 2,300 to $2,499 . . . .$. | 3 |
| 300 to 499. | 11 | 2,500 to $2,999 .$. | 7 |
| 500 to 699. | 12 | 3,000 to $3,499 .$. | 4 |
| 700 to 890 to $1,09$. | 17 | 3,500 to 3,999.. | 3 |
| 900 1,100 to $1,099 \ldots$ $1,299$. | 21 18 | 4,000 to $4,999 \ldots$ 5,000 to 7,499 | 3 |
| 1,300 to $1,499$. | 18 37 | 5,000 to $7,499 \ldots$ 7,500 to $9,999 .$. | 3 |
| 1,500 to $1,699$. | 24 | 10,000 and over | 3 |
| 1,700 to 1,900 to $2,899$. | 11 | To | 210 |
|  |  |  | 210 |

## TABLE VII.

| Animals and fowls. | Number of tenements. |
| :---: | :---: |
| Animals | 16 |
| Fowls . ........... | 80 |
| Both animals and fowls. | 13 |
| Total | 109 |

TABLE VIIa.--NUISANCES.


## TABLE VIII.

|  | Garbage cans. | Number of tenements. |
| :---: | :---: | :---: |
| SatisfactoryUnsatisfactory |  | f. 5 |
|  |  | 187 |
| Total |  | 252 |

## 'IABLE IX.-IENVIRONMEN'I' OF 'IENEMEN'IS.



TABLE X.-NEIGHBORHOODS CLASSIFIED AS TO NATIONALITY.

|  | Nationality. | Number. |
| :---: | :---: | :---: |
| German |  | 8 |
| Hungarian |  | 26 |
| Italian |  | 35 |
| Polish |  | 127 |
| Mixed |  | 19 |
| Total |  | 215 |

TABLE XI.-NUMBER OF TENEMENTS OLASSIFIED AS TO CONDITION OF HALLS AND S'TAIRS.

| Clean | Unclean. | In <br> repair. | Not in <br> repair. | Having <br> windows. | Having <br> transoms. | Having <br> skylights. | Having <br> nightl ghts |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 107 | 65 | 93 | 71 | 72 | 38 | 2 | 67 |

TABLE XII.--OWNERSHIP.

| Mortgage. |  |  |  |  |  |  | Rate of Interest. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Less than $\$ 500$. | $\begin{aligned} & \$ 500- \\ & \$ 999 . \end{aligned}$ | $\begin{aligned} & \$ 1,000- \\ & \$ 1,499 . \end{aligned}$ | $\begin{aligned} & \$ 1,500- \\ & \$ 2,000 \end{aligned}$ | $\begin{aligned} & \$ 2,000- \\ & \$ 2,499 . \end{aligned}$ | $\$ 2,500$ <br> \& over. | Total. | 4 | 5 | $51 / 2$ |
| 9 | 15 | 21 | 3 | 4 | 6 | 58 | 4 | 37 | 1 |

TABLE XIII.-SHOWING NUMBER OF TENEMENTS CLASSIFIED AS TO ASSESS-

| Water. |  |  |  |  |  |  | Paving. |  |  |  |  | SIdewalks. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \dot{8} \\ & \dot{\oplus} \\ & \dot{1} \\ & \dot{\circ} \\ & \hline \end{aligned}$ |  | $\begin{aligned} & \stackrel{8}{\circ} \\ & \stackrel{1}{1} \\ & \stackrel{0}{6} \\ & \stackrel{\oplus}{6} \end{aligned}$ | $\xrightarrow{9}$ | ¢ |  | 䅋 | - | ¢ |  | 守 |  | ¢81 | ¢ | 8 8 ¢ 1 10 0 | ¢ 0 0 0 0 0 ¢ |
| 31 | 39 | 8 | 3 | 6 | 2 | 2 | 3 | 3 | 7 |  | 1 | 4 | 1 |  | 1 | 8 |

TABLE XIV.-NATIONALITY OF TENANTS.

| American | 16 | Italian | 46 |
| :---: | :---: | :---: | :---: |
| Armenian | 2 | Jew ... | 22 |
| Austrian | 4 | Lithuanian | 2 |
| Bohemian | 3 | Negro | 8 |
| Bulgarian | 1 | Norwegian | 3 |
| Croatians | 2 | Polish ..... | 299 |
| Danish | 1 | Roumanian | 1 |
| English | 2 | Russian | 5 |
| Finn | 1 | Slav | 22 |
| French | 3 | Swede | 2 |
| German | 86 | Syrian | 7 |
| Greek | 8 | Not reported | 4 |
| Hungarian | 9 17 | Total | 576 |

TABLE XV.-RELIGION.

| Catholic | 455 |
| :---: | :---: |
| Protestant | 58 |
| Jewish ... | 18 |
| Not reported | 45 |
| Total | 576 |

TABLE XVI.-EMPLOYMENT OF HEAD OF FAMILY.


TABLE XVII．－EMPLOYMENT OF WIFE．

| Bindery workers | 2 | Ragshop employes | 3 |
| :---: | :---: | :---: | :---: |
| Bottle washers | 3 | Scrubwomen ．．．．．． | 11 |
| Cooks ．． | 2 | Seamstresses | 3 |
| Factory operatives | 4 | Storekeepers | 2 |
| Keeping boarders | ${ }^{16}$ | Washerwomen | 35 |
| Keeping roomers | 25 | Miscellaneous | $\begin{array}{r}35 \\ \hline\end{array}$ |
| Laborers | 3 |  |  |

TABLE XVIII．－EMPLOYMEN＇I OF CHILDREN．

| One child |  |
| :---: | :---: |
| ＇Iwo children |  |
| Three children | 15 |
| Four children | 8 |
| Five children | 3 |
| Total | 118 |

TABLE XIX．－HEALTH．

| Man． |  |  |  | Wife． |  |  |  | Children． |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Zo } \\ & \text { O} \\ & \hline 0 \end{aligned}$ | $\begin{aligned} & \underset{\sim}{\tilde{n}} \\ & \underset{\sim}{n} \end{aligned}$ | 茴 | $\begin{aligned} & \text { ञ̃ } \\ & \text { n } \end{aligned}$ | $\begin{aligned} & \text { O } \\ & \hline 0 \\ & \hline 0 \end{aligned}$ | $\stackrel{y}{7}$ |  | $\begin{aligned} & \text { ت̈ } \\ & \stackrel{0}{0} \end{aligned}$ | 1st． |  |  |  | 2nd． |  |  |  | 3rd． |  |  |  |
|  |  |  |  |  |  |  |  | $\begin{aligned} & \text { Z̈ } \\ & \text { O} \end{aligned}$ | $\begin{aligned} & \text { تี } \\ & \text { تn } \end{aligned}$ | $\begin{gathered} \text { Bo } \\ \text { م } \end{gathered}$ | $\begin{aligned} & \text { Fi } \\ & \stackrel{0}{0} \end{aligned}$ | $$ | H゙ |  | $\begin{aligned} & \text { ت゙ } \\ & \text { Ĥ } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { ర్ర } \\ & \text { ס } \end{aligned}$ |  | － | F |
| 498 | 23 | 23 | 544 | 461 | 36 | 22 | 519 | 384 | 17 | 8 | 409 | 286 | 15 | 1 | 302 | 208 | 10 | 2 | 220 |

Chilldren．


## TABLE XX.-SLEEPING ROOMS.

| Cubic feet per person. | Adults and mixed. | Children. |
| :---: | :---: | :---: |
| Less than $100 .$. | 3 | 1 |
| 100-199 | 122 | 21 |
| 200-299 | 227 | 23 |
| 300-399 | 141 | 31 |
| 400-499. | 75 | 10 |
| 500-599. | 122 | 7 |
| 600-699. | 80 | 11 |
| $700-799$ 800-899 | 56 43 | 5 |
| 900-999 .... | 43 35 | 4 |
| 1,000-1,099 | 21 | 2 |
| 1,100-1,199 | 13 | 2 |
| 1,200-1,299. | 17 | 8 |
| 1,300-1,399 .. | 7 | 2 |
| 1,400-1,499 .... | 8 | 1 |
| 1,500-1,599 .. | 8 | 4 |
| 1,600-1,699. | 2 | 2 |
| 1,700-1,799 . | 6 |  |
| 1,800-1,899 . | 2 | 1 |
| 1,900-1,999 | 6 | 1 |
| 2,000 and over | 4 | 1 |
| Total | 998 | 141 |

TABLE XXI.-TENEMENTS CLASSIFIED AS TO NUMBER OF WINDOWS ADMITTING SUNLIGH'T.

| One window | 23 | Nine windows | 12 |
| :---: | :---: | :---: | :---: |
| 'Iwo windows | 84 | Ten windows | 14 |
| Three windows | 85 | Eleven windows | 2 |
| Four windows | 89 | Twelve windows | 1 |
| Five windows | 99 | Thirteen windows | 1 |
| Six windows .. | 52 | No windows | 15 |
| Seven windows | 25 | Not specified | 56 |
| Eight windows | 23 |  |  |

TABLE XXII.-NUMBER OF ROOMS CLASSIFIED AS TO LIGHT.

| Good | 1,064 |
| :---: | :---: |
| Fair | 421 |
| Poor | 355 |
| None | 76 |
| Total | 1,916 |

TABLE XXIII.-NUMBER OF ROOMS CLASSIFIED AS TO VENTILATION.

| Goor Fair | 810 |
| :---: | :---: |
|  | 441 |
| Poor | 51.5 |
| Total | 1,766 |

TABLE XXIV.-DAMP APARTMENTS.


TABLE XXV.-HEIGHT OF BASEMENT.

| Feet Above Floor. |  |  |  |  |  | Feet Above Surface. |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \dot{10} \\ & \dot{0} \\ & \text { in } \end{aligned}$ | $$ | - | 10 0 0 0 0 |  |  | $\begin{aligned} & 101 \\ & 0 \\ & 0 \end{aligned}$ | - | - | ir | 18 0 0 4 | $\begin{aligned} & 10 \\ & 0 \\ & 0 \\ & 0 . \\ & 10 \end{aligned}$ |  | 1 <br> 0 <br> 0 <br>  | 10 | $\begin{aligned} & \text { ì } \\ & \stackrel{7}{0} \\ & 0 . \\ & 0 \end{aligned}$ | - |
| 3 | 25 | 108 | 137 | 22 | 295 | 3 | 13 | 19 | 60 | 74 | 50 | 24 | 17 | 6 | 2 | 1 | 269 |

TABLE XXVI.-KIND OF CLOSET.

| Water | 526 |
| :---: | :---: |
| Vault | 19 |
| None | 5 |
| Total | 550 |

TABLE XXVII.-LOCATION OF OLOSET.

| Cellar | 302 |
| :---: | :---: |
| Hall | 47 |
| Apartment | 74 |
| Yard | 108 |
| Total | 531 |

TABLE XXVIII.-LIGHT OF OLOSET.

| Good | 157 |
| :---: | :---: |
| Fair | 97 |
| Poor | 227 |
| Total | 481 |

TABLE XXIX.-VENTILATION OF CLOSET.

| Good | 188 |
| :---: | :---: |
| Fair | 77 |
| Poor | 117 |
| None | 130 |
| Total | 512 |

TABLE XXX.-SANITATION OF CLOSE'I.


TABLE XXXI.-WATER SUPPLY.

| City ....... | 503 |
| :---: | :---: |
| Well ................................................................................... | 9 |
| Cistern .......................................................................... | 18 |
| None ...................................................................... |  |

TABLE XXXII.-PLUMBING.

| O. K. | Not O. K. | In repair. | Not in repair. | Sink. | No sink. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 349 | 16 | 244 | 19 | 425 | 21 |

$$
4
$$





## BIENNIAL REPORT

# THE ADJUTANT GENERAL 

OF THE

STATE OF WISCONSIN

For the Two Fiscal Years Ending June 30, 1912.


MADISON, WIS.
Democrat Printing Company, State Printrfr
1912

## REPORT

OF

## THE ADJUTANT GENERAL.

> State of Wisconsin, The Adjutant General's Office, Madison, Wis., July 1, 1912.

To His Excellency, Francis E. McGoyern,
Governor and Commander in Chief.
SIr:-Pursuant to law I have the honor to submit the following biennial report.

The strength of the Wisconsin National Guard, July 1, 1912 was 207 commissioned officers and 2792 enlisted men, an increase in two years of two officers and a decrease in the same period of 98 enlisted men. The strength of the naval militia is given in that part of this report devoted to that organization.

During the two year period just passed there has been no organization disbanded nor no new organizations mustered into the service. The Guard continues to be composed of three regiments of infantry, one separate battalion of infantry, one troop of cavalry, one battery of field artillery, a hospital and a medical corps.

## Legislation.

A summary of the laws pertaining to the military, enacted by the legislature in 1911, shows that laws were placed on the statutes granting jurisdiction for military purposes to the United States over a tract of land near Sparta where there has been established a large United States military reservation.

## Equipment-Active Service.

The law governing the appropriation for the Wisconsin National Guard and limiting certain expenses to $\$ 150,000$ annually was amended so as to give the Governor discretion in directing the manner in which expenditures may be made.

An additional appropriation of $\$ 2,500$ annually was made to Troop A, 1st Cavalry, for the purchase of horses and expense incident to their care.

Herbert J. McArthur, who, while a sergeant in Battery A, 1st Field Artillery, lost a foot by a railway accident while enroute with the battery to the annual encampment, was given $\$ 1,000$ and $\$ 500$ was appropriated to Sergeant Adolph Patzer, Co. D, 1st Inf., for the loss of an eye while conducting indoor rifle practice for his company.

## Equipment.

In the issue of clothing and all articles of military equipment, all of which stores and supplies are drawn from the United States government, no radical changes have been made. The effort has keen constant to keep everything up to date in quantity and quality and to supply as far as possible all the articles essential for effective work in the field.

An important feature since the last report is the issue, to all the enlisted men, of the regulation army shoe supplied by the War Department, so that now the Guard of this state is furnished with shoes for marching and for any or all kinds of work that call for the use of well fitting and durable footwear. These shoes are kept in the armories and are ready for military use at all times, and a sliding scale of prices, based on the amount of wear has been adopted to govern the sale of shoes to enlisted men as they leave the service. Further matters in reference to the supply departments will be found in the report of the Quartermaster General.

## Active Service.

During the two years covered by this report there has been but one call for active service on the part of the state military force. This was in October 1911 at Black River Falls and was
due to a flood which carried out dams and completely wrecked the business portion of a flourishing city. The work of protection and relief on this tour of duty was assigned to Major C. R. Williams, Quartermaster who was also placed in command of the troops ordered out. The vigorous and efficient manner in which he performed these duties was of the same excellent character that has uniformly distinguished all of his work for the state and the United States and his intelligent and untiring efforts to alleviate the situation in every way entitles him to the highest commendation. The nature and extent of this tour of duty is shown by the report annexed:

The Adju'tant General,
November 15, 1911.
Madison, Wisconsin.
SIR:-I have the honor to submit the following report of the tour of duty of Companies $D$ and E, 3rd Infantry, and of the undersigned as personal representative of the Governor, at Black River Falls, from October 8 th to the 24 th, 1911, pursuant to the following telegraphic orders which were confirmed by Special Orders No. 98, dated October Sth, 1911:

HELEGRAM.
Madison, Wisconsin,
October 8, 1911.
Major C. R: Williams,
Camp Douglas, Wisconsin.
Governor has been requested to send troops to Black River Falls General Boardman and Colonel Salsman on duty at Buffalo. Call me by long distance telephone to advise.

Signed.
E. S. Driver,

Captain, 1st Infantry.
Two days having elapsed since a portion of the city of Black River Falls was washed away on October 6th, by flood waters of the Black River, and believing that no call would be made for troops by the civil authorities of that city, I left my station at this place on Sunday, October 8 th, at 11:30 A. M. for the purpose of visiting the city to ascertain the damage caused by the breaking of the Hatfield dam. I expected to return to this place on train due to arrive at $2: 00 \mathrm{P} . \mathrm{M}$ but unfortunately this train was late, not leaving Black River Falls until about 4:00 P. M. and arriving at Camp Douglas at 5:10 P. M. The foregoing telegram was forwarded to Black River Falls and im. mediately upon its receipt I communicated with the sheriff of Jackson county who stated that he had called on the Governor for troops to assist in guarding property damaged by the flood.
Upon return to Camp Douglas at 5:10 P. M., the following telegrams were delivered to me:

## Active Service.

Major C. R. Williams,
Camp Douglas, Wisconsin.
The Governor directs you to proceed to Black River Falls at once, to report on conditions in connection with flood at that place. Companies D and E, 3rd Infantry, have been ordered for protection of life and property. They will report to you and you will report to the sheriff of Jackson county. Acknowl. edge receipt. Get in touch with Captain Wetherby at Mauston.


#### Abstract

Signed.


Per.

Major C. R. Williams, Camp Douglas, Wisconsin.
Governor MeGovern directs that you act as his personal representative at Black River Falls. This in connection with telegram previously sent.

> Signed.
C. R. Boardman, The Adjutant General. E. S. Driver, Capt., 1st Inf., Sec.
Madison, Wisconsin, October 8, 1911.

> E. S. Driver,

Madison, Wisconsin, October 8, 1911. Captain, 1st Infantry.
Immediately upon the receipt of the foregoing telegrams, I communicated by telephone with Captain E. S. Driver, acknowledged the receipt of the telegrams and explained to him my reason for delay in answering. Captain C. C. Wetherby, commanding Company D, 3rd Infantry, was called by long distance telephone when he reported that his company was assembled under orders received from your office. He was directed to secure three days garrison rations for his entire command and was informed that arrangements would be made to transport his company from Mauston to Black River Falls by special trains.

Having been informed that Captain E. S. Pearsall, 3rd Infantry, was temporarily away from his home, Captain Marshall Cousins, Adjutant 3rd Infantry, was called by long distance telephone, informed of the Governor's orders and instructed that, in the event of Captain Pearsall not having received crders from your office, to order out Company E, 3rd Infantry, for tour of duty at Black River Falls and was directed to purchase three days garrison rations for the entire command. Captain E. S. Pearsall reported at 6:30 P. M. that orders had been received and that his company was being assembled. At 6:45 P. M. the sheriff of Jackson county was informed by telegram that Companies $D$ and $E$, 3rd Infantry, had been ordered for duty at Black $\bar{R} i v e r$ Falls and would probably arrive at about 11:45 P. M.; that an attempt would be made to run a special train into the city from the north via Levis and requested two wagons to meet train for transporting supplies of troops.-

Company D left Mauston by special train on the Chicago, Milwaukee \& St. Paul Railway at 8:40 P. M., arrived at Camp Douglas at 9:15 P. M., was transferred to a special train provided by the Chicago, St. Paul, Minneapolis \& Omaha Railway, left Camp Douglas at 9:35 P. M. and arrived at Sheppard, about three miles east of Black River Falls station at $11: 15$. The special train was held at this place to await the arrival of the regular passenger train with Company E. Tentage with

## Active Service.

stoves, medical supplies, commissary chests and other stores necessary for both commands were issued by the Quartermaster's Department and were loaded in the baggage car of the special train from Camp Douglas. Arrangements were made with the Chicago, St. Paul, Minneapolis and Omaha Railway for the transportation of Company E, 3rd Infantry, from Eau Claire to Black River Falls on regular passenger train leaving Eau Claire at 10:05 P. M. and scheduled to arrive at Black River Falls at 11:90 P. M.

Having learned from my earlier trip to Black River Falls that the railroad bridge was impassable for trains owing to the damage caused by the flood and that all means of crossing the river south of the railroad bridge had been destroyed, it was planned to have both companies run into the city from the north, via Levis. Upon being informed that the railroad tracks north of the city were impassable, the troops were ordered to run via Sheppard into the railroad station on the east side of the river. Both companies arrived at Black River Falls at 12:01 A. M., October 9 th, and were promptly detrained.

I immediately reported to the sheriff of Jackson county, informing him of my orders and requested instructions as to duties to be performed by the troops under my command. He reported that a great many buildings including stores and residences, had been washed down the river by the flood of October 6th; that the wreckage of these buildings was lodged on both banks and contained some valuable property, including books and safes of the merchants; that the property was being looted and that be was unable with the force at his command, to properly guard it. He requested that this property be guarded until such time as the owners could have an opportunity to look it over and care for articles found to be of value.

It being impracticable to move the troops to proper positions at this time owing to the lack of guides, the following verbal instructions were issued to the commanding officer of each company:

To Captain E. S. Pearsall,-To bivouac his command for the night on a vacant tract east of the railroad station; to break camp promptly at 5:30 a. m.; have breakfast and be prepared to move at 7:00 a. m. to a point down the east side of the river to be designated by a guide to be furnished by the sheriff; there to establish camp and immediately send patrols up and down the river to locate wreckage, guard same and to permit no person to molest or remove any property except upon the orders of the sheriff or of the officer in command.

To Captain C. C. Wetherby,-To cross the river by the railroad bridge, using a hand car for moving supplies; march his command to the fair grounds south of the city and go into bivouac camp; break camp promptly at 5:30 a. m.; have breakfast and be prepared to move at 7:00 a. m. down the west side of the river to a point to be designated by a guide to be furnished by the sheriff; establish camp; send patrols up and down the river for the purpose of locating wreckage, guard same and to permit no person to molest or remove any property

## Active Service.

from the wreckage except under orders of the sheriff or of the commanding officer. The officers in command of the companies were informed that the sheriff would furnish guides and wagons for transportation, one for each company, to report promptly at 7:00 a. m., Oct. 9th. Both officers were instructed to purchase fuel and straw for bedding for their commands and were informed that the commanding officer would remain on the east side of the river until about 7:00 a. m. after which time headquarters would be established at the court house, to which place they were directed to forward all reports and communications.

I remained on the east side of the river, superintended the transfer of Company D across the bridge, and at 7:00 a. m. guide and wagon for Company E not having reported; looked up the sheriff, informed him of the fact and urged prompt action in order that both companies could be moved promptly to positions from which patrols could be sent out to guard the property. The guide and 'wagon reported to Captain E. S. Pearsall at 8:30 a. m., at which time his command moved down the east side of the river to Catfish Eddy, about one and one-half miles south of the railroad station. From this place patrols were sent down the river to Perry Creek, Olson's Flat and to the head of Shepp's Island at which points a vast amount of wreckage was found on the Hats along the bank of the river.
Company D, Captain C. C. Wetherby commanding, did not move from the fair grounds until about 9:30 a. m., owing to the delay in securing guide and wagon transportation. This command was moved to Bailey's farm, about one and one-half miles south of the city on the west bank where camp was established and patrols sent down the river.

Headquarters were established at the court house at 8:00 a. m., October 9th, camp being pitched in the yard between the court house and jail. After reporting to the sheriff the disposition made of the troops I calied on the mayor, informed him that under orders of the Governor, the troops on duty were to assist the civil authorities wherever it was possible and to guard property and maintain order.
At 9:00 a. m. the arrival of Companies D and E, 3rd Infantry, was reported to your office by telephone, Company D with three officers and sixty-three enlisted men and Company E with three officers and fiftyfour enlisted men. Five enlisted men of Company D arrived on passenger train at 11:30 a. m., reported at headquarters and were ordered to join their company.

Previous to the arrival of troops at Black River Falls, the sheriff of Jackson county and mayor of the city had sworn in a number of deputies and special police for the purpose of guarding the flooded district, wreckage and buildings lying on the flats south of the city

## Active Service.

as well as the property of the merchants which had been removed from their buildings before they were washed away. The money from both banks including valuable papers, had been removed to the court house which was being guarded by deputies. It was suggested to the sheriff that the guarding of tue property in the city be turned over to the troops and upon being requested by him to furnish a guard for this duty, the commanding officer of Company D was directed at s:30 a. m. to send a detachment consisting of one sergeant and eight privates to report at headquarters. Guards were immediately established at the court house, relief station, and at the request of the acting postmaster, at the postoffice.

In making an investigation of the condition in the city of Black River Falls on October 9th, it was ascertained that on the afternoon of October 6 h , some fourteen acres of the business portion of the city with all the buildings thereon had been completely washed away by the sudden rise of the waters of the Black River caused by the breaking of the Dells and Hatfield dams. The flood waters reached the city about 1:00 p. m. at which time the first building was destroyed. About $80 \%$ of the entire business section was completely destroyed, including 72 business buildings, several warehouses, 2 banks, 2 hotels and 12 residences. In every instance the real estate upon which this property stood was washed away, the swift current of the river forming a new channel in what had been the business part of the city. Thirty-three residences on the flats south of the town were flooded to a depth of about 6 feet, greatly damaging all the buildings and contents, and rendering this portion of the city uninhabitable and unsanitary. It was estimated that about 58 business institutions had been destroyed and about 60 families made homeless by the flood. The estimated damage to property is about $\$ 1,500,000$, including the light and power plant of the city.

The position of Company E, 3rd Infantry, on the east side of the river was inspected at $1: 30 \mathrm{p} . \mathrm{m}$. October 9 th , and the commanding officer directed to establish an outpost at Olson's Flat, about two and one-half miles south of the railroad station. A detachment of one officer and eighteen enlisted men were sent to this point about 5:00 p. m. and patrols sent down the river to the head of Shepp's Island.

An inspection of the position taken up by Captain C. C. Wetherby, with Company D, 3rd Infantry, was made at $4: 30 \mathrm{p} . \mathrm{m}$. at which time he reported that information received from his patrols showed that his camp was too far north, a great amount of wreckage being from one to two miles below. He was directed to move his camp to Wiggin's farm, two and one-half miles south of the city, and from there to send out patrols south for about two miles. On the morning of October 11th, Captain C. C. Wetherby reported that his patrols had
discovered a large amount of property on Shepp's Island and he was directed to establish an outpost at that place.
Property picked up by the citizens prior to the arrival of the troops was stored in buildings on the fair grounds and upon the request of the sheriff, an outpost from Company D, 3rd Infantry, was established at this place for guard duty.

An inspection was made at 6:00 p. m., October 9th, of the residence district on the flat at the south end of the town which had been badly damaged by the flood. A vast amount of wreckage was piled in the streets, in the yards of residences and on the flats along the river. This district was guarded by special police and finding that strict guard was not being maintained, I requested the mayor to withdraw his police when a military guard would be established over the district. The commanding officer of Company D, 3rd Infantry, was ordered to send a detachment of his command consisting of two noncommissioned officers and eight privates to report at headquarters for duty in the city. These men reported at 10:00 a. m. October 10th. A guard was placed around the flooded district and the special police were relieved at 1:00 p. m., October 10th.

A vast amount of merchandise removed from buildings on the day of the flood, was stored in barns and in the yards of the residents not damaged, and for the purpose of guarding this property at night and at the same time to relieve to some extent, the strain under which the citizens of the city, especially the women and children had been laboring since the flood, patrols were maintained in this district from 7:00 p. m. until 7:00 a. m. each day.

Colonel J. B. Edwards, Medical Corps, W. N. G., who was ordered by the Governor to proceed to Black River Falls to report on sanitary conditions, arrived at 12:00 m. October 9th. He called on the health officer of the city, inspected the sanitary conditions of the flooded district and the camps of both companies. Upon my request, he applied for authority to have two members of the hospital corps ordered for duty with this command. Two members of the hospital corps, assigned to the 3rd Infantry, reported for duty at 6:30 a. m. October 12 th . These men completely equipped and with orderly pouches, were assigned to duty with the troops south of the city, one with each company.

Considerable confusion was caused by the manner in which passes were issued by the sheriff and the mayor of the city. Both of these officiais issued passes prior to and on the day of the arrival of troops. The sheriff requested the guards and patrols to honor all passes signed by the mayor or himself. It was found that these passes were issued indiscriminately by the authorities and in a great many cases were given to persons not entitled to them. As this prevented efficient

## Active Service.

work on the part of the troops, it was suggested to the civil authorities that all passes be issued by the officer in command and all guards and patrols were directed to honor no passes except those countersigned by myself. Passes were issued to citizens residing in the flooded district and to merchants and members of working parties recovering property from the wreckage. These passes were issued only upon certificate of the sheriff or his deputy. No person without a pass was permitted to enter the flooded district and in no case were persons allowed to remove any property from the wreckage without a special permit.

On October 10th, the sheriff requested that the troops be required to serve search warrants which were to be issued by a justice of the peace, for the purpose of searching the buildings of a number of persons living south of the city, on both sides of the river and who had been reported as having in their possession property taken from the wreckage. I refused to permit the troops to perform this duty but in order to satisfy the civil authorities the matter was referred to your office for an opinion of the attorney general. The written opinion of the attorney general, which confirmed the position taken by me, was received on October 11th and a copy delivered to the sheriff.

Wagon transportation was employed for the troops, one wagon being assigned to each company. This transportation was necessary for the purpose of providing supplies from the central camp of companies to patrols up and down the river, also for the transportation of rations which were issued each day.

The troops left their home stations with three days rations and from Wednesday, October 11th, were supplied from a temporary commissary depot established at the court house. Components of garrison rations were purchased at Eau Claire and fresh meat and bread issued daily. I was greatly assisted in this work by Captain Marshall Cousins, 3rd lnfantry, who, at Eau Claire, acted in the capacity of a purchasing commissary.

It being impossible to provide a mess for enlisted men on duty in the city and as the long hours of duty of guards and patrols prevented individual cooking, cooked meals were purchased for this detachment. On October 15th, an additional force from Company D, 3rd Infantry, including a cook, was ordered to duty in the city, and a mess was established for all officers and enlisted men in camp at the court house.

A hospital was estahlished in the camp at the court house and steps taken for the immediate care of any soldiers who might be injured or taken sick and if necessary, of any citizens who could not be cared for by the civil authorities.

On October 10th, reports were received from officers in command of patrols on the east side of the river, that they were having some

## Active Service.

trouble with several farmers who, in boats, floated down the river during the night and looted the wreckage. These parties escaped in boats whenever patrols or outposts approached and challenged. This matter being reported to the sheriff, he ordered that the boats be taken possession of and held until after the departure of the troops. These boats were seized by a detachment of Company E, 3rd Infantry, under command of Lieut. H. O. Hansen, and held until October 21st.

Having been detailed by the Governor as his personal representative at Black River Falls, I called upon the civil authorities on October 10th, for information regarding steps taken to secure and distribute relief supplies and funds for the care and assistance of those rendered homeless by the flood and who required temporary aid. Information was received that on October 7th, the Business Men's Association of the city had organized a relief committee for the purpose of handling supplies and funds contributed for relief purposes. On October Sth, the mayor called a special meeting of the common council which body adopted a resolution appealing for aid to the President of the United States, to the Governors of the different states of the Union, and to the mayors of the different cities throughout the land. The mayor appointed a committee from the common council to handle all contributions and requested that all money be sent by draft which was to be deposited by him in the banks of the city and disbursed on orders of the co mon council. The appointment of two committees caused considerable ill-feeling and friction between the citizens and civil authorities and discouraged to a great extent, contributions of supplies and funds from a number of cities of the state whose mayors and Business Men's Associations had in several instances sent delegations to the city to look over the situation and report upon the necessity for relief. Upon the request of a number of citizens, a new 'committee was appointed on October 9th, consisting of J. J. McGillivray, mayor, as chairman; B. L. Van Gordon, chairman of the county board; H. H. Richards, cashier of the First National Bank; J. H. Mills, Cashier of the Jackson County Bank, and J. H. Levis, real estate agent. This committee appointed a sub-committee to take charge of and issue all supplies received for the flood sufferers. Both committees remained in charge of all relief work until this work was assumed on October 23rd, by the committee appointed in the Governor's Proclamation of October 17th.

A relief station had been established in the city hall and supplies were being issued to all persons who applied, the question as to the necessity of aid for the applicant, being' left entirely to the judgment of those in charge of the station. A meeting with the members of the relief committee in charge, was held on Tuesday, October 10th,

## Active Service.

when it was suggested that a careful and accurate survey be made of the city to secure the names of the persons suffering from the flood and requiring aid, and that a book be compiled showing the names of all persons entitled to assistance, which could be consulted at times when applications were made for supplies. This plan was carried out successfully by a committee of ladies of the city and by October 1.2th, the relief station was fairly organized and assistance was being given to all persons in want.

A number of inquiries were received from citizens of the state, business men and organizations in St. Paul and Minneapolis for information regarding the conditions at Black River Fails and supplies required for relief. In all cases persons inquiring were promptly informed of the conditions and that supplies and funds would be required for the assistance of the citizens whose homes and property had been completely destroyed by the flood.

On October 11th, the following telegram was sent to His Excellency, the Governor, at Madison:

## Governor F. E. McGovern, <br> Madison, Wisconsin.

Troops guarding flooded district and wreckage for five miles on both sides of the river. Organized crews at work gathering property. Relief committee thoroughly organized. Supplies on haṇd sufficient for four days. Sanitary conditions satisfactory. Am assisting civil authorities wherever possible. Signed.
C. R. Williams, Major \& Q. M., W. N. G.

In order that the wreckage at the lower end of town and on both banks of the river could be looked over and property of value cared for as soon as possíble, a meeting was held with the business men of the city on the afternoon of October 10th, when they were strongly urged to make an organized effort to overhaul the wreckage and care for articles of value. Several crews under competent foremen were organized and set to work in the wreckage on both sides of the river and at the lower end of the city.

From inspection made during the forenoon of October 11th, I was satisfied that this work was not being prosecuted with proper vigor and therefore requested the mayor to call a meeting of the business men to be held at the court house at 2:00 P. M. At this meeting the necessity for prompt action in the recovery of property from the wreckage, was again urged upon them. They were informed that while the troops were there to assist in every way possible, they could not remain on duty for any length of time and that if it was desired to have the property guarded, the work must be done within the next three or four days. The meeting resulted in large crews of men being put to work and the finding of a large amount of

## Active Service.

property of value. This work continued until delayed by the heavy rains which set in on October 14th.

Reports received from the commanding officers of companies indicated that all wreckage which contained property of value, was located on Shepp's Island from the west side and Brockway's, Perry Creek and Olson's Flat on the east side of the river. Believing that this property could be efficiently guarded with a much smaller force than that cn duty, twenty-two enlisted men of Company D and twenty enlisted men of Company $E$, were relieved on October 15th. The strength of both companies was further reduced on October 17th when one officer and twenty-one enlisted men of company $D$ and two officers and twelve enlisted men of Company $E$ were relieved.

The heavy rains which fell almost incessantly during the 14 th , 15 th and 16 th, caused the Black River to rise rapidly and during the afternoon of the 16 th , the balance of the business portion of the city was seriously threatened by the wash of the swift current into the west bank of the river. The troops stationed in the city were called out and assisted the civil authorities in rip-rapping the bank with logs and trees.

The heavy rains of the preceding days having ceased, the waters of the river slowly receded during the night of the 16 th and all of the 17th, and the danger which threatened further damage to the city was for the time removed. The work of recovering property from the wreckage, delayed by the rains, was resumed on the 17th.

From inspections made on the 18 th and 19 th and reports received from the commanding officers of companies, I was convinced that it would take a long time to overhaul all the wreckage, that the property remaining in the debris had been almost entirely ruined by the heavy rains, and that articles of value were confined to the wreckage in one or two places which could be easily guarded by the civil authorities. It was therefore suggested to the sheriff on October 19th, that the troops be relieved from duty on October 21st, and upon reporting the situation to your office, I was authorized to relieve both companies on the day mentioned. This order was reported to the sheriff to permit him to make arrangements for stationing special deputies at the places requiring guards. To assist the sheriff in this duty, two conical tents with stoves were loaned to him for use of his deputies. This property was returned to the Quartermaster's Department at Camp Douglas on November 10th. Both companies were relieved îrom duty on October 21st, Company D leaving for their home station at 12:35 P. M. and Company E at 5:30 P. M.

Having been appointed by the Governor in his Proclamation of October 17th as a member of the Black River Falls Relief Committee, I remained in the city with two employees of the Quartermas-

## Active Service.

ter's Department and two enlisted men of Company D, to reorganize the relief station, properly arrange and care for all supplies which had been received to date so that all clothing, bedding and other articles could be issued without confusion or delay. All debts contracted by the troops were settled and I returned to my station at this place on October 24th.

During the time the troops were on duty at Black River Falls, patrols were maintained during the night in the residence district. Strict guard was maintained at the court house, post office, relief station and the flooded district at the south of the town. The wreckage on the baniss of the river south of the city was carefully guarded by patrols and outposts and all persons were prevented, from molesting or removing property, except those authorized to do so. The discipline of the troops was excellent and while strict guard was maintained as required by orders issued, officers and enlisted men were at all times courteous and considerate to the citizens and seemed more than anxious to assist where assistance was required.

The troops were well rationed, being supplied with fresh meat and bread daily. Conical tents with stoves were provided for quarters of officers and enlisted men, including all outposts and although all were exposed to the terrible rains of the $14 \mathrm{th}, 15 \mathrm{th}$ and 16 th , but little sickness was reported.

Reports made by officers and noncommissioned officers in charge of patrols show that they had but very little trouble enforcing orders. The outposts and patrols stationed in the city found its citizens willing and anxious at all times to coöperate with them in carrying out their instructions. This, when considering the terrible calamity which had befallen the city, with the people excited, worn out and restless from long hours of watching and apprehensive of further damage to the city, is a splendid testimonial of the law-abiding spirit of its citizens.

The duty periormed by Company D, 3rd Infantry, under command of Captain C. C. Wetherby and Company E, of the same regiment, under command of Captain E. S. Pearsall, was efficient and proved both commands to be well disciplined and ready at all times for any service they may be called upon to perform.

The call for duty coming on a Sunday caused a delay in the prompt delivery of telegraphic orders sent from your office to commanding officers of companies and a great many men being away from their homes for the day, prevented a more prompt mobilization of both commands. Notwithstanding these difficulties, both companies assembled within five hours from the time orders were issued and were ready to move, completely equipped, with three days garrison rations.

The delay to promptly establish guards in the city was due to the

## Instruction.

nature of information received from the civil authorities as to the duty to be performed by the troops. Inspections were made as promptly as circumstances would permit and as soon as the exact conditions were ascertained, guards were quickly established in different parts of the city.

As the officers attached to companies were required for duty with their organizations, owing to the extent of the territory which it was found necessary to cover by patrols and' outposts, it was found impossible to detach an officer for duty at headquarters. It was therefore necessary that the commanding officer assume immediate command of all guards on duty in the city and this in addition to inspecting troops, on both sides of the river, conferring with civil authorities, meeting deiegates from different cities sent to investigate and report upon relief required, made it impossible to render daily written reports of the situation. Daily reports were therefore made to your office over the long distance telephone.

Maps of the scene of operation on both sides of the river and reports received irom time to time from officers of both companies are attached to and form a part of this report.

Very respectfully,
> C. R. Williams,

> Major and Quartermaster, W. N. G. Commanding.

## Instruction.

This work, both theoretical and practical, has been carried on throughout 1910-1911 and 1911-1912 along the same progressive lines laid out six years ago which were formulated largely through the assistance of officers on duty at the School of the Line and Staff for the United States Army of Ft. Leavenworth, Kansas. For the first year of the period covered by this report the work was under the personal direction of Lieutenant Colonel J. L. Morrison, so well known in army circles on account of the great work he has done at the army school. His as. sistance was voluntary in nature and invaluable in quality so that to-day in the way of tactical instruction he has indelibly stamped his imprint on the state forces and ranks among the efficient workers in the Guard, with General Charles King, its disciplinarian and General Chandler P. Chapman, the great organizer. For the correspondence school he prepared

## Instruction.

the problems and the approved solutions and personally' conducted with the assistance of Captain H. A. Smith, U. S. A., the officers' school and written examinations held at Camp Douglas in 1911. His work was supplemented with the assistance of Captain F. M. Caldwell, 12th Cav. U. S. A., who, in January 1911, visited Oconto, Appleton, Manitowoc, Oshkosh, Ripon, Rhinelander, Ashland, Superior, Eau Claire, Marshfield, Sparta, La Crosse, Mauston, Beaver Dam, Milwaukee, Ft. Atkinson and Madison and there held a conference which included a map problem with the officers stationed at points designated or assembled there from their nearby stations. This work was concluded with a school for each of the regiments held at Camp Douglas for the 3rd, Oshkosh for the 2nd and Milwaukee for the 1st. All of the officers of each regiment being there assembled and a continuation of the problem work taken up. Captain Caldwell's work was very beneficial.

In 1911 the work of each company at its home station was divided into two periods, that of indoor and outdoor instruction. In the former it was directed that attention in the main be given to school of the soldier, squad and company, to develop exactness, obedience, alacrity and discipline. Drills were required to be supplemented with schools and gallery practice. The outdoor work was devoted to practice marches, bivouac camps, extended order, guard duty and firing on the range. To supplement the work General Charles King visited every company in the state at its armory, gave it instruction and ascertained and reported on the condition of the company and the progress attained. His services were very valuable.

The tactical instruction of the military of the state for 191112 has been in charge of Captain E. T. Collins, 6th Inf. U. S. A., and Colonel and Inspector General on the Governor's Staff. Captain Collins was detailed to the state as an instructor-inspector by the War Department under comparatively recent legislation by Congress increasing the number of officers in the Regular Army that such details might be made. $H_{e}$ is a pupil of Colonel Morrison and an honor graduate from the great army school at Fort Leavenworth. With the begin-

## Instruction.

ning of this period of instruction came also new infantry drill regulations adopted by the War Department for the United States Army and the militia. With Captain Collins approval the course of instruction for 1911-12 was again divided into indoor and outdoor periods. For the former, careful study of the new drill regulations was enjoined and accuracy in all close order drill was insisted upon. The supervision of this work and guard duty and ceremonies was given to General Charles King and again he visited every company in the state and patiently and carefully gave each personal instruction and at the same time checked up the work of the three army sergeants on duty in the state and who travel from one company to the other, teaching the men and endeavoring in every way to develop higher efficiency. In preparation for this work General King visited the United States Military Academy at West Point, N. Y., and spent some time in observing the work there under the new drill regulations. He also prepared for publication to the Guard a resumé of all the points in which the new differed from the old regulations and in every way expedited and facilitated the work of instruction.

Captain Collins assumed complete charge of all the school work, the instruction in extended order and directed and supervised all tactical instruction given by the army sergeants. Proceeding on the theory that for the militia it is necessary to know how to obey, march and fight, the course of instruction was prepared accordingly. For theoretical instruction all the officers were divided into two classes, all above first lieutenants being designated Seniors, all below the grade of captain being called Juniors. Separate problems were prepared for each. There were six problems prepared by Captain Collins for each class. The time covered by this work was from Nov. 1st, 1911 to May 1st, 1912. These problems covered marching and camping and troop leading for the Seniors, and for the Juniors, patrolling, reconnoissance and troop leading. Each solution to every problem, and over 70 per cent of the offficers took the course, Captain Collins personally studied, commented on in writing, and returned each solution with his written comments to the student officer.

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He also prepared and sent out an approved solution to each officer.

To supplement and clear up by personal explanation any points in reference to the correspondence school work, Captain Collins, at intervals in November and December, 1911, held conferences with the officers at twelve different points throughout the state. At these meetings explanations were given and questions asked the officers and all inquiries for further information were responded to by the inspector-instructor. The conferences contributed an advantage to the school program. Noncommissioned officers were permitted to attend. In addition to this Captain Collins held a regimental school of all the officers of each regiment at a point within its geographical territory. For each of these regimental schools a regimental officer was selected to prepare a map problem with a solution for presentation to and discussion with the regimental officers. All this was under the supervision of Captain Collins who followed with a general critique and answered all questions and compared the relative merits of the several solutions offered. The idea of having regimental officers conduct these schools was to develop competent instructors within the regiment itself with a view of making them self-reliant and ultimately carrying the education closer to each officer.

This general plan of schooling closed May 29, 1912, with a school for all officers at Camp Douglas. Here Captain Collins had charge of the Senior Class and Captain Robert McCleave, 2d Inf. U. S. A., the Junior Class. This school closed with a written examination. The standing of the ten highest in each class is shown by the following list:

## Senior Class.

> Col. Orlando Holway, 3rd Infantry. Capt. G. W. Garlock, 1st Infantry. Capt. Irving A. Fish, 1st Infantry. Capt. James McCully, 2nd Infantry. Capt. G. D. Armitage, 1st Infantry.

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Capt. William B. Hall, 2nd Infantry. Capt. Paul Clemmens, 3rd Infantry. Major John P. Joachim, 1st Infantry. Major John J. Lynch, 10th Bn. Captain Paul Ahnert, 1st Inf.

## Junior Class.

1st. Lieut. D. L. Remington, 3rd Infantry.
2nd Lieut. L. G. Graef, 2nd Infantry.
1st Lieut. R. H. Lindbaum, 1st Infantry.
2nd Lieut. A. E. Gaartz, 1st Infantry.
1st Lieut. Geo. Merkel, 2nd Infantry.
1st Lieut. Wm. Smith, 1st Infantry.
1st Lieut. U. G. Carl, 2nd Infantry.
1st Lieut. G. H. Hale, 3rd Infantry.
1st Lieut. J. M. Ryan, 3rd Infantry.
1st Lieut. Martin Olson, 1st Infantry.
For school work the first prize offered by Lieutenant Colonel Morrison, a pair of regulation field glasses was won by Captain G. W. Garlock, 1st Inf., Colonel Orlando Holway not being a competitor, and the first prize in the Junior Class was won by 1st Lieutenant D. L. Remington, 3rd Inf.

Other important assistance in the general instruction of the entire command was contributed by Captain Collins in the preparation of three problems in patrolling and outpost work covering the duties of the enlisted men only. Carefully worked out solutions including every detail were furnished with them. Copies of these were placed in the hands of each company commander for use in holding schools for their enlisted men. The three army sergeants on duty in the state were ordered in to Madison and with them Captain Collins went over, on the map, each problem and solution, thoroughly posting each sergeant so there could be no chance of conflicting instruction. They were then directed to use these problems in the schools they held at the company stations of noncommissioned officers and privates. The idea of this is to

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carry proper tactical instruction down through the ranks, facilitating the work of the officers, winning the efficiency of all enlisted men and finding, in the winter months, an interesting as well as a helpful substitute for the monotony of close order drills. The plan although in its inception is necessary and is bound in time to produce results that are worth the while.

Another very important adjunct in the educational scheme for the officers of the Wisconsin National Guard is the plan of examination for appointment or promotion. This includes administration, drill, guard duty, map reading, military law, field engineering, tactics, hygiene and sanitation. The questions for those subjects were prepared through Colonel Morrison at Fort Leavenworth and then carefully revised and new questions supplied by Captain Collins to cover the issue of the new infantry drill regulations and the changes in other textbooks. Each officer to be examined must study up the manual for examination prepared by Captain Collins. A new board is detailed for each examination and as it is largely oral each officer on the board must be familiar with the manual. The manual is based to quite an extent on the educational work in the state up-to-date so that every examination not only helps to select an officer qualified for the position, but on account of the necessity for study and review by the board, it fits in well and helps out the entire educational scheme. This examination is carried a step lower down by the use of a manual, prepared by Captain Collins for the examination for warrant of all noncommissioned officers. This covers definitions; guard principles; school of the soldier and squad; school of the company, battalion and ceremonies; sighting, position and aiming drills; patrols and spelling and writing.

For Troop A, 1st Cavalry the entire instructional work has been placed in charge of Captain F. M. Caldwell, 12th Cav. U. S. A., detailed by the War Department as inspector-instructor of cavalry for Illinois, Missouri and Wisconsin, and for Battery A. 1st Field Artillery in charge of Captain C. C. Pullis, U. S. A., the inspector-instructor detailed for Minnesota and Wisconsin. Each of these officers has given considerable

## Inspection.

time to the work and their efforts to assist and to improve the standing of these organizations has been very satisfactory.

Before leaving the subject of instruction it is not out of place to state that during the period of his detail, Captain Collin's work has been of an extremely high order and justifies all that could be expected of a graduate of high standing from the service schools. He is direct and practical. Clear and logical in his explanations. Well equipped mentally and physically, and in spite of the amount of work done which has required every moment, alert and active at all times. Moreover his address and presence is such that men are attracted to and follow him willingly and with enthusiasm. As a professional military man he represents and well represents that type that has aided in giving the Regular Army the enviable reputation which it justly has. The work of the sergeants detailed to the state from the regular army has been uniformly excellent.

## . Inspection.

The official inspections, two in number, one at the armory and one in camp, have been continued. They have invariably been conducted both for the United States and the state by Army officers. In 1911 a change in the competitive markings was made. Average strength throughout the year, average attendance at drills, etc., number of drills, administration and care of property, were taken into consideration as well as the quality of the drill and the marksmanship. In the inspections for 1910 the 2nd Regiment stood first, the 1st Regiment second, the 3rd Regiment third and the 10th Sep. Bn. fourth. In 1911 the relative order of standing was the same. For 1912 a somewhat different plan of comparison will be used. The value of the competitive system established in this state so many years ago is still well recognized. Its benefits are unquestionably greater than any of the objections. The company commanders of the state by an overwhelming majority, are in favor of its continuance. To avoid, therefore, the difficulties that arise in working down to small fractions of one point, a system of ratings will be used and a company will be marked excellent,

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good, fair, poor. The company receiving the largest number of excellent ratings in the different branches of the work will stand first. The change, however, is nothing but a simplification of methods and it is believed now it will work out better than hair breadth distinctions in markings. However, its trial for the ensuing year will bring forth the final determination.

The armory inspection of each company, which the War Department now requires, applies only to organization and equipment. It should be made to apply also to all forms of instruction that can be executed in the ordinary company armory. Means should be afforded too for more frequent and general inspections on the part of the state of all military stores and supplies issued to the Guard and for which officers are accountable and responsible. While the property losses in Wisconsin have not been excessively heavy, and while such losses have been settled by the bonding companies when the losses have been large, yet more frequent inspections will not only tend to prevent such losses, but will result in better general care of the property and help to keep every company supplied with everything needed and the quality up to a reasonable grade. T'o accomplish this, more funds and help should be supplied to the Quartermaster's Department at Camp Douglas. This department is now handled in a most efficient and satisfactory manner by Major C. R. Williams, but he is overworked, not supplied with sufficient help, and he is underpaid. Consideration of this matter by the Legislature is earnestly requested.

## Encampments.

: All infantry organizations encamped on the Military Reservation at Camp Douglas, both in 1910 and in 1911. In 1910, Troop A, made a practice march of seven days north from Milwaukee and return, and Battery A encamped with the United States batteries and one from Illinois on the United States Military Reservation near Sparta. In addition, the 1st Infantry took part in a ten day tour of duty at the joint camp of instruction with United States troops at Camp Bruce E. McCoy, near Sparta. In 1911 all organizations except the artillery

## Encampments.

camped at Camp Douglas. The artillery again camped near Sparta where it made excellent progress in field firing and field work and showed a good state of instruction and discipline.

As an index to a part of the work of the state troops while in this state encampments, the following paper prepared by General Charles King and read to and published in printed form to the officers and men of this Guard is quoted in full:

> State of Wisconsin, The Adjutant General's Office, Madison, June 15, 1910.

Circular, No. 3.
To illustrate the method on which the markings of the companies are made at the annual encampment the following points are published in order that officers and men may have a general idea of the system. Close attention to the points indicated will lead to avoidance of many an error in other matters of soldiership.

## Duties of Officers.

Are they up, properly dressed and equipped, and near their companies before the assembly at reveille roll call? Do they see to it that the men turn out promptly, fully equipped?- that they are in readiness to form at assembly? That they spring to ranks at the first note of assembly? That the sergeants are at their posts before assembly? 'That the corporals look over their squads and gather them at the proper point before assembly? That they report properly and truthfully? Do officers require men to be steady, silent and soldierly in ranks? Do they promptly correct errors? Are they firm and dignified in bearing? Are they correct in their command, instructions, language and deportment? Are they careful in dress? Diligent to duty? Do they mingle unnecessarily with the men? Do they require men to be observant of military courtesies? Do they inspect tents, kitchens, sinks, etc.? Do they see to it that the sergeants send men to their tents to call to quarters? Are they on hand and in readiness to supervise Taps? Do they require instant observance of Taps?--lights out and silence at the first note? Do they patrol the company street and enforce silence after Taps? Do they enforce as well as convey orders?

## Duties of Noncommissioned Officers.

Do they stir the men out immediately after first call for reveille, and for all formations? Do corporals gather and look over their

## Encampments.

squads? Do they report properly and truthfully at assembly? Is the 1st Sergeant prompt, soldierly, accurate in commands and duties? Are the sergeants at their stations before assembly? Do they require instant silence, steadiness and formation at first note of the assembly? Do sergeants promptly correct all errors in ranks at any formation, ceremony or drill? Do they send men to tents at call to quarters? Do sergeants or corporals in charge of tents suppress instantly any talk, laughter, light or noise after first note of Taps? Are the noncommissioned officers examples to the men in bearing, dress, military courtesies, etc.?

## Military Courtesies.

Do officers in saluting, with sword or hand, do so accurately and well? Do they always stand attention to and salute in addressing those of senior grade? Do they carefully return the salutes of their men? Do they carefully require such observance? Do the men invariably salute and stand attention to officers? Do they remain at attention in addressing them? Do they promptly rise, if seated or lying down outside of their tents, when officers pass within 30 paces? Do they properly render rifle salute?-salute with the hand?-salute to passing colors?-salute at lowering colors, etc.? Do they button coats and straighten hats before saluting, etc.?

## General Discipline.

How does the company detrain on arrival? In what condition is its railway coach? How does it march to camp?-Make camp?-pitch and arrange tents? Clean sinks and kitchens? How does it prepare for roll call and formations? How does it fall in? Is it silent, steady, soldierly in ranks? Do the men turn out promptly after first call for reveille? Are they properly dressed and equipped then and for every occasion? Are they on time on the range? On police? At call to quarters? At Taps? Are the tents uniformly arranged? Are streets, sinks, kitchens, etc., neat and clean? Are the men alert, sober, ready for duty at all times? Are they soldierly in bearing to their officers?-respectful to their noncommissioned officers? Neat in dress and person? Are coats always hooked at collar and buttoned throughout when worn outside the company street? Are the men orderly at meals? Is there excessive drinking? How does each company observe call to quarters? How does it observe Taps? Are lights extinguishéd at first note of Taps? Is there whispering, giggling, smoking, the faintest disorder in any tent after sounding of Taps, etc.? How does the company entrain for home?

Encampments.

The above are merely samples of the many points considered by the Inspector and his assistants in their markings.

By Command of the Governor:

C. R. Boardman, The Adjutant General, Chief of Staff.

Official:
Jno. G. Salsman, Adjutant General.

Referring to the general work at the annual state encampments, it may be noted that every effort is made to conduct the work so as to prepare the troops for service in time for war. Everything is done as nearly like it is done in the Army as possible. Commands usually get up at $5: 20 \mathrm{~A}$. M., clean up the camp at $5: 40$; have breakfast at $6: 20$; then have field exercises, drill or shoot from 7 and 8 until 11. Dinner at 12. Drill or some form of exercise from 2 until 4. Supper at $6: 00$ P. M. and then they are required to go to bed at $10: 15 \mathrm{P}$. M. During all this work whether it be the routine of camp or the march, bivouac and fighting exercise in the field, their work is supervised and they are advised and instructed by officers of the Army detailed by the War Department. In 1910 and again in 1911, three or four infantry officers, graduates from the school at Fort Leavenworth were detailed, headed by Colonel Morrison in addition to General King, so that the instruction received was, for the length of time possible, of the very best. There were but few idle moments in the Wisconsin camps for years past, yet all seem contented for the average each year of present has been 94 per cent and better. The men make and break their own camps, eat the army ration and every way conform to Regulation for the Regular Army life in the field. The strictest sanitary regulations are imposed so that all are taught to keep kitchens, tents and grounds clean, to be careful about the water supply and to fight the menace of disease carried about by the fly. In 1910 and 1911 the same kind of problems that have been used in the school work and which had been also used in the tactical talks at the annual school for the officers were worked out with troops under war conditions, everything being made to correspond to actual war

## Wisconsin Naval Militia.

conditions with the sole exception of the use of blank instead of ball cartridges. In all this work the state has had for two years the benefit of the guiding direction and in fact the personal supervision of Colonel Morrison. Now it has in Captain Collins, his pupil, a worthy successor in this work with the militia. In testimony of this respect and esteem for Colonel Morrison the officers of the Guard in 1911, through the Governor, presented him at the termination of his detail, with a beautiful silver loving cup.

In 1910, in reporting on the encampment work for that year, General Charles King said: "In my opinion the most progressive, the best in point of instruction, good order and military discipline it has ever known, and it has known many that were good."

The first Infantry in command of Colonel Joachim in 1910, put up a fine tour of duty at the U. S. Maneuver Camp near Sparta, Wis. General King said of it: "Beyond minor points I have nothing but commendation of the Wisconsin troops at maneuvers.'" The command was also commended by the Umpires. Certainly it acquitted itself in good style and showed that the work of the Army officers on it had by no means been spent in vain.

## Wisconsin Naval Militia.

Since rendering the last report there has been mustered into the Naval Militia a Division at Washburn, narned the 2nd Division, 1st Battalion, Wisconsin Naval Militia. The strength of the Naval Militia on June 30, 1912 as per returns of that date is as follows:

[^41]
## Wisconsin Naval Militia.

2nd Division, WashburnOfficers3
Petty Officers ..... 5
Seamen ..... 61
Total ..... 69
Aggregate: ..... 122

The state of instruction and discipline of the organization will best be evidenced by the following reports of Colonel Jno. G. Salsman, Adjutant General, who made the inspection for the years 1910 and 1911.

The Adjutant General,
June 27, 1910.
Madison, Wis.
Sir:-I have the honor to report that pursuant to Special Orders No. 64, Extract 1, A. G. O. June 14, 1910, I proceeded to Ashland, Wisconsin, to inspect the First Division, First Battalion, Wisconsin Naval Militia, stationed at that place.

At the date of inspection the strength was as follows:
First Battalion, Officers of the Staff............................
4
First Division Officers 4
Warrant Officers
Petty Officers ..................................................... 13
Seamen .................................................................. 62
Total, First Division ................................... $79 \quad 79$
Aggregate, Bn. Officers and 1st Division .............. 83
There were present at the inspection in complete uniform:
Officers of the 1st Battalion ........................................................................ 4
First Division, Officers ................................................................. 2
Petty Officers .............................................................. 10
Seamen ...................................................................... 33
Total
Two officers were absent from the state and could not be reached in time to be present at this inspection on account of the short notice. The enlisted men absent were absent with leave.

The Division was inspected, formed as a company of infantry, and were clothed in the white duck uniform recently furnished by the Navy Department. They made a very presentable appearance.

They are a fine body of men well selected and are fit for any duty that they may be called upon to perform.

## Wisconsin Naval Militia.

The state of discipline and instruction considering the short time elapsed since their muster into the service is most remarkable.

After inspection and drill by the Division, the signal squad of the Division gave an exhibition of signal work as used in the Navy; first by semaphore, then with the signal flags (wig-wag) and last the ardois light signals, for night signaling. The squad was very proficient in the work.

The Division has been furnished by the Navy Department with the following boats:

```
I steam cutter, 28 foot, complete.
2 cutters, }10\mathrm{ oars each, 28 foot, equipped with sails and riggings for two masts each.
```

No inspection was made of the instruction in boat drill but the men have had exercise and instruction in this branch of the work.

A camp of instruction of a week is planned some time during the month of August when the week will be devoted to boat drill.

I have the honor to recommend that when application is made by the Commanding Officer of the Naval Militia for the necessary tentage for this camp of instruction, that his request be granted.

I have the honor to append hereto a complete list of the equipment furnished the division of the Naval Militia at Ashland by the Navy Department of the United States.

Very respectfully,

Jno. G. Salsman,<br>Adjutant General.

The Adjutant General,
Madison, Wis.

Sept. 27, 1911.
Sir:-I have the honor to report that pursuant to the provisions of Special Orders No. 93, Extract 1, Sept. 7th, 1911, I proceeded to Ashland, Wisconsin, on September 24th, 1911 to inspect the Division of the Wisconsin Naval Militia stationed at that city.

There were present at the inspection :
Lieutenant Commanders . .................................... 1
Lieutenants ...................................................... 1
Lieutenants, Junior Grade .................................... 3
Ensigns . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2
Petty Officers . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 9
Seamen ............................................................. 28
Total
44
Absent with leave:
Lieutenants, Junior Grade ................................... 1
Petty Officers ..................................................... . . 1
Seamen ............................................................ 14

## Wisconsin Naval Militia.

```
Absent without leave:
    Seamen15
```

The inspection consisted in boat and signal work, the cutters under oars and then sail. The signals were given from the mast of the steam cutter to the two pulling cutters.

In spite of the high wind and resultant rough water, the work done was of a high character, and reflected credit on the training of the Division.

Since the inspection of last year the United States Navy Department has issued to the Division:
$1-4$ inch gun complete with Morris tube attachment.
1 Semaphore machine complete and equipped with electric lights.
A gun crew detachment went through the aiming and subcaliber firing of the 4 -inch gun, the results obtained were very satisfactory.

Since the passage of the appropriation for the support of the Naval Militia by the Legislature of 1911 there has been built under authority of the Governor:

1 boathouse for the housing of the boats supplied by the Navy Department, dimensions, 38 by 44 feet, with 22 feet height at front and 12 feet high at rear, roof of galvanized iron.

On account of the close proximity of other boathouses, housing gasoline power boats, would recommend that the sides of the boathouse be cased in corrugated iron. Otherwise the boathouse appears ample and convenient for any reasonable purpose.

Very respectfully,
Jno. G Salsman, Adjutant General.

By a special arrangement with the Commanding Officer of the U. S. S. Yantic, assigned to the Naval Militia of the state of Michigan, by the Navy Department, thirty-two officers, petty officers and seamen of the Wisconsin Naval Militia were enabled to become part of the crew, assigned to quarters on that ship during the cruise of ten days from Aug. 6th, 1912.

The nature of the work and instruction imparted is fully explained by the report of Lieutenant Commander Theo.- W. Werder, submitted herewith.

Wisconsin Naval Militia.

The Adjutant General,
Ashland, Wis., Aug. 19, 1911
Mauison, Wis.
Sir:-I have the honor to herewith give a report of the recent trip of the Wisconsin Naval Militia, on board the U. S. S. Yantic.

The Wisconsin Complement consisted of four officers, 7 petty officers and 21 ordinary seamen, and reported on board the U. S. S. Yantic, August 6th at 8:30 A. M. The Wisconsin complement did not work as an independent division, but was distributed among the other men throughout the ship. The object of this was to enable the men to assimilate knowledge more easily, and also to learn their duties on different stations of the ship. The officers were assigned as follows: Lieut. Commander Werder, in charge of the 4th deck division and supervisor of the quarter deck, also in charge of the steam launch; Lieut. Bitschenauer, in charge of the 3rd deck division and also in charge of the 2 nd Cutter; Lieut. Junior Grade Warner, as assistant signal officer; Ensign Johnson, in charge of the Forecastle and acting master at arms. In addition to the above, Lieut. Commander Werder was Senior Watch Officer of the 3rd section, and Lieut. Bitschenauer was Junior Watch Officer of the 4 th section.

Master at Arms Sorenson, 2nd Class, performed the regular duties of his rating, Coxswain T. Johnson, Yeoman F. Piniachowski, Electrician C. Utman, Yeoman J. B. McMullen, Jr., all performed the duties of their respective ratings. Gunners mate W. Frostenson was assigned to duty as coxswain of the 1st Cutter. Machinists mate H. B. Bennett, 2nd Class was assigned to duty with the engineers force, and was complimented on his work. Special mention must be given the signal squad for the creditable work performed.

The seamen adapted themselves to whatever work was assigned them in a very thorough manner, and went about their different duties with a fine spirit. Enough praise cannot be given to the officers and men, considering that this was their first opportunity to perform ships duties.

The duties performed were: Fire drills, Gun drills, Abandoning ship, Landing forces, Small boat work by signal, Getting under way, Mooring, and, in addition to this, the regular ship routine and watches.

All men stood watches, which consisted of Look out, Life Buoy watches and special duty.

The route of the cruise was from Ashland to Houghton, Mich., where we took the Governor of Michigan aboard, and proceeded to Munising, Mich. From therc to the Soo and to Port Fiuron, Mich., where we disembarked the Governor. From Port Huron, Mich., we proceeded to the Les Cheneaux Island, northeast of the Straits of Mackinac, and from there to the Soo, and then to Hancock, Mich.

## Wisconsin Naval Militia.

From Hancock we returned by rail via the Duluth, South Shore and Atlantic Ry., and Northwestern Ry., to our home station, arriving at 8:00 A. M. August 1sth. At all the above mentioned places shore liberty was given.

We were limited on this trip to 35 officers and men and those who were chosen to go were greatly benefited. The many advantages that were gained by these men, by being able to perform duties afloat, clearly demonstrates the fact that it is necessary for the Wisconsin Naval Militia to have a vessel assigned to them, and I strongly recommend that: steps be taken to secure a vessel for the use of the Wisconsin Naval Militia.

> Respectfully submitted,
> Theodore W. Werder,
> Lieut. Commander Commanding Offcer, Wisconsin Naval Militia.

Application has been made on the Navy Department for the assignment of a suitable Gunboat for the use of the Wisconsin Naval Militia, but to date of this report the Secretary of the Navy has not made an assignment to this state, but the promise is held out that such assignment is to be made in the near future.

The expenditures for the Wisconisn Naval Militia during the fiscal year beginning July 1st, 1911, (the first year during which an appropriation was available) were as follows:

Annual allowànce, lst Division ................... $\$ 700.00$
Pay during cruise ..................................... 828.78
Expense on U. S. Steamer ............................ 269.25
Transportation ........................................... 100.00
Boathouse ............................................... 1,000.00
Duluth So. Shore and Atlantic Ry. ................. 128.65
Surety Bonds ............................................ 7.50
Col. J. G. Salsman, Expense-Washington.......... 91.95
Lieut. Comm. T. W. Werder, Expense-Washington 115.10
N. Jenson, livery ........................................ . . 8.00

Allowance, 2nd Division .............................. 200.00
H. A. Davis, bond ......................................... 7.50
H. Bitschenauer ........................................... 4.04
\$3,460.77
In 1911 the legislature appropriated $\$ 4,000$ to the Naval Militia for travel, subsistence, pay and the maintenance of, Armories.

Small Arms Practice.

## Small Arms Firing.

The system of small arms firing and the allowances for that purpose have been continued about as they were described in the preceding biennial report. In 1910 the aggregate strength was 2890. Of this number, 399 qualified as Expert Riflemen, 155 as Sharpshooters and 1459 as Marksmen. The remainder were distributed among the first, second and fourthclass men. The average figure of merit was 99.54 which is very high and which is excelled or equalled by but few of the states. This indicates the interest taken by officers and men in this branch of the work and the efficiency of the direction and instruction given by the inspector of rifle practice, Colonel R. B. McCoy, assisted by the inspectors in each of the regiments. Judged by the figure of merit the 3rd Regiment stood first, the 1st Regiment second and 2nd Regiment third and the 10th Sep. Bn. fourth. The high companies were I, 1st; E, 2nd ; E, 1st.

In 1911 the aggregate of the force was 2981 and of this number 478 made Expert, 160 Sharpshooters, and 1471 Marksmen. Figure of merit 101.25. The order of the organizations was 3rd Regt., 1st, 2nd and 10th Sep. Bn., but the three regiments were very close together. The three highest companies were E, 1st ; I, 1st ; A, 3rd.

All officers and men armed with revolvers have taken part in pistol competition and of these 178 in 1910 qualified as Marksmen or better and in 1911, 187.

As a stimulus to participation in rifle and pistol practice, various prizes have been offered. In 1910 the gold watch offered by the officers of the Guard was won by Sergeant L. L. Bailey, Co. C, 3rd Inf., who also won the National Guard Trophy. The Badger medal was won by Sergeant Adolpii Patzer, Q. M. Sergeant, Co. D, 1st Inf. and the revolver presented by General Charles King for the best revolver score was won by 2nd Lieutenant Carl Penner, 1st Cav. In 1911 the watch and trophy were won by 2nd Lieutenant Gustave C. Schwandt, 2nd Inf., and the revolver by Captain Robert

## Small Arms Practice.

A. Merrill, 3rd Inf. The three National Defense trophies were won by Co. E, 1st ; Co. I, 1st, and Co. A; 3rd.

In 1910 and 1911 the Pfister Trophy annually awarded to the best all around company in the state was won by Co. E, 1st Inf.

The state team for the National Team Match, shot at Camp Perry, Ohio, under direction of the War Department, was composed as follows:
Leonard L. Bailey, Sergt. Co. "C," 3rd Inf.
Alex. E. Sheills, Corporal Co. "E," 1st Inf.
Gustave C. Schwandt, Corporal Co. "F," 2nd Inf.
Carl L. Behnken, Color Sergt., 3rd Inf.
Bert Funk, Private, Co. "E," 2nd Inf.
Ernest V. Cook, Private Troop "A," 1st Cav.
John Klinge, Private, Co. "B," 3rd Inf.
Walter Mueller, Q. M. Sergt. Co. "A," 2nd Inf.
Adolph Patzer, Q. M. Sergt. Co. "D," 1st lnf.
Forrest Nagler, Private Troop "A," 1st Cav.
Joseph H. Russéll, Private, Co. "L," 2nd Inf.
Geo. A. Crippen, 2nd Lieut. 2nd Inf.
Erwin Grundeman, Corporal Co. "G," 2nd Inf.
Albert W. Mueller, Sergt. Co. "M," '3rd Inf.
Anthony Lund, Q. M. Sergt. Co. " F ," 3rd Inf.
In 1911 the members of the state team are shown by the following list:

Gustave C. Schwandt, 2nd Lieut., 2nd Inf.
Carl L. Behnken, Color Sergt., 3rd Inf.
Leonard L. Bailey, Sergt., Co. "C," 3rd Inf.
Ernest V. Cook, Private Troop "A," 1st Cav.
George Organ, Color Sergt., 3rd Inf.
Lona Enslin, Private, Co. "C," 3rd Inf.
John Klinge, Bn. Sergt. Major, 3rd Inf.
Walter Zimmerman, Private Co. "C," 3rd Inf.
William J. Shiells, Corporal, Co. "E," 1st Inf.
Joseph A. Walters, Private, Co. "E," 1st Inf.
John B. Gay, Musician, Co. "F'," 3rd Inf.
Joseph H. Russell, Artificer, Co. "L," 2nd Inf.
Jacob A. Schneller, Color Sergeant, 2nd Inf.
Alex E. Shieils, Sergt., Co. "E," 1st Inf.
Leo J. Longdin, Private, Co. "E," 2nd Inf.
James R. Allen, Sergt., Co. "A," 1st Inf.

Small Arms Practice.

In both years places on the team were won by open competition on the range. The Wisconsin team for the great National team match has never been chosen by selection, but, on the contrary, by regular competition. At the regimental camps at the State Military Reservation, every man is required to fire the marksman's course. From the results, the high thirty-six men are selected and they compete for the regimental team of twelve men each. At the state competition, usually held two or three weeks before the National Match, these regimental teams compete, together with the Distinguished Markesmen of the state, and the men with the high scores are chosen to constitute the.state team. The ideal to be attained by rifle practice is a high average degree of efficiency throughout the rank and file and the use of the Na tional Competition as a reward for merit is thought will produce better guard results than will come from the selection of a team simply for the purpose of winning. Even though this manner of selection has been followed in the state its teams have consistently held a good place in the first division with the service teams. A revision of the firing regulations is expected with the advent of a new year. The general drift now is directed more toward improving the average man than towards further refinement in skill or expertism. It is hoped this movement will prevail for practical conditions demand as of primary importance the plan of instruction that will - best fit the soldier for battle condition.

As the ability to correctly estimate distances is an important adjunct in the efficiency of an officer an annual competition in this is held among all the officers, for which a diamond badge has been provided as a prize by Colonel Orlando Holway. In 1910 this was awarded tò Captain H. L. Boortz, 10th Sep. Bn., and in 1911 to 1st Lieut. A. R. Langholff, 1st Inf.

## Brevet Second Lieutenants.

The proper authorities of the University of Wisconsin having reported them as entitled to the honor, brevet second

## Award of Service Medals.

lieutenants commissions in state troops have been issued to the following:
In 1911: Harry D. Blake, Patrick H. Martin, Carl W. Esau, Charles J. Moritz, Karl M. Mann.

In 1912: Ralph R. Hibbard, Lewis K. Wilson, Adam Richmond, Arthur J. Barclay, Harry V. Meissner, Halbert I. Kadish.

Award of Service Medals.
The medal for fifteen years service provided for by Chapter 240, laws of 1903; has, during the biennial period since July 1st, 1910, been awarded to the following officers and men:

| Sergt. Leopold H. Sill.. | Co. B, 3rd Inft. |
| :---: | :---: |
| Edward G. Asmus.......... | Co. A, 1st Cav. 1st Inft. |
| Lt. G. E. Bacon | 2nd Inft. |
| Capt. G. D. Armitag | 1st Inft. |
| Sergt. L. L. Bailey | Co. C, 3rd Inft. |
| Lt. E. R. Wells |  |
| ri. R. L. Hall. | Co. M, 2nd Inft |
| Priv. Herbert Haskin | Co. M, 2nd Inft |
| Musc. Peter H. Hansen | Band, 2nd Inf |
| Capt. G. W. Garlock | 1st Inft. |
| Lt. M. J. Olson. | 1st Inf |
| Lt. Byron Beveridge | 2nd Inft. |
| Priv. F. J. Schneller | Co. I, 1st Inf |
| Major R. P. M. Rosman | 1st Inft. |
| Capt. Paul Ahnert. | 1st Inft. |
| Q. M. Sergt. Geo. J. Roellig. | Co. B, 3rd Inft |
| Lieut. John W. Simkey | 3rd Inft. |
| Priv. Carl J. Miller. | Co. F, 3rd Inft. |
| Priv. Frank G. Schul | Co. F, 3rd Inf |
| Capt. C. E. Butters |  |
| Lieut. F. E. Fitz. | Troop A, 1st Cav. |
| Sergt. J. J. Quill | oop A, 1st Cav. |

## Medical Department.

## Medical Department.

The changes in personnel, stations and organizations and the operations of the Medical and Hospital Corps are set forth in the appended report from the Chiet Surgeon, Colonel J. B. Edwards.

To the Adjutant General,
July 1, 1912.
Madison, Wis.
Sir:-
I have the honor to submit the following report for the last biennial period:

The changes in the Medical Corps since the last report have been the resignations of Captain J. F. Dumn, Captain W. J. Cronyn and 1st Lieutenant F. G. Connell. The vacancies were filled by the commissioning of Ur. Hugo F. Mehl and Dr. Geo. W. Neilson of the Hospital Corps and the transfer of 1st Licutenant L. A. Moore, from the line of the 1st Infantry to the Medical Corps.

The detachments of the Hospital Corps have been consolidated at three points instead of four, to-wit: Milwaukee, Appleton and Viroqua, the Milwaukee detachment consisting of 16 enlisted men, 12 to serve with the 1st Iniantry and two each with Troop $\mathbf{A}$ and Battery A. The change has, in my opinion, been beneficial, but not of as much benefit as would result in the concentration of all sanitary troops at one point.

At the suggestion of Professor M. V. Ravenel of the Hygienic Laboratory of the University of Wisconsin, a large majority of the officers and enlisted men of the Wisconsin National Guard have been vaccinated with antityphoid vaccine. The exact number cannot be given as the full reports are not yet in. This vaccination is not obligatory on enlistment. The offer of the University of Wisconsin to furnish the vaccine free and the free services of the surgeons and medical examiners of the Guard made it possible to give the members of the Guard this great benefit. An exact record of all men vaccinated will be filed in The Adjutant Generals Office and I am informed by the officers of the Medical Corps of the United States Army that this record when completed will be accepted by the War Department should our troops be called into active service by the President.

A reserve supply of medical and hospital stores has, on my recommendation, been procured by the Quartermaster, Major C. R. Williams, since my last report.

## Medical Department.

Major P. C. Fauntleroy, Medical Corps, U. S. A., was detailed to both annual encampments since my last report. His service there and instruction received by me through personal correspondence with him has been of great benefit to the department.

Major F. M. Hartsock, Medical Corps, U. S. A.., was detailed as instructor for the Medical Officers at the school held at Camp Douglas this year.

> Very respectfully, J. B. Edwards, Colonel and Surgeon General.

Synorsis of General Orders and Circulars.
General Orders No. 1. Jan. 3, 1910. Publishes list of men dishonorably discharged during preceding six months.
General Orders No. 2. Jan. 4, 1910. . Publishes scheme of instruction.
General Orders No. 3. Jan. 11, 1910. Relative to target practice.
General Orders, No. 4. Jan. 25, 1910. Fixes annual clothing allowance.
General Orders No. 5. Jan. 26, 1910. Announces inspection for the War, Deparment to be made by Captain Charles King, U. S. Army retired.
General Orders No. 6. Feb. 17, 1910. Fixing allowance for company range expenses.
General Orders No. 7. Mar 4, 1910. Organizes school for officers at Camp Douglas, May 24th to 26th, 1910.
General Orders No. 8. April 26, 1910. Announces dates and regulations for camps during July 1910.
General Orders No. 9. April 27, 1910. Announces instructions for camps of 1910.
General Orders No. 10. June 15, 1910. Announces dates and regulations for state rifle competition.
General Orders No. 11. July 1, 1910. Publishes list of men dishonorably discharged during the preceding six months.
General Orders No. 12. July 25, 1910. Announces death of Colonel I. Watson Stephenson, A. i. C.

General Orders No. 13. Sept. 15, 1910. Publishes 1st. Report of annual inspection. 2nd. Report of Small Arms firing. 3rd. Report of state teams and prizes. 4th. Report of pistol qualifications. 5th. Report of rifle qualifications. 6th. Announces winner of Pfister Trophy.
General Orders No, 14. Nov. 2, 1910. Amends G. O. No. 4, A. G. O., Jan. 25, 1910.
General Orders No. 15. Dec. 20, 1910. Attaches 10th S. B. Inf. to 3rd Inf. for purposes of administration and instruction.

## Medical Department.

General Orders No. 16. Dec. 24, 1910. Publishes figure of merit in small arms firing.
General Orders No. 17. Dec. 24, 1910. Publishes itinerary for Captain F. M. Caldwell, 12 th Cav. U. S. A. for company conferences.
Circular No. 1. Feb. 7, 1910. Questions on Military Map Reading prepared by the Division of Militia Affairs.
Circular No. 2. May 15, 1910. Publishes regulations relative to care of leather equipment.
Circular Nó. 3. June 15, 1910. Explains system of marking at inspections.
Circular No. 4. Oct. 12, 1910. Comments on tour of duty for 1910 by General Charles King, inspecting officer.
General Orders No. 1. Jan. 3, 1911. Publishes list of men aishonorably discharged during preceding six months.
General Orders No. 2. Jan. 4, 1911. 1st. Publishes scheme of instruction.
2nd. Outline for rifle practice.
3rd. Ammunition allowance.
General Orders No. 3. Jan. 5, 1911. Publishes scheme of instruction.
General Orders No. 4. Jan. 6, 1911. Relative to equipment and rifle practice.
General Orders No. 5. Jan. 7, 1911. Regulations relative to clothing.
General Orders No. 6. Jan. 12, 1911. Regulations for the uniform.
General Orders No. 7. Jan. 25, 1911. Tour of instruction by General Charles King.
General Orders No. 8. Jan. 26, 1911. Announces dates for the inspections of the W. N. G.
General Orders No. 9. Feb. 15, 1911. Publishes system of inspection markings.
General Orders No. 10. May 11, 1911. Publishes call for officers school, June 5th to 7th, 1911.
General Orders No. 11. May 20, 1911. Announces dates and regulation for camps of 1911.
General Orders No. 12. May 20, 1911. Announces instructions relá tive to camps of 1911.
General Orders No. 13. July 1, 1911. Announces list of men dishonorably discharged during preceding six months.
General Orders No. 14. July 6, 1911. Announces dates and regulations for riffe camp.
General Orders No. 15. July 25, 1911. Publishes acts of the legislature relative to the W. N. G.
General Orders No. 16. Sept. 1., 1911. Publishes 1st. Report of small arms firing. 2nd. Results ior firing for positions on team.

## Medical Department.

3rd. Report of pistol qualifications.
4th. Report of rifle qualifications.
General Orders No. 17. Oct. 10, 1911. Publishes course of instruction. General Orders No. 18. Nov. 8, 1911. Publishes tour of Captain E. T.

Collins, 6th Inf. U. S. A., for tantical instruction.
General Orders No. 19. Nov. 7, 1911. Recruiting system for war.
General Orders No. 20. Nov. 22, 1911. Figure of merit W. N. G.
General Orders No. 21. Dec. 20, 1911. Mahual of examination of officers.
General Orders No. 22. Dec. 31, 1911.
1st. Report of annual inspection.
2nd. Award of Pfister Trophy.
3rd. Award of National Defense Trophies.
Circular No. 1. Nov. 1, 1911. Letter from industrial commission relative to Workmen's Compensation Act.
Circular No. 2. Nov. 1, 1911. Synopsis of changes in drill regulations.

## Financial Statement.

## Financial Statement.

Fiscal years July 1, 1910, to June 30, 1912.

| July 1, 1910, | July 1, 1911, |
| :---: | :---: |
| to | to |
| June 30, 1911. | June 30, 1912. |

Rent of Armories
Allowances to Company Commanders
Allowances to Battalion Commanders
Allowan'ces to Regimental Adjutants
Allowances to Regimental Headquarters
Allowances to Hospital Corps
Clothing allowances
Extra horse hire, troop and battery
C. R. Boardman, The Adjutant General, salary
C. R. Boardman, Expenses
J. G. Salsman, Adjutant General, salary.
J. G. Salsman, Expenses

Salaries, National Guard Department
Salaries, Pension Department
Pay of troops in camp.
Troop A, 1st Cavalry, Care and feed of horses
Battery A, 1st Field Artillery, Care and feed of horses
Quartermaster General's Department
Medical Department
Telegraph and telephone
Express and freight
Printing
Postage
Light Horse Squadron Armory Association.
Pay of troops, Black River Falls
Naval Militia
C. F. Lamb, premium bond

Louis Esser Co., Medals
Tapping and Riedeburg, bond
Dues, Interstate National Guard Association . . . . . . . . . . . . . ...................... . .
Reports, Interstate National Guard Associa-
tion . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .

Pay of Company Armorers
Army Sergeants (lodgings)
Army Officers (expense)
Books, Secretary Army Service School....
Captain J. A., Moss, Books.
Army and Navy .Tournal
General Charles King, Inspection
R. B. McCoy, Expenses 2 years
$\$ 23,20000 \quad \$ 23,20000$

| 2,10000 | 2,10000 |
| :--- | ---: |

$50000 \quad 50000$
$15000 \quad 15000$
$30000 \quad 30000$
$57000 \quad 57000$
$14,20500 \quad 13,94500$
$3,00000 \quad 3,00000$
$2,00000 \quad 2,00000$
9587
9975
$1,80000 \quad 1,80000$
$15090 \quad 19364$
$2,40000 \quad 2,40000$
$2,31000 \quad 2,32947$
$52,572 \quad 10 \quad 52,265 \quad 16$
$\begin{array}{ll}3,50000 & 6,00000 \\ 3,50000 & 3,50000\end{array}$
$\begin{array}{rrrr}23,253 & 09 & 19,582 & 82\end{array}$
$97169 \quad 1,04646$
$10454 \quad 12122$
$11705 \quad 6004$
$54210 \quad 72819$
$61400 \quad 72700$
$2,00000 \quad 2,00000$
3,139 86
3,460 77
10500
9600
19250
3000


Pension Division.

## Pension Division.

During this biennial period there have been filed with this office 2,568 claims for pensions.
Of this number there were allowed by the pension commissioner $. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .1,110$
Rejected .................................................................... 52
Claims filed without title........................................... 40
Claimants died beîore adjudication of claim.................. 14
Claims abandoned by declarants................................ 4
Leaving the number of claims now pending before the com-
sion at ........................................................... 1,348
This large number of claims is accounted for by the recent legislation of the Congress in passing a new pension law, Act of May 11th, 1912, a service and age pension act combined, the rate of pension being dependent on the age of the claimant and the time spent in the service.

About 3500 letters and circulars relative to pension matters have been sent, and the business of the office has been kept fairly current, in spite of the large number of claims submitted after the passage of the Act of May 11th, 1912.

Since the last biennial report, Charles H. Russell, the chief clerk of the pension division, a veteran of the 1st Wisconsin Volunteer Cavalry, Civil War, has passed away. For many years he transacted the pension business of the state in a faithful and efficient manner and rendered to Wisconsin soldiers skilled service in all pension matters. He has been succeeded by M. J. Rawson, a veteran of the 21st Regt. Wisconsin Infantry Volunteers, Civil War.

## Volunteer Service Division.

The work of this division continues much the same as during previous periods reported upon. The recent legislation by the Congress increasing the pensions to nearly all the soldiers of the Civil War, has caused an increased demand for certificates of service, to substantiate claims for pensions. About 2,036 certificates of service, statements of service and letters on record subjects have been written since the last report.

Miscellaneous.

## Miscellaneous.

On July 18th, 1910, occurred the death of Colonel Isaac Watson Stephenson, who, at the time of his death, was an aide-de-camp on the staff of the Governor.

In 1910 the 10th Sep. Bn. was for all purposes of administration, attached to the 3rd Infantry. The improvement in the work of the battalion since that time proves the efficiency of the order.

Pursuant to a change provided for by the War Department, the reënlistment period in the Wisconsin National Guard has been made three years instead of one. The original enlistment still starts at three years, but at'the expiration of this term, if a man desires to reënlist, he must now do so for another three years.

The monthly bulletin system of giving information to all officers of the Guard of the transactions each 30 days, that they should know about, was adopted in 1910. Mimeographed copies are used and the execution of the plan involves but little expense.

Pursuant to the request of the Secretary of War, a recruiting system, in the event of war, has been adopted for Wiscon$\sin$. By the provisions of this plan the first Lieutenant of each company is made its recruiting officer for war. A supply of all blanks necessary for enlistments is to be kept constantly on hand and each recruiting officer must familiarize himself with all the laws bearing on recruiting. When an organization called into the service for war, has not the prescribed strength, the recruiting officer must remain at his station, procure the needed number of recruits and forward them, joining his company before it leaves the state. Each regiment as it leaves the state for war will establish a recruiting party to recruit for it during the war. Camp Douglas has been designated as the mobilization point for this state and all recruits will first go there, where they will be physcally examined, fully armed and equipped and instructed as far as time will permit before they go to the front.

## Miscellaneous.

During the session of the legislature in 1911 an act for the relief of employes throughout the state, including those in the service of the state, was adopted. It is known as the "Workmen's Compensation Act', and is designed to cover compensation for injuries incurred in the course of employment. The question as to whether or not members of the Wisconsin National Guard came under the provisions of the act has been taken up with the Industrial Commission. In the reply to the communication on the subject the commission says: "No good reason seems to exist why members of the National Guard, who may be called into the service of the state in a dangerous occupation should not be compensated as other employes. Their employment is not limited to mere military service, but they may be called into the service in the event of public disaster resulting from flood, conflagration or tornado. This question is of sufficient importance, however, that in the opinion of the Commission, when an actual case comes up for consideration, it should be submitted for the advice of the Attorney General, and, if he deems it proper or néeessary, submitted to the court for adjudication."

Since the last report, Co. E; 2nd Inf., stationed at Fond du Lac has torn down and replaced its frame armory with a very fine armory of brick and cement construction. It cost approximately $\$ 35,000$. The company had a building fund established some years ago which was agumented by liberal contributions by citizens. These funds with a bond issue of $\$ 15,-$ 000 made the project possible. The armory is complete in every respect and is so designed that a sufficient income to pay off the indebtedness can be derived from it without the rental interfering with the regular military work. The building project is a memorable piece of work sucessfully carried out under rather adverse conditions. That it has been successful is due to the energy and good judgment, not only of the company officers and men but also to the assistance of Major Chas. J. Hunter, retired, and Captain E. T. Markle, paymaster.

The pay bill for the militia is still pending in Congress. The determined stand of the Secretary of War and Chief of

## Miscellaneous.

Staff of the Army has resulted in a bill that appears adapted to obtaining the best results out of the pay proposition both for the militia and the United States. There are prospects, at this writing, that the measure will eventually be enacted into law.

In conclusion an expression of appreciation from myself for the consideration shown by you, for the efficient work of the departmental forces and for the good will and loyal coöperation of the officers and men of the Guard, seems not ou't of place.

$$
\begin{aligned}
& \text { Very respectfully, } \\
& \text { C. R. Boardman, } \\
& \text { The Adjutant General. }
\end{aligned}
$$

The Quartermaster's, Subsistence and Ordnance Departments.

> State of Wisconsin, Quartermaster's and Ordnance Depot, $\cdot$ Camp Douglas, July 1st, 1912.

## The Adjutant General,

 Madison, Wisconsin.Sir: In compliance with the law, I have the honor to submit the following report of the Quartermaster's, Subsistence and Ordnance Departments of the Wisconsin National Guard for the two years ending June 30th, 1912.

## Personnel.

One change was made in the commissioned personnel of these departments during the year 1911. Captain E. T. Markle, commissary, being transferred to fill a vacancy in the Pay Department. The vacancy thus created was filled by the transfer of Captain Chas. Green from the Second Infantry.

Changes have been made in the positions of civilian employees by the transfer of M. P. Curtius (Captain, W. N. G., retired, from storekeeper to chief clerk to fill the vacancy caused by the resignation of M. M. Wells.

The following order authorized the appointment of three noncommissioned officers to fill positions held by civilians:

State of Wisconsin<br>The Adjutant General's Office,<br>Madison, December 20, 1911.

## Special Orders

No. 114.

## Extract 3

Pursuant to the provisions of Section 1, Chapter 167 of the Laws of 1907 and Section 9, Chapter 228, Laws of 1901, the following will constitute the non-commissioned staff of the Ordnance and Quartermaster's Departments.-One Post Ordnance Sergeant at $\$ 75.00$ per month; two Post Quartermaster Sergeants at $\$ 60.00$ per month each.

These Sergeants when warranted will report to the Chief of Ordnance and Quartermaster General at Camp Douglas, Wisconsin, who will as-

The Quartermaster's, Subsistence and Ordnance Departments.
sign them to such special service in connection with the work of his departments as he may deem necessary and proper.

By Command of the Governor:
C. R. Boardman, The Adjutant General, Chief of Staff.
Official:
(Signed) Jno. G. Salsman, Adjutant General.
Under authority of this order, Leo Wilkinson was made Post Ordnance Sergeant and E. S. Burroughs and E. V. Luck Post Quartermaster Sergeants. Sergeant Burroughs has been in the employ of the Quartermaster's Department since May 1st, 1895, and Sergeant Wilkinson since June 1st, 1902. Sergeant Luck, formerly corporal Company D, Third Infantry, was appointed storekeeper March 1st, 1911, vice M. P. Curtius appointed chief clerk.

As soon as the bill now pending before Congress providing for the reorganization of the Quartermaster's, Subsistence and Pay Departments of the Army, becomes a law, it will be necessary that corresponding change be made in similar departments of this State. When this change becomes necessary, it is recommended that the officers of the new Quartermaster's Corps consist of the Chief of the Corps, one Major and one Captain, the Captain being detailed to active duty only during periods of encampments and tours of duty in the field. This number of commissioned officers, with the employment of an additional clerk during encampments, will be sufficient for the proper and efficient administration of the Corps. If additional officers are required during times of mobilization or encampments, details should be made from the line in the manner now required in the regular service, thus permitting the education of a number of line officers in duties pertaining to supply.

## Quartermaster's Department.

General Orders No. 5, published from your office under date of January 9 th, 1911, which announced the clothing and annual money allowance therefor of enlisted men of the service, permitted this department to inaugurate during the year 1911, a cost
system whereby it is now possible to keep a record of-first: The value of all clothing, equipage, subsistence, medical and engineer property issued to each organization. Second: The value of these articles acted upon by a surveying officer and dropped from returns of accountable officers. Third: The value of property lost or destroyed and expended in the public service.

During the fiscal year ending June 30th, 1912, the value of property issued by the Quartermaster's Department, was as follows:

| Clothing and equ | \$36,850.49 |
| :---: | :---: |
| Medical property | 37.28 |
| Engineer property | 10.60 |
| Signal Corps propert | 390.0 |

During the two years covered by this report, 949 requisitions were received at the office of the Quartermaster General and during this period, 2432 transfers or issues of property were made. The shipments of property issued were made on bills of lading issued by this department; 1186 were issued during the year 1911 and 937 during the year 1912.

## Clothing and Equipage.

The enlisted men of all organizations are provided with the artic'es of clothing specified by General Orders No. 5, 1911. Shoes, russet, marching, were issued during the fall of 1910 and the band, non-commissioned staff and companies of the Second and Third Infantry were provided with the olive drab overcoat during the past fiscal year.

Changes have recently been made by the War Department in practically every article of the uniform. The cotton, olive drab uniform has been adopted in lieu of the cotton khaki. New pattern service hats, leggins, and ponchos, have been adopted and changes have been made in the pattern of the service woolen coat, dress and service caps. Clothing of the new pattern will be obtained from the Quartermaster's Department of the Army as soon as available for issue and the stock on hand at the Quartermaster's Depot is exhausted. The supply of rubber ponchos was exhausted January 1st, 1912, and 400 of the new pattern

The Quartermaster's, Subsistence and Ordnance Departments.
were obtained from the Quartermaster's Department of the Army and issues of this pattern are being made to fill requisitions.

Funds will be available during the fiscal year ending June 30, 1913, for acquiring olive drab overcoats and blankets for issue to the First Infantry. Olive drab blankets should be obtained for issue to the Second and Third Infantry and Tenth Battalion as soon as allowances will permit. Troop A, 1st Cavalry, and Battery A, 1st.Field Artillery, and detachments of the hospital corps were provided with the olive drab blanket and overcoat during 1909.

Officers of the Army detailed by the War Department to inspect the troops of this State, have on several occasions criticized the condition and fit of clothing worn by enlisted men. Commanding officers of organizations are responsible for this criticism for the clothing allowances and supply on hand at the Quartermaster's Depot is more than ample for the ordinary requirements of the service. The majority of company commanders do not follow the regulations and orders published regarding the drawing and fitting of the uniform to enlisted men. The practice of drawing large quantities of uniforms on requisitions two or three times a year, usually before the annual inspection and encampment, should be absolutely prohibited by orders. Clothing should be called for only when required for the immediate issue to the soldier, the sizes of the different articles wanted being determined by careful measurement and wherever possible, an actual try on of the garment. A record should be kept in each organization of the size of each item worn by the soldier and if properly kept, it would be an easy matter for company commanders to prepare requisitions for clothing required to replace articles worn out and lost or destroyed. The sizes of the different articles of the uniform are ample and will insure a good reasonable fit for the soldier if regulations and orders regarding the drawing and fitting the uniform are followed by the organization commander. Fully $60 \%$ of requisitions received at this office show that the sizes of clothing called for are guessed at.

A new pattern field desk and shelter tent have been adopted

The Quartermaster's, Subsistence and $\bar{O}$ rdnance Departments.
by the War Department and these articles should be obtained and issued to all organizations when ready for issue by the Quartermaster's Department of the Army.

Bugles with slings, required by Army regulations for musicians of companies, and whistles for each organization, will be obtained and issued before the next inspection to be made by an officer detailed by the War Department.

Band instruments and surplus kit bags have been secured from the Quartermaster's Department of the Army ; the instruments issued to the Bands of the First and Second Infantry and surplus kit bags to all organizations of the service. Canvas basins; pails, folding; camp chairs, folding; canvas cots; lockers; bedding rolls for officers and field glasses were purchased during the month of May 1912, and issued to officers of the Second and Third Infantry, and in addition to these items, folding tables were supplied to field officers and company commanders. These articles, with the exception of the locker, form a part of the personal field equipment of officers and issue should be made as soon as possible to officers of the First Infantry and Tenth Battalion, Troop A and Battery A.

Two hundred pyramidal tents have been obtained on requisition and with the addition of 30 and 50 wall tents, complete, there will be on hand a sufficient amount of tentage for all organizations in accordance with tables of allowances published by the War Department.

All tentage, including shelter tents in possession of troops, rendered unserviceable, have been repaired at the Quartermaster's Depot and placed in serviceable condition. During the two years 875 shelter tents have been returned for repair. The small amount of tentage submitted annually for the action of a surveying officer is due to the careful attention given this class of work.

Twenty-two escort wagons and 28 double sets of wheel and lead harness were received during June of this year from the Quartermaster's Department of the Army. The balance of wagons and harnesses required for the field trains of all organizations should be secured as soon as suitable buildings can be provided for their storage on the Military Reservation.

The Quartermaster's, Subsistence and Ordnance Departments.

## Company Armorers.

General Orders No. 10, dated June 18, 1909, authorized the appointment of an armorer by the commanding officer of each company of Infantry, Troop A, 1st CavaIry, and Battery A, 1st Field Artillery, at a salary of $\$ 25.00$ per month. The duties of the armorers as defined by orders, were to care for all property issued to the organization, assist in preparing requisitions and returns, perform the usual duties of janitor and assist the company commander in every reasonable way. Payment for this service is made on pay roll of this department, report of services with a certificate that armorer has performed his duties in a satisfactory manner, being required from each company commander. The armorer of a number of companies is omitted each month from pay roll owing to the failure of company commanders to forward their reports of services.

It was expected by officers who recommended the enactment of the law authorizing the appointment and pay of armorers, that this assistance to the company commander would greatly relieve this officer of a vast amount of work which devolved upon him in the care and accounting for public property, and that the losses of property due to neglect and improper care, would be reduced to the minimum.

That these expectations have not been realized is evident from reports of an officer of this department detailed to inspect the property of a number of organizations during the past two years. These reports as well as the property losses clearly indicate that practically little service has been rendered by armorers of ten companies in return for wages received. In a number of organizations armorers have discharged their duties in a very satisfactory manner as shown by the excellent condition and small losses of property. The same results could be obtained in all companies if the right person was appointed to the position and the work properly supervised by company officers.

The failure to obtain efficient service in all companies is attributed to the following:

1st. Failure on part of organization commanders to appoint the proper person to the position.

T'le Quartermaster's, Subsistence and Ordnance Departments.

2nd. Failure of company commanders to make frequent inspections of property, thereby ascertaining whether or not the armorer has properly performed his duties.

3rd: Frequent changes made in the position in a number of companies.

4th: Appointment of persons who are not enlisted men.
5 th: Lack of a proper system of inspection by officers competent to judge whether or not all classes of property are properly cared for.

The following recommendations are suggested:
1st: That the position of company armorer, as now authorized, be abolished.

2nd: That the quartermaster sergeant of each company of infantry, troop of cavalry and battery of field artillery, be paid $\$ 25.00$ per month; the acting quartermaster sergeant of each band $\$ 15.00$ per month and of each detachment of hospital corps $\$ 10.00$ per month.

3rd: That the Quartermaster's Department be authorized to publish regulations defining the duties to be performed by the quartermaster sergeants and each enlisted man receiving pay for the care of property and to require, wherever practicable, that these soldiers report at the Quartermaster's Depot for instruction in paper work and in the care and repair of property.

4th: That an inspection of property of each organization be made at least once a year by an officer of the Quartermaster's Department or by some officer of the line of sufficient experience to enable him to determine the exact condition of the property inspected.

## Military Reservation.

The amendment to the Military Law as enacted by the last Legislature, permitted the expenditure of money for the care and improvement of the Military Reservation, in addition to the $\$ 3,000$ authorized annually for the care of this property.

The following improvements were made during the year ending June 30, 1911:

The Quartermaster's, Subsistence and Ordnance Departments. ,

Kitchen of the officers' mess enlarged and provided with a refrigerator of sufficient size for the storage of all perishable articles required during schools and competitions.

The stone retaining wall of Pit 3 extended 76 feet and the entire wall provided with a concrete cap for the better protection of target tenders. A cement walk and concrete retaining wall for target positions were built the entire length of the pit. This pit was equipped with 56 Aiken Pony targets, the rear carriage of which was modified so as to carry the $B$ target, with a saving of $\$ 938$ in the cost as compared with the cost of the steel target designed for carrying the larger target. In addition to this sum, $\$ 275$ was saved in the expense of the retaining wall constructed in the target pit.

The addition and rearrangement of targets on Range 3 necessitated the reconstruction of the telephone system for this range. All wires were placed underground and each firing line and pit provided with five telephones. The center telephones both pit and range, are connected with the Reservation exchange.

A concrete cap was constructed on the retaining wall of Pit 2 as a protection to the wall and target tenders.

The total cost of these improvements, including the expense of care and policing grounds and minor repairs to buildings, amounted to $\$ 4,796.70$.

During the year, 40 acres of land east of the bluffs in the rear of the target butts, was purchased from C. H. Hoton of Camp Douglas, Wisconsin, at $\$ 10.00$ per acre. There is an annual drainage tax of $\$ 33.19$ on this land which must be paid by the State.

During the fiscal year just passed, a new ice house west of the commissary depot was erected at a cost of $\$ 527.00$.

A cement sidewalk was laid from the Quartermaster's Depot to the gates at the main entrance and a brick walk was built from the east end of the Staff building to the Governor's cottage.

The horse and hay shed were re-roofed with rubberoid and the roof of the commissary, guard house, bath buildings and pump station, repainted.

The camp site at the southeast corner of the Reservation was
enlarged by extending the water system and the number of vaults for latrines so as to accommodate a regiment of infantry.

The total cost of these improvements, including care of grounds, was $\$ 4,330.53$.

A portable cover for the pit of camp latrines was designed by the department and two were constructed and used for the officers' sink during the last camp. This cover was pronounced as a great improvement over the tent covers by all medical officers, especially those of the Army on duty with the State, and as it can be constructed at about the same cost as the tents which are usually rendered unserviceable after two or three years use, it is recommended that all camp latrines be provided with this portable cover.

Attention is respectfully invited to recommendation made in former reports regarding stables for horses and facilities for the storage and care of public property pertaining to the Quartermaster's and Ordnance Department. These recommendations are renewed.

The shed now used as a stable for horses of the department is a disgrace and the construction of a suitable building of sufficient size to accommodate ten horses with harnesses, buggies, etc., should be authorized at once.

All available buildings on the Reservation are now being used for the storage of some class of property. These buildings are widely scattered and the expense of transferring the contents from one to another during schools and encampments is becoming very heavy. The storage of valuable property in these scattered buildings has greatly increased the work of the departments in accountability and preservation and protection of contents against theft and fire.

A new roof is required on the Ordnance and Quartermaster's Depot and the wood porch of this building should be replaced with one of concrete. The roof of the range house is unserviceable and the wood porch on three sides is so badly decayed as to be unsafe and should be replaced with one of cement. A cement porch for this building is considered necessary as a matter of fire protection.

The Quartermaster's, Subsistence and Ordnance Departments.

It will be necessary in the near future to provide a shed for wagons required for the field train of troops. When the new stables recommended are constructed, the shed now being used for the shelter of horses and storage of wagons and implements, can be arranged so as to provide for 72 wagons.

## Encampments.

In the preparation of the Military Reservation for the encampment of troops, only such work has been performed by the Quarttermaster's Department as could not be done by the troops, owing to the limited time devoted to the tour of duty. Tent floors, garbage cans, ice chests and wood tables, have been placed at the head of the company streets and tables and flies for the assembly tent erected at the foot of each street. The regimental quartermasters and commissaries being required by orders to take station on the Reservation at least twenty-four hours in advance of troops, storage tents required for the storage of Quartermaster's supplies, and Subsistence property are erected by this department. The balance of the work in preparing camps has been performed by the troops.

The manner in which the regimental quartermasters have performed their duties, show some advancement over former years but there are many opportunities for improvement, especially in two regiments.

The commissaries of regiments, with the exception of one, have performed their duties in a satisfactory manner.

The property required by organizations during encampments is issued on requisition to the quartermaster of the regiment, who, in turn, issues to companies and organization commanders on memorandum receipt. This property is collected by the quartermaster at the close of the tour 'of duty and transferred by him to the quartermaster of the succeeding regiment or turned into the Quartermaster's Depot.

It is the practice of commanding officers of a number of organizations to await their arrival at camp before drawing needed articles of clothing, equipage, etc. required for their commands. The uniforms, arms, equipments, etc. of each command should be
complete at all times and there is no excuse for companies drawing quantities of supplies during encampments, especially as no enlistments are permitted after the first of June of each year.

The orders published limiting the amount of baggage to be transported by troops are not followed and a vast amount of unnecessary property is annually carried to and from the encampments. A number of companies carry ice chests, although a chest for the storage of perishable articles of the ration is sujplied by the Quartermaster's Department. Nearly every organization has in its baggage, chests which are so large and heavy that it is almost impossible to unload them from the baggage cars of troop trains, and require from six to eight men to handle them in loading and unloading on wagons. A great many extra cooking utensils are carried, although the utensils issued with the field range, with the possible addition of one or two articles, have been found by the Army to be sufficient for the proper preparation of food for troops in the field. All companies should be provided by the Quartermaster's Department with a sufficient number of canvas cases to be used in transporting overcoats at times of encampments and maneuvers.

The services rendered by the railroad companies awarded the business of transporting troops to and from camps, have been fairly satisfactory. Troop trains have not always arrived at Camp Douglas on schedule time, a number of the delays being charged to the heavy traffic on days of travel. Several complaints have been made regarding the class of equipment furnished by the railroad companies. These have been investigated and found, with one or two exceptions, unwarranted. The railroad officials, claim that it is almost impossible to provide suitable coaches for the transportation of troops on Saturdays, on which day during the summer there is a great, demand for this class of equipment.

## Subsistence Dep.artment.

Subsistence stores required for issue tó troops during encampments have been purchased on specifications of this department and by inviting proposals from dealers at La Crosse, Milwaukee and Chicago.

The Quartermaster's, Subsistence and Ordnance Departments.

The components of the garrison ration are issued by the department to regimental commissaries on their approved requisitions and commissaries make sales to organizations in the manner prescribed by General Orders No. 57, Headquarters of the Army, 1910. This method of handling rations has been found to be satisfactory and no complaints have been received as to the quality of articles supplied. There is still a considerable waste of articles of food in a number of organizations, due to inexperienced and inefficient cooks and lack of proper supervision on the part of officers.

A number of companies have received credit for an excessive number of rations, owing to the practice of making out the first Return for the maximum instead of the strength of the command actually present for duty and the failure to make proper deductions on the Return for the second issue period for the rations overdrawn. This matter should receive the careful attention of regimental commanders and the ration Return for the second issue period of the encampment should not be approved until all additions and deductions have been verified with the morning reports.

The new pattern field range obtained on requisition from the Subsistence Department of the Army has been issued to all organizations. The value of subsistence property issued by this department during the past year was $\$ 698.44$.

## Ordnance Department.

The allowance of ordnance stores required each year by organizations to replace articles worn out and lost or destroyed, spare parts for making repairs, small arms ammunition for target practice, target materials and supplies, and supplies for the cleaning and preservation of all ordnance stores, was placed on a monetary basis by General Orders Nos. 2 and 4, dated January 6,1911 . The cost of all ordnance stores issued, with the exception of small arms ammunition, is charged, on the books of this office against the equipment allowance fixed for the organization by General Orders No. 4 and ammunition issued is charged against the allowance authorized by General Orders No. 2.

The Quartermaster's, Subsistence and Ordnance Departments.

During the two years, 1094 requisitions have been received for ordnance stores and 1779 transfers of ordnance property have been made.

The value of empty cartridge cases for the rifle and revolver ammunition, cartridge clips, bandoleers and packing boxes with metal lining returned to the Ordnance Depot, is credited in accordance with orders to the ammunition allowance of organizations. All empty cartridge cases retůrned are decapped and washed by the department, packed and shipped together with cartridge clips, bandoleers and packing boxes, to an arsenal of the Ordnance Department of the Army.

During the year 1911, 85,884 ball cartridges, model of 1906, valued at $\$ 2,499.22$ have been received for components of ammunition returned and during 1912, 95,820 ball cartridges, model of 1906 , valued at $\$ 2,788.36$, were received.

During the two years ending June 30, 1912, the following additional articles have been issued to infantry companies and to the troop of cavalry, with the exception of the Colt's revolver, revolver cartridge belt and holster:

1 Maxim silencer,
1 Colt's revolver, cal..38, for 1st sergeant,
1 Chest, bacon, model 1910,
1 Chest, condiment, model 1910,
1 Cartridge box, revolver, cal..38, for 1st sergeant,
1 Revolver cartridge belt, cal..38, for 1st sergeant,
1 Revolver holster, cal..38, for 1st sergeant,
1 Winder's miniature skirmish butt, complete,
1 Recording rifle rod outfit,
2 Belgian aiming devices.
The issue of the Aiken Standard target for the equipment of company ranges has continued during the two years and, with the exception of companies "D" and "I'", 3rd Infantry, and "D" 10th Battalion, the ranges of all organizations are now equipped with this modern target carrier.

The value of all classes of ordnance property, excepting small arms ammunition, issued during the year ending June 30, 1912, was $\$ 7,356.19$, and the value of small arms ammunition $\$ 18$, 628.55 .

The Quartermaster's, Subsistence and Ordnance Departments.

The present equipment of infantry troops, the model 1905 bayonet scabbard, and the cartridge belt and canteen of mounted troops, are obsolete, new models having been adopted by the War Department. It is not known just when issue of the new equipment will be made by the Ordnance Department of the Army to the Organized Militia. The canteens and haversacks of infantry organizations are in poor condition and will have to be replaced in the near future and it is therefore recommended that the new equipment be obtained and issued to the service as soon as available.

The Colt's Automatic revolver, cal. 45, has been adopted by the War Department and it is expected that this pattern of arm to replace the Colt's revolver, cal. .38, will be supplied shortly after January 1st, 1913.

It appears from reports of inspectors that rifles in hands of troops are in good serviceable condition although inspection of barrels of rifles returned as unserviceable, show fully $60 \%$ of them to have been rendered unfit for service through neglect and improper cleaning. During the two years, 495 barrels with receivers for the U. S. rifle, model 1903, and 23 barrels with receivers for Gallery practice rifle, cal. 22, have been issued to troops to replace those unserviceable.

To insure that the rifles will at all times be in good serviceable condition, it is recommended that the practice of issuing barrels on requisitions be discontinued and that this department be authorized to require organization commanders to return annually to the Ordnance Depot at least 10 or 12 rifles for overhauling. If necessary, new barrels can be fitted to those rifles, worn spare parts, such as bands, butt plates, guards and floor plates, re-blued and stocks and hand guards refinished. These arms would be returned practically as good as new and if this system was followed, all the rifles of companies would be completely overhauled at the Ordnance Depot at least once in five years.

A large number of canteen straps, web, gun slings, sets of blanket roll straps and all classes of horse equipment, both leather and canvas, have been turned in to the Ordnance Depot, repaired and returned to organizations.

The Quartermaster's, Subsistence and Ordnance Departments.

## Property Accountability.

The regulations regarding the accountability of public property are rigidly enforced and all officers having property in their possession are required to render semi-annual returns to the Quartermaster's and Ordnance Department. Articles pertaining to subsistence property, medical supplies and engineer property, are carried and accounted for under appropriate headings on Returns of Quartermaster's Supplies. During the two years ending June 30, 1912, 332 Returns' of Quartermaster's Supplies and 351 Returns of Ordnance and Ordnance Stores have been received from accountable officers, examined and settled.

In accordance with existing regulations, unserviceable c!othing is submitted by accountable officers for the action of a surveying officer and the property reported worn out and of no value, is ordered to be destroyed as required by the law recently enacted by Congress. In order to prevent as far as possible the condemnation of articles of equipage and ordnance and ordnance stores, this class of property, when reported by organization commanders as unserviceable, is required to be returned to the Quartermaster's and Ordnance Depot and such as are found reparable, repaired and returned. This class of property returned to the Quartermaster's and Ordnance Depot, if found upon inspection to be unserviceable, is submitted for the action of a surveying officer, affidavits stating the manner in which the property was rendered unserviceable, being obtained from the responsible officer.

Property lost or destroyed and dropped from Returns of accountable officers is charged against the allowance of organizations unless evidence submitted as a voucher to the Return from which the property is dropped, is such as to show conclusively that the property was not lost through fault or neglect on the part of the responsible officer or enlisted men to whom the property was issued.

Charges were made during the two years amounting to $\$ 2$, 034.63 for the Quartermaster's supplies and $\$ 1,254.56$ for Ordnance stores improperly accounted for. The examinations of

## The Quartermaster's, Subsistence and Ordnance Departments.

Returns of accountable officers for the fiscal year just past shows property to have been consumed and lost as. follows:


The following shows the average cost per organization of all classes of property expended, lost or destroyed, and surveyed as unserviceable, during the past fiscal year:

CLOTHING AND EQUIPAGE.

|  | Expended. | Lost or destroyed. | Survered as unserviceable. |
| :---: | :---: | :---: | :---: |
| Infantry company... ... | \$123 | $\$ 3319$ | \$209 97 |
| Infantry band............. | 288 | ${ }^{9} 23$ | 13165 |
| Troop of Cavalry.......... | 170 | 1502 | 2810 |
| Battery of tield artillery | 66 | 1109 |  |
| Detachments of Hos. |  |  |  |
| Corps <br> Maximum | co. L, znd Inf. 503 | Co. B. 2nd Inf. 14471 | Co. D. 3rd Inf.9¢6 47 |
| Minimum | Co. L, 1st Int. . . . . . | Co.G, 3 rd $\operatorname{lnf}$........ | Co. F. ist Inf. 810 |

SUBSISTENCE PROPERTY.

|  | Expended. | Lost or destroyed. | Surveyed as unserviceable. |
| :---: | :---: | :---: | :---: |
| Infantry company....... | \$ 04 | $\$ 082$ 48 | 8912 |
| Infantry band........... |  |  |  |
| Troop of Cavalry......... |  |  | 172 |
| Battery of field artilery Detachments of Hos. C.. |  |  |  |
| Maximum | Co. F, ist Inf. ${ }^{\text {a }}$ | Co. L, 2nd Inf. 427 | Co. L, 2nd Inf. 3893 |
| Minimum................. | Co. A, ist Inf ...... | Co.M, 1st Inf. ...... | Co. K. 1st Inf. ...... |

The Quartermaster's, Subsistenae and Ordnance Departments.

## MEDICAL PROPERTY.

|  | Expended. | Lost or destroyed. | Survesed as unserviceable. |
| :---: | :---: | :---: | :---: |
| Infantry company....... | \$0 13 | \$0 44 | \$0 44 |
| Troop of Cavaliy. |  | 11 |  |
| Battery of field artillery | 51 |  |  |
| Detachments of Hos. C.. Maximum | Co. M 1 istur $\cdots$...... | 11 | 147 |
| Minimum.................... | Co. A, 1st:Inf. ...... | Co. I, 3rd Inf. 357 <br> Co. K. 1st, Inf ...... | Co. H, 3rd Inf. 323 Co. F, 1st Inf. ....... |

ORDNANCE AND ORDNANCE STORES.


The total value of all property for which the State is accountable to the General Government at date, is as follows:
Clothing, equipage and Quartermaster's Supplies......... \$221,445.87
Subsistence property . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $2,663.29$
Medical property
4,231.26
Signal corps property
2,318.75

The value of all classes of property in possession of a company of infantry is $\$ 6,645.37$, divided as follows:
Clothing, equipage and Quartermaster's supplies ..... $\$ 4,179.91$

Subsistence property
71.09

Medical property . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 11.
Signal corps property. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 66.95
Ordnance and ordnance storés. . . . . . . . . . . . . . . . . . . . . . . . $2,315.86$
Property valued at $\$ 154,061.67$ has been received during the two years from the General Government as a charge against this

## The Quartermaster's, Subsistence and Ordnance Departments.



## Financial.

Statements of the expenditures of the department during the two years and all moneys received and disbursed for property lost and sold, are attached herewith.

The total expenditures as shown by this statement amount to $\$ 68,194.75$, while the expenditures of the department for the two years ending June 30,1910 , were $\$ 60,480.02$. The expenditures for the two years ending June 30, 1910, include the payment of $\$ 10,775.01$ to company armorers, while the present financial statement shows $\$ 24,775.00$ to have been paid to these employees. The deduction of amounts paid for salaries of company armorers from the total expenditures, shows a saving of $\$ 5,285.26$, in the cost of maintenance of the Quartermaster's Department during the two years ending June 30, 1912. Very respectfully,
J. Hodgins

The Quartermaster General and Chief of Ordnance, Wisconsin National Guard.

The Quartermaster's, Subsistence and Ordnance Departments.

## EXPENDITURES OF QUARTERMASTER GENERAL'S DEPAR] MENT.

July 1, 1910, to June $30,1912$.

| * | $\begin{gathered} \text { July } 1,1910, \\ \text { to } \\ \text { June } 30,1911 . \end{gathered}$ | $\begin{array}{\|l\|} \text { July } 1.1911, \\ \text { to } \\ \text { June } 30,1912 . \end{array}$ | Total expenditures July 1, 1910, to June $30,1912$. |
| :---: | :---: | :---: | :---: |
| Transportation- |  |  |  |
| Camp, W. N. G. | \$259 83 | \$188. 40 | \$448 23 |
| Rifle competition | 1597 | 5181 | 6778 |
| Offficers' convention | 41133 | 52763 | 93901 |
| Inspection and instruction | 85704 | 38748 | 1,244 52 |
| Miscellaneous | 38431 | 59405 | 1,978 36 |
| Camp of instruction (Maneuvers) | 11105 | 1930 | 13035 |
| Examinations $\quad . . . . . . . . . . . . . . . . . . .$. | 3578 | 768 | 4346 |
| Total transportation | \$2,075 31 | \$1,776 40 | \$3,851 71 |
| Freight- |  |  |  |
| Camp, W. N. G. . . . . . . . . . . . . . . . . . . . . . . . | \$236 15 | \$92 44 | \$323 59 |
| Supplies, Quartermaster's and Ordnance Departments | $1,38442$ | 72801 | 2,112 43 |
| National competition .......................... | 1565 |  | 1565 |
| Total freight | \$1,636 22 | \$820 45 | \$2,456 67 |
| Clothing - <br> Purchased, special size, etc. $\qquad$ | \$165 45 | $\$ 37^{\prime} 35$ | \$202 80 |
| Total clothing | \$165 45 | \$37 35 | \$202 80 |
| Telegraph and telephone- |  |  |  |
| Western Union Telephone Company.......... | \$18 45 | $\$ 2153$ | \$39 98 |
| Wisconsin Telephone Company... | 8880 | 2985 | 1186 |
| Juneau Electric Company |  | 4220 | - 4220 |
| New Lisbon Mutual Telephone Company. | 2100 |  | 2100 |
| Total telegraph and telephone | \$128 25 | \$93 58 | \$221 83 |
| Salaries- |  |  |  |
| General J. Hodgins | \$996 00 | $\$ 99600$ |  |
| Major O. R. Williams. | 1,800 00 | 1,800 00 | 3,600 00 |
| M. M. Wells..... | + 48000 | 1,........ | +480 00 |
| M. P. Curtius | 76000 | 87000 | 1,630 00 |
| Alma Olson | 59000 | 66000 | 1,250 0 ) |
| Leslie Lea ... |  | 21000 | 1,210 00 |
| Leo Wilkinson .. | 72000 | 81000 | 1,530 00 |
| E. S. Burroughs | 72000 | 72000 | $1,440 \quad 00$ |
| E. V. Luck....... | 20000 | 66000 | '4000 |
| T'otal salaries | \$6,266 00 | \$6,726 00 | \$12,992 00 |
| Camp expenses- |  |  |  |
| Material and supplies. | \$1,435 47 |  |  |
| Labor | 1,150 68 | 43659 | $1,587 \quad 27$ |
| Mess, employees, Quartermaster's and Adjutant General's Departments. | 1,15068 23195 | 23665 | 1,58727 46860 |
| Total camp expenses. . . . . . . . . . . . . . . . . . . | \$2,818 10 | \$1,102 79 | \$3,920 89 |
| Competition expenses- |  |  |  |
| Labor . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | 17400 | \$136 25 | \$310 25 |
| Mess, employees, Quartermaster's and Adjutant General's Department....................... | 11750 | 913625 9670 | 21420 |
| Total competition expenses.............. | \$291 50 | \$232 95 | \$524 45 |

> Report of the Adjutant General.

The Quartermaster's, Subsistence and Ordnance Departments.

EXPENDITURES OF QUARTERMASTER GENERAL'S DEPARTMEN'I.-Continued.

|  | $\begin{gathered} \text { July 1, 1910, } \\ \text { to } \\ \text { June } 30,1911 . \end{gathered}$ | $\begin{array}{\|c} \text { July 1, 1911, } \\ \text { to } \\ \text { June } 30,1912 . \end{array}$ | Total expenditures, July 1, 1910, to June 30, 1912. |
| :---: | :---: | :---: | :---: |
| Expenses, officers of Quartermaster's Depart-ment- <br> General J. Hodgins. $\qquad$ <br> Major C. R. Williams. | $\$ 1450$ <br> 158 | \$210 60 | $\$ 1450$ <br> 368 <br> 65 |
|  | \$172 55 | $\$ 21060$ | \$383 15 |
| Printing and Postage- <br> Printing $\qquad$ <br> Postage $\qquad$ | $\$ 19238$ 36500 | $\$ 5671$ 320 300 | $\$ 75998$ 69000 |
|  | \$557 38 | \$892 60 | \$1,449 98 |
| Quartermaster's DepartmentMaterials and Supplies Q. M. and Ord. Depts. Labor Salaries, armorers', companies Expenses, Officers' school. Total Quartermaster's Dept. | \$2,246 58 | \$2,136 19 | \$4,382 77 |
|  | - $\quad 1,04700$ | 1,017 63 | 2,064 63 |
|  | - 12,22500 | 12,550 00 | 24,77500 |
|  | - 1800 |  |  |
|  | . \$15,536 58 | \$15,703 82 | \$31,240 40 |
| Military Reservation- <br> Material and supplies. $\qquad$ <br> Labor <br> Special appropriation $\qquad$ <br> Drainage tax <br> Total Military Reservation. $\qquad$ | - \$2,192 40 | \$2,595 39 | \$4,787 79 |
|  | . 2,571 11 | 1,735 14 | 4,306 25 |
|  | . 40000 |  | $\begin{array}{r}400 \\ \\ 3 \\ \hline 19\end{array}$ |
|  | . 3319 |  |  |
|  | . \$5,196 70 | \$4,330 53 | \$9,527 23 |
| National competition [nsurance premium Total expenditures | $\begin{array}{r} \$ 22212 \\ 96552 \end{array}$ | \$236 00 | $\begin{array}{r} \$ 45812 \\ 965 \quad 59 \end{array}$ |
|  | .. \$36,031 68 | \$32,163 07 | \$68,194 75 |
|  |  |  |  |

The Quartermaster's, Subsistence and Ordnance Departments.

## LOST PROPERTY FUND.

## (Sec. 37, Chap. 228, Laws 1901)

Receipts.

| 1910 | Rzonis. |  |
| :---: | :---: | :---: |
| July 1 | By balance | 68.11 |
| July | To deposit, State Treasurer, sales | 20.00 |
| July | To deposit, State Treasurer, sales | 13.90 |
| Sept. ${ }^{2}$ | To deposit, State Treasurer, sales | 13.90 32.32 |
| Sept. 10 | To deposit, State Treasurer, sales ....... | 9.75 14.88 |
| Sept. 19 | To deposit, State Treasurer, lost property | 14.88 1.85 |
| Sept. 29 <br> Oct 13 | To deposit, State Treasurer, lost property | 1.85 |
| Oct. 21 | To deposit, State Treasurer, sales | 8.40 |
| Dec. 5 | To deposit, State Treasurer, lost property | 5.65 3.18 |
| Dec. Dec. 13 | To deposit, State Treasurer, sales ....... | 12.25 |
| Dec. 14 | To deposit, State Treasurer, lost property | 29.59 |
| Dec. 27 <br> 1911 | To deposit, State Treasurer, sales | $\begin{aligned} & 48.50 \\ & 14.40 \end{aligned}$ |
| Feb. 16 | To deposit, State Treasurer, sales |  |
| Feb. 16 | To deposit, State Treasurer, lost property | 56.30 35.94 |
| Feb. 18 | To deposit, State Treasurer, sales ....... | 35.94 30.00 |
| Mar. 11 | To deposit, State Treasurer, lost property | $\begin{array}{r}372.00 \\ \\ \hline 10\end{array}$ |
| Mar. 17 Mar. 17 | To deposit, State Treasurer, lost property | 107.29 |
| Mar. 27 | To deposit, State Treasurer, sales ....... | 5 |
| Mar. 28 | To deposit, State Treasurer, lost property | 77.08 |
| Apr. 17 | To deposit, State Treasurer, lost property | 25.25 5.00 |
| Apr. 26 | To deposit, State Treasurer, sales ....... | 5.00 16.00 |
| May 18 | To deposit, State Treasurer, sales | 16.00 |
| June 1 | To deposit, State Treasurer, sales | 16.25 21.00 |
| June 28 | To deposit, State Treasurer, sales | 18.25 |
| July 1 | To deposit, State Treasurer, sales | 28.40 |
| Aug. 17 | To deposit, State Treasurer, lost property | 42.60 217.20 |
| Aug. 17 | To deposit, State Treasurer, sales . . . . . . | 217.20 36.05 |
| Aug. 24 | To deposit, State Treasurer, lost property | 36.05 100.00 |
| Sept. 29 | To deposit, State Treasurer, refund on transportation | 10.00 |
| Oct. 27 | To deposit, State Treasurer, sales | 8.16 4.00 |
| Nov. 20 | To deposit, State Treasurer, sales | 4.00 18.00 |
| Nov. 21 | To deposit, State Treasurer, sales | 7.50 |
| Dec. 26 | To deposit, State Treasurer, sales | 6.25 |
| $\begin{gathered} \text { Dec. } 28 \\ 1912 \end{gathered}$ | To deposit, State Treasurer, sales | $\begin{array}{r} 7.50 \\ 47.50 \end{array}$ |
| Jan. 3 T | To deposit, State Tr |  |
| Jan. 6 T | To deposit, State Treasurer | 2.00 |
| Jan. 25 T | To deposit, State | 36.00 |
| Jan. 29 T | To deposit, State Treasurer, sal | 14.50 2.00 |
| Jan. 31 T | To deposit, State Treasurer, lost property, Express Co | 0 |
| Feb. 23 T | To deposit, Sta | $\underline{3.25}$ |
| Mar. 6 T | To deposit, State Treasurer, lost property | 627.15 <br> 481.58 |

The Quartermaster's, Subsistence and Ordnance Departments.

| Mar. 8 | To deposit, State Treasurer, lost property | 23.62 |
| :--- | :--- | ---: |
| Mar. 15 | To deposit, State Treasurer, lost property | 24.80 |
| Mar. 22 | To deposit, State Treasurer, lost property | 1.91 |
| Mar. 30 | To deposit, State Treasurer, lost property | 78.80 |
| Apr. 5 | To deposit, State Treasurer, lost property | 21.60 |
| Apr. 10 | To deposit, State Treasurer, sales ........ | 2.00 |
| Apr. 11 | To deposit, State Treasurer, lost property | .47 .56 |
| Apr. 12 | To deposit, State Treasurer, lost property | 2.48 |
| Apr. 26 | To deposit, State Treasurer, lost property | 20.10 |
| May 22 | To deposit, State Treasurer, lost property | 93.67 |
| May 18 | To deposit, State Treasurer, sales ....... | 13.00 |
| June 8 | To deposit, State Treasurer, sales ....... | 50.00 |
| June 10 | To deposit, State Treasurer, lost property | 50.00 |
| June 11 | To deposit, State Treasurer, lost property | 184.46 |
| June 14 | To deposit, State Treasurer, lost property | 85.38 |

Total receipts

$\$ 3,754.76$

## Disbursements.

## 1910

Aug. 20 Stores purchased from Ordnance Department, U. S. A.
$\$ 10.50$
Aug. 20 Supplies purchased from Medical Department, U. S. A............................ . 84.26
1911
Apr. 27 Stores purchased from Ordnance Department, U. S. A........................... . 300.95
June 2 Shoes purchased from Roberts, Johnson \& Rand Shoe Co.........'...................
Aug. 16 Supplies purchased from Medical Depart-
Sent, U. S. A............................. 60.34
319.89

Sept. 4 Supplies purchased from Goll \& Frank Co. $\quad 25.00$
Sept. 26 Supplies purchased from C. H. Hoton.... $\quad 3.00$ 1912
Feb. 5 Stores purchased from Ordnance Department, U. S. A................................ 182.01

Feb. 5 Supplies purchased from Quartermaster's Department, U. S. A.....................
409.21

Feb. 5 Supplies purchased from Quartermaster's Department, U. S. A....................
Feb. 5 Supplies purchased from Medical Depart- 278.93
May 23 ment, U. S. A.............................. 93.13
May 23 Stores purchased from Ordnance Department, U. S. A.
157.93

May 23 Supplies purchased from Signal Corps Department, U. S. A.

Total disbursements ....................... $\$ 3,320.00$
Balance to credit of fund, June 30, 1912.
$\$ 434.76$


[^0]:    K \& \% Mr

[^1]:    N

[^2]:    

[^3]:    Report of the State Superintiendent.
    er

[^4]:    

[^5]:    w.
    

[^6]:    *Estimated.

[^7]:    

[^8]:    Report of the State Superintendent.

    991

[^9]:    *Of this number 141 are hearing pupils who have defective speech.

[^10]:    *C, C, Parlin resigned from the Presidency, June 24, 1911.

[^11]:    Abstract.
    The purpose, then, of the teaching of physics is to give the pupil such a mastery of the facts and laws of physical science as will give him increased power and control over his experiences in the industrial or mechanical phase of life.

    The following suggestions are made regarding laboratory work:

[^12]:    ${ }^{1}$ Secretary Coore, Fncl. Brit.
    人

[^13]:    ${ }^{1}$ Dutton \& Snedden, School Admin.

[^14]:    ${ }^{1}$ President Edmund G. James' Inaugural Address, U. of Ill.

[^15]:    "Whereas, It appears that certain municipalties of the state are desirous from time to time of increasing their water supply for fire protection, as well as furnishing more water for domestic use without giving special consideration as to the pureness of the water and its safety for domestic use,
    "Resolved, therefore, That the State Board of Health of Wisconsin condemn in strongest terms the connecting of city or village water supplies with lakes and rivers in any and all of the thickly populated portions of the state where the purity of the water in such

[^16]:    "No person suffering from pulmonary tuberculosis or believed to be suffering from pulmonary tuberculosis, when reported to the health officer as provided for in sections 1416-3 and 1416-4, of the laws of 1907 , shall be permitted to attend or frequent public, 3-B. H.

[^17]:    * Quarterly.

[^18]:    * Quarterly.

[^19]:    * Quarterly.

[^20]:    * Triplets, 2 females, 1 male.
    + Triplets, 2 females, 1 male.
    $\ddagger$ Triplets, 3 males.
    $\ddagger$ Triplets, 3 males
    $\ddagger$ Triplets, 3 males.
    *Triplets, 2 males, 1 female.
    Total triplets, 18.

[^21]:    Chapter 44, provides for the coöperation of the local health officer and the public school authorities in the prevention and control of communicable diseases. It also provides for the disinfection of schoolhouses periodically and after each outbreak of contagious diseases in the school.

    Chapter 69, provides that the report of all cases of tuberculosis shall be treated as confidential by the local health officer.

    Chapter 242, amends the Embalmers license law so as to provide for two years practical experience under a licensed embalmer before a license can be granted. Provision is also made in this law for the revoking of embalmers licenses for failure to file death certificates and obtain burial permits.

[^22]:    * Stillbirths not included in total. Total 27.185.

[^23]:    *Stillbirths not included in total. Total 27,185.

[^24]:    *Stillbirths not included in total. Total-27,185.

[^25]:    * Judge Paul D. Carpenter of Milwaukee, in an address on "Some Legal Phases of Insanity" made before the Iowa State Bar Association.

[^26]:    *Laws of 1909, ch. 276.

[^27]:    * This is true of Milwaukee. It appears to be less true of other parts of the state.

[^28]:    7 Scott Nearing-Newsboys at Night in Philadelphị- Charities 17:784.

[^29]:    ${ }^{1}$ O. R. Lovejoy-Child Labor and the Night Messenger Service, Survey 24:31; Scott Nearink $\cdots$ wsboys at Night in Philadelphia-Charities 17: 779.
    ${ }^{2} \mathrm{E}$. W. Goodhue, Boston Newsboys-Charities, 8:529; Scott Nearing-same article, p. 779; Ernest Poole. Waifs oi the Street-McClures, 21: 41-42.
    ${ }_{3}$ Scott Nearing, same article, p. 782 ; Ernest Poole, same article, p. 48.

    * Ernest Poole, above, p. 42; Charities, 10:60-62.

[^30]:    ${ }^{1}$ Session Laws of 1909, Chapter 307.
    ${ }^{2}$ Session Laws of 1905, Chapter 103.
    : Session Laws of 1905, Chapter 209.

[^31]:    ${ }^{1}$ O. R. Lovejoy, Survey 24: 311-317.

[^32]:    ${ }^{1}$ N. S. Adams, Children in the American Street Trades. Annals of the American Academy, 25: 444.

[^33]:    * Mother is also idl.
    ${ }^{1}$ Includes illness, 3; dependence on children, 2; charity, 1; dressmaker, 1; cigar maker, 1; tanner, 1; brewer, 1; whitewasher, 1; janitress, 1; oculist, 1; owner box factory, 1; total, 14.

    1 See part on the Boy on the Street-subject-earnings.

[^34]:    ${ }^{1}$ R. P. Falkner, The Psychological Clinc. Vol. II, No. 3, p. 69. Avcrage of percentages on this page. Ibid, pp. 57-74.
    ${ }^{2}$ O. P. Coman, The Psychological Clinic. Vol. I, No. 9, pi). 245-58.
    ${ }^{1}$ Report of the Departmental Committee on the Employment of Children Act, 1903, p. 12 .

[^35]:    ${ }^{1}$ National Child Labor Committee, pamphlet No. 32, p. 3.

[^36]:    ${ }^{1}$ Includes truancy, 9 cases incorrigibility, 3 ; loafing, 1 ; not reporting to the probation officer, 2; not stated, 3; total, 18.

[^37]:    ${ }^{1}$ Report of the Departmental Committee on The Employment of Children Act, 1903
    ${ }^{1}$ What of the Newsboys of the Second Cities? Charities, 10: 368-71.

[^38]:    ${ }^{2}$ Scott Nearing, Newsboys at Night in Philadelphia. Charities 17: 778-84. L. R. B. Rothschild. In the Making. The Review, VI. 3, p. 31-35.
    ${ }^{3}$ E. W. Goodhue, Boston Newsboys. Charities, 8: 527-32.
    ${ }^{1}$ M. G. Adams, Children in The American Street Trades. Annals American Academy, 25:, 437-58.
    ${ }_{2}$ Child Labor on the Street-The Newsboy: pamphlet issued by the New York Child Labor Commitee, 1906.
    ${ }_{3}$ E. N. Clopper, Qhildren on the Streets of Cincinnati. Annals American Academy, Supp. 32: 113-23.

[^39]:    ${ }^{1}$ B. Whedlock, Interesting People: John E. Guckel-American Magazine, 69: 63,e4.

[^40]:    ${ }^{1}$ W. H. Beveridge, Unemployment, p. 126.
    ${ }^{1}$ Quoted by Ernest Freund-Police Power-p. 173, et seq.
    ${ }^{2}$ Re Nightingale, II. Peck, 168.
    ${ }^{3}$ Commonwealth vs. Fenton, 139 Mass. 195; White vs. Kent, 11 Ohio St. 550.

[^41]:    Staff, 1st Battalion Officers

    4
    1st Division, Ashland Officers3
    Petty Officers ..... 10
    Seamen ..... 36

