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## PUBLIC DOCUMENTS

## STATE OF WISCONSIN

BEING THE REPORTS OF THE VARIOUS

State Officers, Departments and Institutions

For the Fiscal Term ending June 30, 1902.

## VOLUME II



MADISON, WIS.
Democrat Printing Company, State Printer.
1903.

## PUBLIC DOCUMENTS.

## FOR 1901-1902.

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## TENTH BIENNIAL REPORT

## OF THE

# BUREAU OF LABOR 

## AND INDUSTRIAL STATISTICS.

## STATE OF WISCONSIN <br> 1900-1901.

HALFORD ERICKSON, Commissioner.


MADISON, WIS
Democrat Printing Company, State Printer 1902

## LETTER 0F TRANSMITTAL.

Burtau of Labor and<br>Industrial Statistics.<br>Madison, Wis., September 30, 1902.

To His Excellency Hon. R. M. La Follette,
Governor of Wisconsin.
Dear Sir:-I have the honor to transmit herewith the Tenth Biennial Report of this Bureau as required by the laws of this state.

Very Respectfully Yours,
Halford Erickson,
Commissioner.

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## INTRODUCTION.

This is the tenth biennial report of the Bureau of Labor and Industrial Statistics of Wisconsin. The report is made up of ten parts, each one of which is devoted to a separate subject.

Part I relates to the Manufactures of this state in 1899 and 1900. It is based upon the report of 1,152 establishments representing 46 separate industries and about 60 per cent of the productive capacity for the state. The object of these presentations is to show the industrial condition during the period in question. In view of the fact that nearly two-thirds of the productive capacity is represented, and that the data for both years were received from the same establishments, it would seem that the conclusions arrived at can safely be regarded as representing the actual situation.

Part II is devoted to the Population in this state in 1890, 1895, and 1900. It shows for villages, cities, towns and counties, or for each civil subdivision, the actual number of inhabitants at each census. The figures for 1895 were obtained from the state census of that year, while those for 1890 and 1900 were obtained from the federal census of these years. The purpose of this part is to present in a readily available form the population at each census, as well as the changes in the same which took place during the intermediate period.

Part III deals with the condition in the garment-making industries in Milwaukee, the very industries in which the so-
called "sweating system" is generally held to be the most common. The part opens with a general discussion of sweating. It explains the conditions to which this term is applied and gives a few facts in its history. An effort has also been made to point out who the real sweater is, what some of the underlying causes of this evil are, and where the remedy is likely to be found. The conditions in Milwaukee are then taken up, and the conditions of employment and earnings are quite fully presented and analyzed. There is also a discussion of the "housing problem" in which some of the evils of bad housing are set forth, and many possible remedies explained. The part ends with a paper on "The Consumer's Influence on Production," which was prepared by Mr. Clough Gates of Superior, while employed in this Bureau.

Part IV forms a study of the population in Racine, Richland and Crawford counties in this state, during the earlier decades in the history of these counties. The material for these studies was obtained from the returns of the federal census in 1850, 1860, and 1870. These studies cover not only the population in the earlier stages showing its movements from the eastern parts of the state to the westward, but they deal wih the soil and topography of the counties as forming a physical basis for the discussion. To the student of history, both general and local, these studies will be found of the greatest importance.

Part V relates to the state government. It gives in a condensed form the laws which govern State Officers, Departments, Boards, Commissions, Institutions, Agents and Agencies, and shows the Powers, Duties, and Privileges of each. It also includes statements giving the expenses of each office, board, institution, commission and agent, during the fiscal year ending June 30, 1900, together with the total receipts and disbursements for the state during the same period. This part will be found a convenient handbook for all who may have business with the state as well as for students and readers in general.

Part VI is a study of the conditions under which women are employed in factories and workshops in this state. The material for this study was obtained through personal visits and observatons and has been presented both in tabular and textual form. It is the first part of a series of studies of the conditions of women, wage earners that have been planned by the Bureau, and as far as it goes covers the field quite fully. This part will be found interesting not only to students but to the general reader.

Part VII deals with the work of the Free Employment Offices in Milwaukee and Superior, which were provided for by the last legislature. It gives some of the reasons why these offices ,were established and why they are needed. There is also a brief review of the work of such offices in other countries and other states in this country. Then follows an account of the work of the offices in this state during the first year of their existence, showing the number of applications filed and the number of positions filled, with such an analysis of the facts as was thought proper. Applicants for employment are usually requested to answer a series of questions relating to their condition. These answers were compiled, explained and analyzed, and a portion of this part has been devoted to the material thus obtained.

Part VIII relates to Earnings and Employment. It covers Wholesale and Retail Mercantile Establishments, six Skilled Trades, Municipal Employment, and Labor Organizations. The material upon which this part is based was in all cases except that of Labor Organizations obtained from the employers. It covers Earnings, Range of Employment, Hours of Labor and mode of paying wages. The statistical data for the labor organizations were obtained directly from the secretary of each union. The textual matter on labor organizations was prepared by Mr. J. D. Beck of Cashton, who is employed in this Bureau and has also assisted in the work generally.

Part IX covers our manufacturing statistics for 1900 and 1901, and in addition to this it deals with Employment and Earnings in various other industries that are closely allied to those of manufactures. It also contains an article on Lead and Zinc Mining and the so-called zinc district in the southwestern part of the state. The statistics of manufacture are along the same line as those in part I. They were obtained from identical establishments and show the condition during the period. The article on the lead mining industry has also been carefully prepared by a party who has made a special study of such matters, and will be found both valuable and interesting.

Part X is the last part of the report, and relates to Factory Inspection. It includes a record giving the name, location, business, persons employed and power used, for each establishment. It also contains analyses of the reports of the factory inspectors, and the work that has been performed by them during the present term. On the whole, it presents a mass of industrial facts that cannot fail to prove useful to those who in one way or another are brought in touch with the manufacturing interests of this state.

While the last two sessions of the legislature greatly extended the so-called factory laws and increased the ability of the Bureau to enforce them, there is still need of additional legislation. The laws which regulate the employment and school attendance of children are far from being as stringent and comprehensive as they should be, or as the circumstances demand. The provisions which relate to the sanitary conditions in factories are also weak and fall short of their real purpose. It is also time to consider whether this Bureau should be required to publish a bulletin at least once every three months, dealing with labor and industrial conditions in the state. Such bulletins are issued in other states and are regarded as of the greatest value. Definite recommendations upon these points, however, are withheld for the present.

I am under the greatest obligation to all other employes in this Bureau for their efficient assistance in the work, and also to those who have kindly furnished the data upon which this report is based.
H. E.

## ERRATA.

Page 166, at head of classification, for 'number counties," read 'number villages.'"

Page 660, in heading of second table, for "as reported by employers" read "as reported by employes."

Page 664, in totals of table at foot of first column for ' $\$ 4.97$," read "497.,
Page 666, in classification of table, for '" 300 but less than $\$ 100$," read ' 300 but less than $\$ 500$. "

Page 833, at head of table, for "the employ of last last employer," read "the employ of last employer."

Pages 906 and 907, in headings of tables at bottom of page, for "Semi-weekly," read "Semi-monthly."

## PART I.

## Manufacturers' Returns ior 1899 and 1900.

## IN.TRODUCTION.

This part of the report is devoted to facts and statistics that have been compiled and computed from the annual return of their business for 1899 and 1900 which the manufacturers of this state make to this bureau. The statistical presentations have been compiled from the returns of 1,152 manufacturing establishments classified into 46 separate industries. In order that these presentations may be better understood a few explanations as to how the facts were obtained and the method of compiling them are offered.

The data was collected direct from each establishment upon schedules which were uniform and specially prepared for this purpose. In most cases these schedules were sent out through the mail with a request that they be filled in and returned in the same way. In cases where this method was not thought best the facts were obtained through personal visits and examinations on the part of some one connected with the bureau.

Every precaution was taken to insure correct returns. In the first place the questions in the schedule are of such a nature and so arranged that the answers, when taken together, would reveal errors and any effort to mislead. Then again the returns were carefully edited and compared with past reports. This enabled us to detect, at least the greater part of all important errors that had crept in and to have the same corrected before the facts were compiled.

The facts or figures for all the establishments in each industry have been compiled separately and their totals with the calculations based upon them are presented in one.table. This table covers one page in the report. It can therefore be said that one page in this report has been devoted to the facts for each of the 46 industries included. These 46 tables, covering that many industries, and pages, may be regarded as the basic tables, the tables which not only contain the essential facts, but the ones upon which all comparisons, analyses, and generalizations to be made must be based. The figures in these 46 tables have also been compiled into one table, a table which thus necessarily gives the totals for all industries and which follows immediately after those from which it is compiled. As the totals in this last table thus represent all industries the calculations made upon these totals must of course also represent all industries. In other respects, such as in form and the space occupied, the last table differs in no way from those for each industry.

Each of these tables is also so to say, sub-divided according to the nature of the data. Thus it will be found that the first part of it contains presentations which relate to "Classified Weekly Earnings;" that the second part shows the "Number of Persons Employed and the Range of Employment-by months;"and that the third part includes a number of facts under "Other Presentations." Each of these subdivisions need further explanations.

Classified weekly earnings: In this part of the table the mechanics, operatives and laborers employed in the establishments included have been classified according to their weekly earnings. Thus we find here the number of these persons who received less than $\$ 5.00$ per week, the number who received $\$ 5.00$ per week but less than $\$ 6.00$, the number who received $\$ 6.00$ per week but less than $\$ 7.00$ and so on until the point of $\$ 20.00$ per week and over is reached. Above this amount no classification has been made. The males and females are classified separately. That is, the respective number of persons of each sex in each class for earnings appear in separate columns. Another fact which is also shown here is the per cent. relation which the total number in each wage class bear to the total number employed. These illustrations are probably sufficient to convey a fairly good idea
of this table. As a whole this part of the table throws more light upon the conditions as to wages in this state than any other that could have been presented.

Number of persons employed, range of employment-by months: Under this head in the second part of the table is found the number of persons employed during each month as well as the range of employment throughout the year.

The number employed during each month was ascertained by adding together the total number employed each week in the month and dividing the sum thus obtained by the number of these weeks. It is plain that the number obtained through this operation constitutes in reality a sort of an average, and it is believed that it comes nearer to expressing the exact number employed than the number that would have been obtained by any other of the available methods.

What is meant by the range of employment may not be easily seen. Perhaps it may be explained somewhat in this way. The month when the greatest number were employed is regarded as the period of full employment, or in other words, as the month when all who could be employed in the industry in question were so employed. The other months when less persons were em. ployed are regarded as periods when there was only partial employment. The difference between the month when the greatest number were employed and each one of the other months when a smaller number were employed is regarded as the measure of the unemployment at the time. This may be illustrated as follows: In the table for agricultural implements, the first in order, we find that in 1899, the greatest number of persons, 3,581 , were employed in February and that the smallest number, 1,466, were employed in September. According to the above there was thus full employment during the former month and 59.34 per cent. less than full employment in the later. In other words, the range of unemployment in September amounted to 21.15 persons, or 5934 per cent. The same rule when applied to each of the other months will give the range of employment and unemployment in each case.

It is obvious that the range of employment thus obtained can, strictly speaking, only apply to the industry to which it is ap-
plied. Take agricultural implements as an example. Here more than twice as many persons were employed in February as in September. It is not at all likely, however, that all those who had laid off in September when business in this line was dull remained out of work until business in their line picked up again. On the other hand it is more than likely that the greater proportion of those thus out of work had found employment at some other occupation and therefore could not properly be counted among the unemployed. Most industries have their dull periods during the year. But these periods seldom come at the same time for all. Some have their busiest period in the winter, others have it in the summer, spring or fall. While it is a fact that a part of those who are thrown out of work in dull periods find something to do in other lines, it is also true that the supply of labor is, as a rule, often greater than the demand for it, and that a certain proportion are therefore constantly out of work. The calculations of the range of employment as given here are not without importance. Besides throwing a great deal of light upon the course of business, or the ups and downs in the industry to which they directly apply, they show in an unmistakable way that there are great fluctuations in the course of employment, and even to a certain extent afford a fairly reliable measure of these fluctuations.

Other presentations: Under this head in the third part of the tables are included a variety of presentations, more or less closely related. Some of these relate to the persons employed, time in operation and average yearly earnings of each worker; others to the kind of management of the establishments included, and again others to the capital invested, the value of the goods made, the total amount paid as wages and the average amount of capital and product to each person employed. These facts for the two years have also been compared and the increase or decrease in 1900 as compared with 1899 is shown in each case.

Smallest, greatest and average number of persons employed: The figures under this sub-head were obtained from the second part of the table, or the part which deals with the persons employed and range of employment.

By the smallest number of persons is meant the number for the month when the smallest number were employed.

By the greatest number of persons is meant the number for the month when the greatest number of persons were employed.

By the average number of persons is meant the average number of persons employed during each year. This number was obtained by adding the number for each month and dividing the sum of this by twelve, or by the number of months.

Average yearly earnings and time in operation: The facts in this case are partly obtained, from the returns directly and partly from calculations upon other figures.

The average yearly earning is the figure obtained when the total amount paid as wages during the year was divided by the average number of persons employed during the same period.

The average time or days in operation shown is the figures which were obtained when the total number of days in operation by all the establishments included is divided by the number of these establishments. Each establishment included reported in full as to the number of days it was in operation during each year.

Kind of management, etc.: Under this head is shown how many establishments in each case were under private and corporate management. It is also shown how many males and females were interested as partners in the private firms, and how many males and females were interestd as stockholders in the corporations.

These facts were obtained directly from the reports. Each establishment reported as to whether it was a private firm or corporation. Those under private management also gave the number of partners, and those under corporate management gave as near as they could the number of the stockholders. With this data at hand it was of course an easy matter to compute the facts which are shown in this part of the table.

Capital, product, wages, etc.: In this connection is presented the total amount of capital invested, the total value of the product, or goods made, the total amount amount paid as wages in
obtaining this product, and the average amount of capital and product to each worker.

Each establishment reported as to the capital, product and wages. It showed in detail the amount of capital invested, the selling value of its product each year and the amount it had paid as wages in obtaining this product. This constituted the original data and from these figures the totals for each industry or for all establishments included were computed.

The average capital and product to each worker was obtained by dividing the total amount in each case by the average number of persons employed.

The figures in all the presentations in the tables which have thus been briefly explained cover the years 1899 and 1900 respectively.

As said above this investigation is continued from year to year, and its purpose has been explained in previous reports. Briefly it may be said that this purpose is to show from year to year the condition and growth of the manufacturing industries in this state. Hew far this purpose is subserved may not be settled beyond dispute. Those who have to furnish the data or who take extreme individualistic views upon economic and social questions often talk as if they attached but little importance to presentations of this nature, and this in face of the fact that they are often employing such facts in support of arguments in other lines without questioning their soundness. Others again manifest a strange disregard for all statistical information. By students, the press, and the greater proportion of the public, however, facts of this kind are regarded as important and are constantly sought.

A close examination of these facts cannot fail to furnish material for important conclusions. The figures under earnings and the number of persons employed certainly throws a great deal of light upon the condition of the wage earning classes. These facts again, together with those which relate to the investment and product, reveal a great deal that is absolutely essential in judging of industrial conditions in general.

## MANUFACTURERS' RETURNS, 1899-1900.

AGRICULTURAL IMPLEMENTS-27 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classfied WeeklyEarnings. | 1899 |  |  |  | 1900 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Fe- | Total. |  | Male. | T:EMALE. | Total. |  |
|  |  |  | No. | Pr. ct. |  |  | No. | Pr. ct. |
| Under \$5.00 .......... | 223 |  | 223 43 | 5.09 1.14 | 192 |  | 192 66 | 5.02 1.73 |
| $\$ 5.00$ 6.00 but under buder | 343 |  | 343 | 9.93 | 326 |  | 326 | 8.52 |
| 7.00 but under 8.00 | 576 |  | 576 | 15.27 | 610 |  | 610 | 15.95 |
| 8.00 but under 9.00 | 571 |  | 571 | 15.14 | 610 590 |  | 590 | 15.43 |
| 9.00 but under 10.00 | 594 |  | 594 | 15.75 14.02 | $\stackrel{396}{ }$ |  | $\stackrel{96}{ }$ | 10.36 |
| 10.00 but under 12.00 | 529 |  | 589 | 14.48 | 571 |  | 571 | 14.93 |
| 12.00 but under 15.00 | 584 |  | ${ }_{259}$ | $\underline{6.87}$ | 363 |  | 363 | 9.49 |
| 15.00 20.00 but under over ........ | 259 50 |  | - 50 | 1.33 | 100 |  | 100 | 2.61 |
| 20.00 and over | 3,772 |  | 3,772 | 100.00 | 3,824 |  | 3,824 | 100.00 |

2. Number of Persons Employed, Range of Employment-by Month.

| Months. | Total No. of PERSONS Employed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1899. | 1900. | 1899. | 1900. | 1899. | 1900. |
| January |  | 3,435 3,581 | 94.17 97.90 | 95.92 100.00 | 5.83 2.10 | 4.08 |
| February | 3,359 3,431 | 3,581 | 90.90 100 | 109.69 89.43 |  | . 10.57 |
|  | 3,357 | 3,202 | 97.84 | 89.43 | ${ }_{10}^{2.16}$ | 10.57 17.59 |
| May | 3,055 | 2,951 | 89.04 | 82.41 | 10.96 9.24 | 21.06 |
| June | 3,114 | $\stackrel{2,827}{2}$ | 80.59 | 59.79 | 14.41 | 40.21 |
| July |  |  | 84.90 | 48.42 | 15.10 | 51.58 |
| August | $\stackrel{2,913}{2,481}$ | 1,466 | 72.31 | 40.66 | 27.69 | 59.34 |
| September | 2,412 | 1,626 | 70.30 | 45.41 | 29.70 16.67 | 54.59 52.25 |
| November | $\stackrel{2}{2,859}$ | 1,710 | 83.33 92.57 |  | 16.67 7.43 | 58.43 |
| December | 3,186 | 2,563 | 92.57 | 71.57 | 7.43 | 28. |

3. Other Presentations.

| Classification. | 1899. | 1900. | Increase or DeCREASE in 1900. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | Pret. |
| Smallest No. of persons employed.. | 2,412 | $\left.\begin{aligned} & 1,466 \mid- \\ & 3,581 \\ & 2,567 \end{aligned} \right\rvert\,-$ | - $\quad \begin{aligned} & 946 \\ & +\end{aligned}$ | $\begin{array}{r} 39.22 \\ 4.37 \end{array}$ |
|  | 3,431 |  | $\pm \quad 458$ | 15.14 |
| Arearage No. of persons employed.. | 3,025 |  |  | 15.14 15.21 |
| Average yearly earnings ............ | \$47,500 282 | $\$ 54,726$ | $\pm \begin{array}{r}\$ 7,226 \\ +\quad 70\end{array}$ | 15.21 .25 |
| Average time in operation, days.... |  |  |  |  |
| No. of private firms | 6 | 4 |  |  |
| No. of male partners | 6 | 6 |  |  |
| No. of female partners |  | 6 |  |  |
| Total No. of partners | ${ }^{23}$ | 23 |  |  |
| No. of corporations .... | 185 |  |  | 4.87 |
| No. of male stockholders ... | 47 |  | ................. | 3.88 |
| No. of female Total No of stocknolders ............. | 232 |  |  | 3.88 |
| Total No. of partners and stock- |  |  |  | 3.78 |
| holders |  |  |  |  |
| Amount of capital invested | \$12,471,417 51 | \$13,726,206 07 | + \$1,254,788 56 | 10.06 |
| Amoun of goods made or work done | 7,432,127 69 | 7,918,399 15 | $\begin{array}{r}+\quad 486,27146 \\ \hline\end{array}$ | 6. 2 |
| Amount paid as wages............... | $1,436,922$ 4,122 78 | 1,404,829 54 | + $\quad \begin{aligned} & -\quad 1,22440\end{aligned}$ | 29.70 |
| Av. capital to each person employed | 2,456 90 | 3,084 69 | +................ | . 25.55 |

## MANUFACTURERS' RETURNS, 1899-1900.

ARTISANS' TOOLS-9 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classified Weekly Earnings. | 1899 |  |  |  | 1900 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\underset{\text { MALe. }}{\text { Fe- }}$ | Total. |  | Male | $\underset{\text { MALE. }}{\text { Fe. }}$ | Total. |  |
|  |  |  | No. | Pr. ct. |  |  | No. | Pr.ct. |
| Under $\$ 5.00$............ $\$ 5.00$ but under $\$ 6.00$ | 292 |  | 292 | 22.29 | 235 |  | 235 |  |
| 6.00 but under ${ }^{6} 9.00$ | 105 |  | 105 | 8.02 | 65 |  | 65 | 6.65 |
| 7.00 but under 8.00 | 125 |  | 133 | 10.15 9 | 123 |  | 123 | 12.58 |
| 8.00 but under 9.00 | 141 |  | 125 | $\begin{array}{r}9.54 \\ 10.76 \\ \hline\end{array}$ | 91 |  | 91 | 9.30 |
| 9.00 but under 10.00 | 134 |  | 134 | 10.76 | 114 | -...... | 114 | 11.66 |
| 10.00 but under 12.00 | 122 |  | 122 | 10.76 9.31 | 104 |  | 104 | 10.63 |
| 15.00 but under ${ }^{12} 15.00$ | 148 |  | 148 | 11.30 | 93 |  | 71 | 7.26 |
| 20.00 and over ........ | 89 |  | 89 | 6.80 | 71 |  | 71 | 9.51 7.26 |
| 20.0 and over | 21 |  | 21 | 1.60 | 11 |  | 11 | 7.26 1.12 |
| Totals | 1,310 | .... | 1,310 | 100.00 | 978 |  | 978 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. cf Persons Employed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1899. | 1900. | 1899. | 1800. | 1899. | 1900. |
|  |  |  |  |  |  |  |
| March . | 1,251 | 774 | 100.00 | 80.12 | 8.63 | 19.88 |
| April | 1,166 939 | 585 | 93.21 | 60.56 | 6.79 | 39.44 |
| May | 849 | 532 | 75.06 | 55.07 | 4.94 | 44.93 |
| June | 815 | 533 456 | 67.87 | 55.18 | 32.13 | $44.8{ }^{2}$ |
| July | 831 | 462 | 65.15 66.43 | 47.20 | 34.85 | 52.80 |
| August ${ }^{\text {September }}$ | 851 | 753 | 68.03 | 77.95 | ${ }_{31} 33.67$ | 52.17 |
| October ${ }^{\text {S }}$ | 879 | 762 | 70.26 | 78.88 | 29.74 | 22.05 21.12 |
| November | 950 | 878 | 75.94 | 90.89 | 24.06 | 9.11 |
| December | 1,011 | 869 947 | 75.06 80.82 | 89.96 | 24.94 | 10.04 |
|  | 1,011 | 947 | 80.82 | 98.03 | 19.18 | 1.97 |

3. Other Presentations.

| Classification. | 1899. | 1900. | Increase or DeCREASE IN 1900. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | $\int$ Prct. |
| Smallest No. of persons employed.. | 815 |  |  |  |
| Greatest No. of persons employed.. | 1,251 | 456 966 | 359 285 | 44.05 22.79 |
| Average No. of persöns employed.. | -969 | 710 | 259 | 26.73 |
| Average yearly earnings. Average time in operation, days... | $\$ 37510$ 302 | $\$ 44787$ 300 | $\pm \quad \$ 7277$ | 19.40 |
| No. of private firms |  |  |  | 66 |
| No. of male partners ................... | 14 | 7 |  |  |
| No. of female partners................... | 14 | 12 | 2 | 14.29 |
| Notal No. of partners | 14 | 12 | - 2 | 14.29 |
| No. of corporations | 1 5 | 1 |  | 14.29 |
| No. of female stockholders | 5 | 5 |  |  |
| Total No. of stockholders... | 5 |  |  |  |
| Total No. of partners and stockholders | ${ }^{5}$ | 5 |  |  |
|  | 19 |  | 2 | 10.53 |
| Amount of capital invested.:........ |  |  |  |  |
| Value of goods made and work done | $1,265,86886$ |  |  | ${ }_{10} 3.49$ |
| Amount paid as wages ............ | -363,474 43 | 1,317,989 871 | $\begin{array}{rr} 136,60748 \\ -\quad 45,48456 \end{array}$ | $\begin{aligned} & 10.80 \\ & 12.51 \end{aligned}$ |
| Av. capitact to each person employed | $\begin{array}{r}915 \\ 13 \\ \hline\end{array}$ | 1,29281 | + $\quad 37748$ | 41.24 |
| A.ond | 1,306 26 | 1,590 51\| | $28425{ }^{\text {\| }}$ | 22.53 |

[^0]
## MANUFACTURERS' RETURNS, 1899-1900.

BEEF AND PORK PACKING-9 ESTABLISHMEN'TS.

1. Classified Weekly Earnings.

| Classtfied Weekly | 1899 |  |  |  | 1900 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\begin{gathered} \text { FE- } \\ \text { MALE. } \end{gathered}$ | Total. |  | Male. | $\underset{\text { MALE. }}{\text { FE- }}$ | Total. |  |
|  |  |  | No. | Pr. ct. |  |  | No. | Pr.ct. |
| Under $\$ 5.00 \ldots .$. | 79 |  | 79 | 4.70 | ${ }_{26}^{76}$ |  | 76 24 | 4.23 1.33 |
| \$5.00 but under ${ }^{66.00}$ | 14 | 2 | 16 47 | ${ }_{2} .95$ | 190 |  | 190 | 10.56 |
| $\begin{array}{lll}6.00 & \text { but under } \\ 7.00 & \text { but under } & 8.00 \\ \end{array}$ | 46 261 | 1 | 262 | 15.60 | 495 |  | 495 | 27.51 |
| 8.00 but under 9.00 | 56 |  | 56 | 3.34 | 390 |  | 390 | 21.68 |
| 9.00 but under 10.00 | 529 |  | 529 | 31.51 | 201 |  | 201 | 11.17 |
| 10.00 but under 12.00 | 301 |  | 301 | 17.93 | 218 |  | 218 | 12.12 |
| 12.00 but under 15.00 | 223 |  | 223 | 13.28 | 103 |  | 103 | 5.73 |
| 15.00 but under 20.00 | 119 |  | 119 | 7.09 | 97 |  | 97 | 5.39 |
| 20.00 and over ....... | 47 |  | 47 | 2.80 | 5 |  | 5 | . 28 |
| Totals | 1,675 | 4 | 1,679 | 100.00 | 1,797 | 2 | 1,799 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons Emploved. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1899. | 1900. | 1899. | 1900. | 1899. | 1900. |
| January ................. | 1,637 1,756 |  | 100.00 | 100.00 |  |  |
| February | 1,476 1 | 1,444 | 90.16 83.08 | 82.23 71.92 | 9.84 16.92 | 17.7728.08 |
| March | 1,302 | 1,151 | 79.54 | 65.64 | 20.46 |  |
| April |  | 1,197 | 77.46 |  | 22.54 | 34.36 31.80 |
| June | 1,268 1 1 | 1,403 | 83.4580.94 | 79.9073.52 | 16.55 | 20.10 |
| July | 1,325 | 1,291 |  |  | 19.0622.66 | 26.48 |
| August | 1,2661,226 | 1,2721,240 | 77.3474.89 | 72.44 |  | 27.5829.38 |
| September |  |  |  | 70.62 | 22.66 25.11 |  |
| October .. | 1,4171,543 | 1,443 | 86.56 94.26 | 82.18 | 13.44 | 17.828.43 |
| November |  | 1,740 | 98.41 | 99.09 | 1.59 \| |  |
| December | 1,611 |  |  |  |  | $\begin{array}{r}\text { 8. } \\ .91 \\ \hline\end{array}$ |

3. Other Presentations.

| Classification. | 1899. | 1900. | Increase or DeCREASE IN 1900. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | $\mid$ Pret. |
| Smallest No. of persons employed.. | 1,226 | 1,151 | 75 | 6.12 |
| Greatest No. of persons employed | 1,637 | 1,756 | 119 | 7.27 |
| Average No. of persons employed.. | 1,400 | 1,401 |  | . 07 |
| Average yearly earnings ............ | \$40700 | \$429 64 | \$22 64 | 5.56 |
| Average time in operation, days.... | 289 |  |  | 42 |
| No. of private firms | 4 |  |  | 25.00 |
| No. of male partners | 20 |  |  |  |
| No. of female partners | 21 | 11 |  | 47.62 |
| Total No. of partners No. of corporations .. | 5 |  |  | 20.00 |
| No. of male stockholders | 33 |  |  | 33.33 |
| No. of female stockholders |  |  |  |  |
| Total No. of stockholders | 33 |  | 14 | . 42 |
| Total No. of partners and stock- | 54 |  | 4 | 7.41 |
| Amount of capital invested. | \$3,947,832 00 | \$4,069,690 67 | + \$121,858 67 | 3.08 |
| Value of goods made or work done.. | 13,929,994 58 | 15,337,168 93 | + 1,407.174 35 | 10.10 |
| Amount paid as wages.. | 570,779 80 | 601,930 59 | 31,150 79 | 5.46 |
| Av. capital to each person employed | 2,81988 9,949 | 2,90485 10,94730 | 8497 997 | 3.01 10.02 |
| Av. product to each person employed | 9,949 99 | 10,947 30 | 99731 | 10.02 |

## MANUFACTURERS' RETURNS, 1899-1900. <br> BOOTS AND SHOES-28 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| $\begin{gathered} \text { Classified Weekly } \\ \text { Earnings. } \end{gathered}$ | 1899 |  |  |  | 1900 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\xrightarrow[\text { Mate }]{\text { Fe. }}$ | Totas. |  | Male. | $\underset{\text { MALE. }}{\text { MALE. }}$ | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr.ct. |
| Under $\$ 5.00 \ldots \ldots .$. | 365 | 481 | 846 | 32.50 | 377 | 552 | 929 | 32.45 |
| $\$ 5.00$ 6.00 but under | 75 | 197 | 272 | 10.45 | 82 | 117 | 199 | 6.95 |
| $\begin{array}{lll}6.00 & \text { but under } \\ 7.00 & \text { but under } \\ 8.00\end{array}$ | 131 | 98 56 | 229 190 | 8.80 7.30 | ${ }^{95}$ | 104 | 199 | 6.95 |
| 8.00 but under 9.00 | 140 | 40 | 180 | 6.91 | 142 | 45 | 186 | 6.50 |
| 9.00 but under 10.00 | 205 | 37 | 242 | 9.30 | 337 | 28 | 365 | 12.75 |
| 10.00 but under 12.00 | 228 | 27 | 255 | 9.80 | 409 | 34 | 443 | 15.47 |
| 12.00 but under 15.00 | 184 | 13 | 197 | 7.57 | 165 | 17 | 182 | 1.36 |
| 15.00 but under 20.00 | 134 | 1 | 135 | 5.19 | 124 |  | 124 | 4.34 |
| 20.00 and over | 55 | 2 | 57 | 2.29 | 48 | 1 | 49 | 1.72 |
| Totals | 1,651 | 952 | 2,603 | 100.00 | 1,910 | 953 | 2,863 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons Employed |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1899. | 1900. | 1899. | 1900. | 1899. | 1900. |
| January . | 2,496 | 2;521 | 100.00 | 99.17 |  | 83 |
| February | 2,479 | 2,474 | 99.32 | 97.32 | . 68 | 2.68 |
| March | 2,472 2,452 | 2,542 2,382 | 99.04 98.24 | 100.00 | . 96 |  |
| May | $\stackrel{\text { 2,452 }}{2,304}$ | $\stackrel{2,382}{2,199}$ | ${ }_{92.31}^{98.24}$ | ${ }_{86.51}^{93.71}$ | 1.76 7.69 | 6.29 13.49 |
| June | 2,333 | 2,372 | 93.47 | ${ }_{93.31}$ | 6.53 | 13.49 6.69 |
| July | 2,408 | 2,399 | 96.47 | 94.37 | 3.53 | 5.63 |
| August | 2,421 | 2,435 | 97.00 | 95.79 | 3.00 | 4.21 |
| September | 2,456 | 2,501 | 98.40 | 98.39 | 1.60 | 1.61 |
| October | 2,470 | 2,401 | 98.96 | 94.41 | 1.04 | 5.59 |
| N'ovember | 2,425 | 2,354 | 97.16 | 92.60 | 2.84 | 7.40 |
| December | 2,405 | 2,389 | 96.36 | 93.98 | 3.64 | 6.02 |

3. Other Presentations.

| Classification. | 1899. | 1900. | Increase or DeCREASE in 1900. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Amount. | Pret. |
| Smallest No. of persons employed.. | 2,304 | 2,199 |  | 105 | 4.56 |
| Greatest No. of persons employed Average No. of persons employed. | 2,496 | 2,542 |  | 105 46 | 4.56 1.84 |
| Average N'o. of persons employed... | 2,427 | 2,414 |  | 13 | . 53 |
| Average yearly earnings | \$302 64 | \$355 28 |  | \$52 64 | 17.39 |
| Average time in operation, days.... | 284 | - 280 |  |  | 1.41 |
| No. of private firms. | 8 | 7 |  |  | 12.50 |
| No. of male partners... | 12 | 14 |  | - ${ }^{1}$ | 16.67 |
| No. of female partners Total N'o. of partners |  |  |  |  |  |
| No. of corporations ... | 12 | 14 |  | 2 | 16.67 |
| No. of male stockholders | 147 |  |  |  | 5.26 |
| No. of female stockholders | 18 | 20 |  | 2 | 11.11 |
| Total No. of stockholders. | 165 | 160 |  | 5 | ${ }_{3} 1.03$ |
| Total No. of partners and stockholders | 177 | 174 |  | 3 | 1.70 |
| Amount of capital invested.......... | \$2,327,632 43 | \$2,353,820 38 | + | \$26,187 95 | 1.12 |
| Value of goods made or work done. | 3,796,942 20 | 4,319,748 48 |  | 522,806 28 | 13.77 |
| Amount paid as wages................ | 732,694 62 | 857,644 76 |  | 124,950 14 | 17.05 |
| Av. capital to each person employed | 96143 | ${ }^{1} 97507$ |  | -1364 | 1.42 |
| Av. product to each person employed | 1,568 34 | 1,789 45 |  | 22111 | 14.09 |

1 establishment did not report as to kind of management and No. of partners.

## MANUFACTURERS' RETURNS, 1899-1900.

BOXES, PAPER-6 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classified Weekly Earnings. | 1899 |  |  |  | 1900 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\begin{aligned} & \text { Fe- } \\ & \text { MALE. } \end{aligned}$ | Total. |  | Male. | $\begin{gathered} \text { FE- } \\ \text { MALE. } \end{gathered}$ | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr.ct. |
| Under \$5.00 | 36 | 220 | 256 | 57.66 | 34 | 185 | 219 38 | 49.32 8.56 |
| $\$ 5.00$ but under $\$ 6.00$ | 8 | $\stackrel{24}{47}$ | 32 <br> 59 | 7.20 | 13 | 54 | ${ }_{65}$ | 14.64 |
| 6.00 but under 7.00 | ${ }_{14} 12$ | 17 | $\stackrel{59}{31}$ | $\underline{13.98}$ | 8 | 33 | 41 | 9.23 |
| 8.00 but under 9 | 10 | 1 | 11 | 2.48 | 9 | 2 | 11 | 2.48 |
| 9.00 but under 10.00 | 15 |  | 10 | 2.25 | 13 | 4 | 17 | 3.83 |
| 10.00 but under 12.00 | 13 | 1 | 14 | 3.15 | 13 | 1 | 14 | 3.15 |
| 12.00 but under 15.00 | 15 |  | 15 | 3.38 | 24 | ....... | 24 | 5.41 |
| 15.00 but under 20.00 | 11 |  | 11 | 2.48 1.13 | 12 |  | 12 | 2.70 |
| 20.00 and over ....... | 5 |  | 5 | 1.13 | 3 |  | 3 | . 63 |
| Totals . ........ | 134 | 310 | 444 | 100.00 | 140 | 304 | 444 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total ino. of Persons Employed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1899. | 1900. | 1899. | 1900. | 1899. | 1900. |
| January .................. | 374383397408418416417409406419427423 | $-\quad 383$389394404406396390389385402416428 | $\begin{array}{r} \hline 87.59 \\ 89.70 \\ 92.97 \\ 95.53 \\ 97.89 \\ 97.42 \\ 97.66 \\ 95.78 \\ 95.08 \\ 98.13 \\ 100.00 \\ 99.06 \end{array}$ | $\begin{array}{r} 89.49 \\ 90.89 \\ 92.06 \\ 94.39 \\ 94.86 \\ 92.52 \\ 91.14 \\ 90.89 \\ 89.95 \\ 93.93 \\ 97.20 \\ 100.00 \end{array}$ | $\begin{array}{r} 12.41 \\ 10.30 \\ 7.03 \\ 4.47 \\ 2.11 \\ 2.58 \\ 2.34 \\ 4.22 \\ 4.92 \\ 1.87 \\ \ldots \ldots .9 . \end{array}$ | 10.519.117.945.615.147.488.869.1110.056.072.80$\ldots . .$. |
| Mebruary |  |  |  |  |  |  |
| April . |  |  |  |  |  |  |
| May |  |  |  |  |  |  |
| June |  |  |  |  |  |  |
| July |  |  |  |  |  |  |
| August |  |  |  |  |  |  |
| September |  |  |  |  |  |  |
| October ${ }^{\text {November }}$ |  |  |  |  |  |  |
| November |  |  |  |  |  |  |

3. Other Presentations.

\begin{tabular}{|c|c|c|c|c|}
\hline \multirow{2}{*}{Classification.} \& \multirow{2}{*}{1899.} \& \multirow{2}{*}{1900.} \& \multicolumn{2}{|l|}{Increase or DeCREASE IN 1900.} <br>
\hline \& \& \& Amount. \& Pret. <br>
\hline Smallest No. of persons employed.. \& 374
427 \& 383
428 \& 1 \& 2.41
.23 <br>
\hline Greatest No. of persons employed.. \& 427 \& \& 1 \& $\underline{2.21}$ <br>
\hline Average No. of persons employed... \& 408 \& \& \& 2.21 <br>
\hline Average yearly earnings... \& \$254 10 \& \$255 20 \& \$1 10 \& . 43 <br>
\hline Average time in operation, days.... \& 298 \& 298 \& \& <br>
\hline No. of private firms................. \& 5 \& 5
8 \& \& <br>
\hline No. of male partners No. \& 1 \& 1 \& \& <br>
\hline No. of female partners ................ \& 9 \& 9 \& \& <br>
\hline No. of corporations . ${ }^{\text {a }}$. ............... \& $\frac{1}{5}$ \& 1 \& \& <br>
\hline No. of stockholders \& 5 \& 5 \& \& <br>
\hline No. of male stockholders ........ \& 2 \& 7 \& \& <br>
\hline Total No. of stockholders ............- \& 7 \& 7 \& \& <br>
\hline  \& 16 \& 16 \& \& <br>
\hline Amount of capital invested ....... \& \$470,376 66 \& \$478,898 81 \& + $\quad \$ 8,62215$ \& 1.83 <br>
\hline Value of goods made or work done. \& 682,929 44 \& 696,932
101,827

1 \& +
$+\quad 14,00280$

+ \& 1.81 <br>
\hline Amount paid as wages .............. \& 103,670
1,15288
1,68 \& 101,827 1,20050 \& \& 1.81
4.13 <br>
\hline Av. capital to each person employed
Av. product to each person employed \& 1,673 85 \& 1,746 70 \& $+\begin{aligned} & + \\ & +\end{aligned}$ \& + 4.35 <br>
\hline
\end{tabular}


# MANUFACTURERS' RETURNS, 1899-1900. BOXES, PACKING AND CIGARS-29 ESTABLISHMENTS. <br> 1. Classified Weekly Earnings. 

| Classified Weekly | 1899 |  |  |  | 1900 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\underset{\text { MALE. }}{\text { Fe }}$ | Total. |  | Male | $\begin{gathered} \text { Fe- } \\ \text { MALE. } \end{gathered}$ | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr.ct. |
|  |  |  |  |  | 347 | 122 | 469 | 30.71 |
| $\$ 5.00$ 6.00 but under buder | 73 177 | 33 | 106 | 7.16 | 87 | 121 31 | 118 | 7.73 |
| 7.00 but under 8.00 | 177 | 6 | 183 <br> 234 | 12.36 | 135 <br> 205 | 27 | 162 | 10.61 |
| 8.00 but under 9.00 | 120 |  | 120 | ${ }_{8} 8.11$ | 129 |  | 129 | 13.42 8.45 |
| 9.00 but under 10.00 | 145 |  | 145 | 9.80 | 235 |  | $\stackrel{123}{ }$ | 15.39 |
| 10.00 but under 12.00 | 112 |  | 112 | 7.57 | 102 |  | 102 | 6.68 |
| 12.00 but under 15.00 | 59 |  | 59 | 3.99 | 69 |  | 69 | 4.52 |
| 15.00 but under 20.00 | 31 |  | 31 | 2.09 | 27 |  | 27 | 1.77 |
| 20.00 and over | 22 | .... | 22 | 1.49 | 11 |  | 11 | . 72 |
| Totals | 1,329 | 151 | 1,480 | 100.00 | 1,347 | 180 | 1.527 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months:

| Months. | Total No. of Persons Employed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment, |  |
|  | 1899. | 1900. | 1899. | 1900. | 1899. | 1900. |
| January | 1,194 | 1,206 | 88.91 |  |  | 9.05 |
| February March | 1,150 | 1,140 | 85.63 | 85.97 | 14.37 | 9.05 14.03 |
| April | 1,110 1,252 | 1,232 1,281 | 82.65 93.22 | ${ }_{96.91}^{92.91}$ | 17.35 | 7.09 |
| May | 1,313 | 1,308 | $\stackrel{97.84}{ }$ | 96.61 98.64 | 6.78 2.16 | 3.39 |
| June | 1,318 | 1,326 | 98.14 | 98.64 100.00 | 2.16 1.86 | 1.36 |
| July | 1,336 | 1,304 | 99.48 | 98.34 | +. 52 | 1.66 |
| August | 1,333 | 1,279 | 99.26 | 96.46 | .74 | 1.65 |
| September | 1,343 | 1,240 | 100.00 | 93.51 |  | 6.49 |
| October .. <br> November | 1,279 | 1,209 | 95.23 | 91.18 | 4.77 | 8.82 |
| November | 1,298 1,229 | 1,208 1,245 | ${ }_{91}^{96.65}$ | 91.10 | 3.35 | 8.90 |
| December | 1,229 | 1,245 | 91.51 | 93.89 | 8.49 | 6.11 |

3. Other Presentations.

| Classification. | 1889. | 1900. | Increase or DeCREASE IN 1900. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | Pret. |
| Smallest No. of persons employed.. | 1,110 | 1,140 | + 30 | 2.70 |
| Greatest No. of persons employed.. | 1,343 1,263 | 1,326 | - 17 | 1.28 |
| Average yearly earnings ............. | \$2809 94 | \$300 17 | $+\quad \$ 1923$ | 6.84 |
| Average time in cperation, days.... | 261 | 255 | ${ }^{\$ 15}$ | 6.84 2.30 |
| No. of private firms | 16 |  |  |  |
| No. of male partners.. | 29 | 29 |  |  |
| No. of female partners |  |  |  |  |
| No. of corporations.... | 29 | 29 |  |  |
| No. of male stockholders. | 13 55 | 13 55 | . |  |
| No. of female stockholders |  |  |  |  |
| Total No. of stockholders............. | 55 | 55 |  |  |
| Total No. of partners and stockholders | 84 | 84 |  |  |
| Amount of capital invested.......... | \$1,343,233 30 | \$1,368,715 20 | + \$25,48190 | 1.90 |
| Value of goods made or wark done. | 2,074,337 10 | 2,134,307 88 | + 59,97078 | 2.89 |
| Amount paid as wages .............. | 354,826 32 | 374,614 99 | $+\quad 19,78867$ | 5.58 |
| Av. capital to each person employed | 1,063 53. | 1,096 73 | $+\quad 3320$ | 3.12 |
| Av. product to each person employed | 1,642 39 | 1,710 18 | $+\quad 6779$ | 4.13 |

## MANUFACTURERS' RETURNS, 1899-1900.

BRICK, TILE AND SEWER PIPE-32 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classtified Weekly Earnings. | 1899 |  |  |  | 1900 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female. | Total. |  | ale. | $\begin{gathered} \text { Fe- } \\ \text { MALE. } \end{gathered}$ | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr.ct. |
| Under $\$ 5.00 \ldots \ldots . .$. | 73 |  | 73 | 8.81 1.45 | 54 | 2 1 | 56 17 | 6.50 1.97 |
| \$5.00 but under $\$ 6.00$ | 15 |  | 15 | 1.81 | 48 |  | 48 | 5.57 |
| 6.00 but under 7.00 but under 8.00 | 148 | $i$ | 149 | 17.97 | 58 | ....... | 58 | 6.74 |
| 8.00 but under 9.00 | 189 |  | 189 | 22.80 | 136 |  | 438 | 50.87 |
| 9.00 but under 10.00 | 293 |  | 293 | 35.34 7 | 438 |  | 80 | 9.29 |
| 10.00 but under 12.00 | 66 |  | 66 22 | 7.96 2.65 | 22 |  | 22 | 2.56 |
| 12.00 but under 15.00 | $\stackrel{1}{9}$ |  | $\stackrel{1}{9}$ | 1.09 | 5 |  | 5 | . 58 |
| 15.00 but under 20.00 | 1 |  | 1 | 1.12 | 1 |  | 1 | . 12 |
| 20.00 and over ......... | 828 | 1 | 829 | 100.00 | 858 | 3 | 861 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months'.

| Months. | Total No. of Persons Employed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1899. | 1900. | 1899. | 1900. | 1899. | 1900. |
| January | 71 | 118 129 | 8.93 9.81 | 14.27 15.60 | 91.07 90.19 | $\begin{aligned} & 85.73 \\ & 84.40 \end{aligned}$ |
| February | 145 | 149 | 18.24 | 18.02 | 81.76 | 81.98 |
| April . | 281 | 283 | 35.35 | 34.22 | 64.65 13.58 | 65.78 12.70 |
| May | 687 | 722 | 86.42 | 87.30 100.00 | 13.65 | 12.7 |
| June . | 766 | 827 | 96.35 100.00 | 109.40 | 3.65 | .60 |
| July . | 779 | 806 | 197.99 | 97.46 | 2.02 | 2.54 |
| August | 730 | 708 | 91.82 | 85.61 | 8.18 | 14.39 |
| September | 474 | 467 | 59.62 | 56.47 | 40.38 | 43.53 |
| October .. | 303 | 268 | 38.11 | 32.41 | 61.89 | 67.59 |
| November | 185 | 154 | 23.27 | 18.62 | 76.73 | 81.38 |

3. Other Presentations.

| Classification. | 1899. | 1900. | Increase or DeCREASE IN 1900. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | Prct. |
| Smallest No. of persons employed. . | $\begin{array}{r} 71 \\ 795 \\ 441 \end{array}$ | 118827454 | + 47 | 66.20 4.03 |
| Greatest No. of persons employed.. |  |  | 13 |  |
| Average No. of persons employed.. | $\$ 31178$150 | \$380 55 | \$68 77 | 22.06.67 |
| Average yearly earnings ............ |  |  |  |  |
| Average time in operation, days.... |  |  |  |  |
| No. of private firms.. | 23 38 |  | - $\quad 1$ | 21.34 |
| No. of male partners.................. | 139 | 232 | 1 | 100.0020.51 |
| No. of female partners |  |  | 7 |  |
| Total No. of partner | 8 | $\stackrel{3}{9}$ | 7 | 12.50 |
| No. of corporations..... | 45 |  |  | 15.567.69 |
| No. of male stockholders................ | 13 | 12 | 1 |  |
| No. of female stockholders.......... | 58 |  | 6 | 10.34 |
| Total No. of stockholders.. Total No. of partners and stock- | 97 | 96 | - 1 |  |
| Total No. of par.......................... |  |  |  | 1.03 |
|  | $\begin{array}{r}\$ 573,895 \\ 458,230 \\ 83 \\ \hline 38\end{array}$ | \$509,887 54- | \$64,008 29 | 11.15 |
| Amount of calue of goods made or work done. |  | 172,769 13+ | 35,27306 | 25.66 |
| Amount paid as wages ............. | 137,496 07 | $\begin{aligned} & 1,123 \\ & 1,084 \\ & 10 \\ & \hline \end{aligned}$ |  |  |
| Av. capital to each person employed | 1, 1,0391307 |  | $\begin{array}{r} 178 \\ 45 \\ 45 \end{array}$ | 13.70 <br> 4.40 |

1 establishment did not report as to kind of management and No. of partners.

## MANUFAC'TURERS' RETURNS, 1899-1900. <br> BROOMS, FTC.- 18 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classified Weekly | 1899 |  |  |  | 1900 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\underset{\text { MaLe. }}{\text { Fe- }}$ | Total. |  | Male. | $\underset{\text { FAE- }}{\substack{\text { Fece. }}}$ | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr.ct. |
|  | 43 |  | 43 | 15.09 | 60 | 5 |  |  |
| ${ }_{6.00}$ but under ${ }^{(1000}$ | 16 |  | 16 | 5.61 | 21 | 5 | ${ }_{21}^{65}$ | 22.57 7.30 |
| 7.00 but under 8.00 | 47 |  | 47 | 16.49 | 31 |  | 31 | 10.76 |
| 8.00 but under 9.00 | 26 |  | 65 26 | ${ }_{9} 2.81$ | 26 |  | 26 | 9.03 |
| 9.00 but under 10.00 | 35 |  | 35 | ${ }_{1} 12.12$ | 39 57 |  | 39 | 13.54 |
| 10.00 bnt under 12.00 | 34 |  | ${ }_{34}$ | 11.93 | 57 31 |  | 57 | 19.79 |
| 12.00 but under 15.00 | 16 | 1 | 17 | 5.97 | 14 |  | 31 | 10.76 |
| 15.00 but under 20.00 20.00 and over $\ldots \ldots .$. | 2 |  | 2 | . 70 | 14 |  | 14 | 4.86 |
| - |  |  |  |  | 1 |  | 1 | 1.04 .85 |
| Totals . ........ $\mid$ | 284 | 1 | 285 | 100.00 | 283 | 5 | 288 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons Employed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1899. | 1900. | 1899. | 1960. | 1899. | 1900. |
| January | 170 | 171 | 65.64 | 69.80 | 34.36 | 30.20 |
| March ... | 190 209 | 193 | 73.36 | 78.78 | 26.64 <br> 1 | 21.22 |
| April | 199 | 214 | 80.69 | 87.35 | 19.31 | 12.65 |
| May | 231 | 227 | 76.83 89.19 | 86.53 92.65 | 23.17 | 13.47 |
| June | 231 | 238 | 89.19 | ${ }_{97.14}^{92.65}$ | 10.81 10.81 | 7.35 |
| August | 249 | 245 | 96.14 | 100.00 | 3.86 | 2.86 |
| September | 259 | 244 | 100.00 | 99.59 |  | 41 |
| October ... | 231 | 232 | 89.19 | 94.69 | 10.81 | 5.31 |
| November | 193 179 | 204 | 74.52 | 83.27 | 25.48 | 16.73 |
| December | 169 | 199 179 | 69.11 | 81.23 | 30.89 | 18.77 |
|  |  | 179 | 65.25 | 73.06 | 34.75 | 27.94 |

3. Other Presentations.

| Classification. | 1899. | 1900. | Increase or DeCREASE IN 1900, |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | Pret. |
| Smallest No. of persons employed.. | 169 |  |  |  |
| Greatest No. of persons' employed.. | 259 |  |  | 1.18 |
| catest No. of persons employ | 209 |  |  | 1.91 |
| Average vearly earnings . | \$301 52 |  |  |  |
| Average time in operation, day | \$ 268 | \$249 24 | $\$ 168$ 19 | $\begin{array}{r}.59 \\ \hline .09\end{array}$ |
| No. of private firms. |  |  |  |  |
| No. of male partners | 29 | $\stackrel{14}{23}$ | ${ }_{6}$ | 20.69 |
| Total No. of partners.. |  |  |  |  |
| No. of corporations.. | ${ }_{4}^{29}$ | 23 | 6 | 20.69 |
| No. of male stockholder | ${ }_{26}^{4}$ | $\stackrel{4}{24}$ | . ${ }^{\text {a }}$ |  |
| No. of female stockholders | 26 3 | 24 |  | 7.69 |
| Total No. of stockholders............. | 29 | 29 |  | 66.67 |
| Total No. of partners and stock- holders |  |  |  |  |
|  | 58 |  | 6 | 10.34 |
| Amount of capital invested......... | \$151,719 21 | \$163,195 86 |  |  |
| Amount paid as wages work done. | 235,934 70 | 245,758 25 | \$1, 9,82355 | 4.16 |
| Av. capital to each person employed | 63,017 725 | 63,866 50 | -84895 | 1.35 |
| 1v. product to each person employed | 1,128 87\| | 1,153 79 | 44 2492 | 6.24 |

## MANUFACTURERS' RETURNS, 1899-1900. <br> BURIAL CASES-3 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classified Weekly Earnings. | 1899 |  |  |  | 1900 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\begin{gathered} \text { FE- } \\ \text { MALE. } \end{gathered}$ | Total. |  | Male. | $\begin{gathered} \text { Fe. } \\ \text { MALE. } \end{gathered}$ | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr-ct. |
| Under $\$ 5.00$ | 35 | 62 | ${ }_{21} 9$ | 27.09 | ${ }_{50}{ }_{3}$ | 28 | 78. 40 | 21.73 11.14 |
| \$5.00 but under \$6.00 | 9 3 | $\begin{array}{r}12 \\ 4 \\ \hline\end{array}$ | $\stackrel{21}{36}$ | 5.87 10.06 | 3 4 | 30 | 34 | 9.47 |
| 6.00 but under 7.00 | 32 | 4 | 76 | ${ }_{21.23}$ | 76 | 1 | 77 | 21.45 |
| $\begin{array}{lll}7.00 & \text { but under } \\ 8.00 & 8.00 \\ \text { but under } & \\ 9.00\end{array}$ | 28 |  | 28 | 7.82 | 27 |  | 27 | 7.52 |
| 9.00 but under 10.00 | 51 |  | 51 | 14.25 | 47 |  | 47 | 13.09 |
| 10.00 but under 12.00 | 15 | 1 | 16 | 4.47 | 18 | 1 | 19 | 5.29 |
| 12.00 but under 15.00 | 22 |  | 22 | 6.14 | 18 |  | 18 | 5.01 |
| 15.00 but under 20.00 | 11 |  | 11 | 3.07 | 19 |  | 19 | 5.3 |
| 20.00 and over $\ldots \ldots$. |  |  |  |  |  |  |  |  |
| Totals | 279 | 79 | 358 | 100.00 | 262 | 97 | 359 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons Employed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1899. | 1900. | 1899. | 1900. | 1899. | 1900. |
| January | 304 | 356 | 84.68 | 98.89 99.17 | 15.32 1.11 | 1.11 .83 |
| February | 355 356 | 357 | 98.89 99.11 | 99.17 | 1.89 | . 83 |
| March | ${ }_{356}^{356}$ | 357 | 99.11 | 99.17 | . 89 | . 83 |
| May . | 357 | 358 | 99.44 | 99.44 | . 56 | . 56 |
| June | 357 | 359 | 99.44 | 99.72 | . 56 | . 28 |
| July | 357 | 358 | ${ }_{99}^{99.44}$ | 99.44 99.44 | . 56 | . 56 |
| August | 357 <br> 358 | 358 359 | 99.44 | 99.72 | . 28 | . 28 |
| September | 358 | 369 360 | 99.72 | 100.00 | . 28 |  |
| October ${ }^{\text {Noyember }}$ | 359 | 360 | 100.00 | 100.00 |  |  |
| December | 359 | 360 | 100.00 | 100.00 |  |  |

3. Other Presentations.

| Classification. |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: |

# MANUFACTURERS' RETURNS, 1899-1900. CAN'NING VEGETABLES-16 ESTABLISHMENTS. 

1. Classiffed Weekly Earnings.

| $\underset{\text { Clarsified Weekly }}{\text { Earg. }}$ | 1899 |  |  |  | 1900 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\begin{aligned} & \text { FE- } \\ & \text { MALE. } \end{aligned}$ | Total. |  | Male. | $\begin{gathered} \text { Fe- } \\ \text { MALE. } \end{gathered}$ | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr.ct. |
|  | 181 |  |  |  | 163 |  | 627 | 37.23 |
| $\$ 0.00$ <br> 6.00 <br> but under <br>  | 58 <br> 43 | 107 48 | 165 91 | 10.82 | 163 20 51 | 211 | 231 | 13.72 |
| 7.00 but under 8.00 | 98 | 48 | 91 98 | 5.69 | 51 | 48 | 99 | 5.88 |
| 8.00 but under 9.00 | 68 | 12 | 80 | 6.13 5.00 | 112 | ${ }_{12}^{8}$ | 120 | 7.12 |
| 9.00 but under 10.00 | 177 | 21 | 198 | +12.00 | 153 <br> 248 <br> 1 | 12 | 165 | 9.80 |
| 10.00 but under 12.00 | 166 |  | 166 | 10.38 | 113 | $\stackrel{2}{5}$ | ${ }_{1} 118$ | 15.97 |
| 15.00 but under 115.00 | 75 |  | 75 | 4.69 | 31 |  | 31 | 7.01 |
| 20.00 and over ........ | 28 |  | ${ }_{28}^{15}$ | . 94 | 5 |  | 5 | . 30 |
|  |  |  | 28 | 1.75 | 19 |  | 19 | 1.13 |
| Totals . ....... | 909 | 690 | 1,599 | 100.00 | 915 | 769 | 1,684 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons Employed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1899. | 1900. | 1899. | 1900. | 1899. | 1800. |
| JanuaryFebruary |  |  |  |  |  |  |
| March ... | 525556 | 46 46 51 | 3.85 | 3.18 3.18 | 96.35 96.13 | 96.82 |
| April . |  | $\stackrel{51}{77}$ | 3.94 | 3.52 | 96.06 | 96.48 |
| May | 147 | 115 | 10.33 | 7.94 |  | 94.68 |
| June |  |  |  |  | 89.67 | 92.06 |
| July . | 1,4231,393 | $1,448$ | 100.00 | 50.76 100.00 | 46.73 | 49.24 |
| August |  |  | 97.8959.03 | $97.72$ |  | $\dddot{2.28}$ |
| September | 1,393 840 | 1,425 |  |  | 2.11 40.97 |  |
| October . | $\begin{array}{r}406 \\ 282 \\ \hline 68\end{array}$ | 424 | $\begin{array}{r} 28.53 \\ 19.82 \\ 4.78 \end{array}$ | $\begin{array}{r} 29.28 \\ 11.40 \\ 3.87 \end{array}$ | $\begin{aligned} & 71.47 \\ & 80.18 \\ & 95.22 \end{aligned}$ | $\begin{aligned} & 70.70 \\ & 88.70 \\ & 8.60 \end{aligned}$ |
| November |  | 46416556 |  |  |  |  |
| December | 68 |  |  |  |  |  |

3. Other Presentations.

| Classifivation. | 1899. | 1900. | Increase or DeCREASE IN 1900. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | Pret. |
| Smallest No. of persons employed. ${ }_{\text {Greatest }}$ |  |  |  |  |
| Greatest No. of persons employed.. Average No. of persrons employed. | ' 1,423 | 1,448 | + $\quad 25^{6}$ | 11.54 1.76 |
| Average No. of persrons employed.. | 465 |  |  | 4.52 |
| Average yearly earnings ........... Average time in operation |  | \$247 02 | $+\quad \$ 1414$ | 6.07 |
| Average time in operation, days.... | 139 | 129 | - $\quad 10$ | 7.19 |
| No. of private firms | 5 | 5 |  |  |
| No. of male partners No. | 9 | 9 |  |  |
| No. of corporations. | 11 | 11 |  |  |
| No. of male stockholders. | 345 | 11 | $\cdots \cdots$ |  |
| No. of female stockholders | 14 |  | - 90 | ${ }^{26.09}$ |
| Total No. of stockholders ............ | 359 |  |  | 25.14 |
| Total No. of partners and stockholders | 368 | 277 |  | 25.35 |
| Amount of capital invested. | \$632,989 73 |  |  |  |
| Value of goods made or work done. |  |  | \$33,488 28 | 5.29 |
| Amount paid as wages............... | 1,108,292 15 | 1,184,210 ${ }^{109} 978$ | 10,538 50 | . 90 |
| Av. cãpital to each person employed | 1,361 27 | 109,578 1,501 | 1,386 82 | 1.19 |
| Av. product to each person employed | 2,524 03 | 2,667 14 | + $\quad 14311$ | 10.27 5.67 |

## MANUFACTURERS' RETURNS, 1899-1900.

CEMENT, LIME AND PLASTER-12 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classtfied Weekly Earnings. | 1899 |  |  |  | 1900 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Fe- | Тотal. |  | Male. | $\begin{aligned} & \text { FE- } \\ & \text { MALE. } \end{aligned}$ | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr.ct. |
| Under $\$ 5.00 \ldots \ldots . . .1$ | 27 | 43 | 70 | 9.52 | 30 | 34 | 64 | 10.32 |
| $\$ 5.00$ but under $\$ 6.00$ | 3 | 1 | 4 | 8.54 | 8 |  | $\begin{array}{r}9 \\ 19 \\ \hline\end{array}$ | 1.45 |
| $\begin{array}{lll}6.00 & \text { but under } & 7.00 \\ 7.00 & \text { but under } & 8.00\end{array}$ | r 57 | 3 | 150 | 21.63 | 167 | i | 168. | 27.10 |
| 8.00 but under 9.00 | 143 |  | 143 | 19.46 | 32 |  | 32 | 5.16 |
| 9.00 but under 10.00 | 92 |  | 92 | 12.52 | 148 |  | 148 | 23.87 |
| 10.00 but under 12.00 | 165 |  | 165 | 22.45 | 152 |  | 152 | 24.52 |
| 12.00 but under 15.00 | 28 |  | 28 | 3.81 | 18 |  | 18 | 2.90 |
| 15.00 but under 20.00 | 9 |  | 9 | 1.23 | 8 |  | 8 | 1.29 |
| 20.00 and over ........ | 5 |  | 5 | . 68 | 2 |  | 2 | . 32 |
| Totals | 688 | 47 | 735 | 100.00 | 584 | 36 | 620 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months'.

| Months. | Total No. of Persons Employed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1899. | 1900. | 1899. | 1900. | 1899. | 1900. |
| January | 233 | 281 | 38.70 | 49.82 | 61.30 | 50.18 |
| February | 282 | 293 | 43.02 46.84 | 51.95 59.75 | 56.98 53.16 | 48.25 |
| April . | 312 | 465 | 51.83 | 82.45 | 48.17 | 17.55 |
| May | 458 | 478 | 76.08 | 84.75 | 23.92 | 15.25 |
| June | 602 | 564 | 100.00 | 100.00 |  |  |
| July | 584 | 527 | 97.01 | 93.44 | 2.99 | 6.56 |
| August ... | 525 | 493 | ${ }_{91} 7.36$ | 886.35 | 8.64 | 13.65 |
| Oetober | 575 | 497 | 95.51 | 88.12 | 4.49 | 11.88 |
| November | 529 | 489 | 87.87 | 86.70 | 12.13 | 13.30 |
| December | 412 | 299 | 68.44 | 53.01 | 31.56 | 46.99 |

3. Other Presentations.


## MANUFACTURERS' RETURNS, 1899-1900.

CIGARS-48 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classified Weekly Earnings. | 1899 |  |  |  | 1900 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | $\underset{\text { MALE. }}{\text { Me. }}$ | Total. |  | Male. | $\underset{\text { male }}{\text { Fe }}$ | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr.ct. |
| Under $\$ 5.00 \times \ldots \ldots \ldots$ | 941 | 113 | 207 | 26.00 | 87 | 159 | 246 | 28.54 |
|  | 11 | 23 | 34 | 4.27 | 11 | 21 | 32 | 3.72 |
| 7.00 but under 8.00 | 24 | 8 | 32 32 | 6.65 4.02 | 36 52 5 | ${ }^{6}$ | 42 | 4.87 |
| 8.00 but under 9.00 | 48 | 19 | $\stackrel{37}{ } 6$ | 8.42 | ${ }_{76}$ | 17 | 64 | 7.42 |
| 9.00 but under 10.00 | 90 | 7 | 97. | 12.19 | 79 | 17 | 88 | 10.79 |
| 10.00 but under 12.00 | 130 | 9 | 139 | 17.46 | 108 |  | 111 | 12.88 |
| 12.00 but under 15.00 | 102 | 2 | 104 | 13.07 | 113 |  | 113 | 13.11 |
| 15.00 but under 20.00 | 49 |  | 49 | 6.16 | 62 |  | 62 | ${ }_{7} \mathbf{7} .19$ |
| 20.00 and over ........ | 14 |  | 14 | 1.76 | 18 |  | 18 | 2.09 |
| Totals .......... | 595 | 201 | 796 | 100.00 . | 642 | 220 | 862 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons Employed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1899. | 1900. | 1899. | 1900. | 1899. | 1900. |
| January | 707 | 773 | 91.70 | 94.38 | 830 | 5.62 |
| March . ${ }^{\text {February }}$ | 709 | 753 | ${ }_{93}^{91.96}$ | 91.98 | 8.04 | 8.02 |
| April | 732 | 794 | 94.94 | 96.83 96.95 | 6.36 | 3.17 |
| May | 732 | 812 | 94.94 | 99.15 | 5.06 | 3.05 |
| June | 744 | 782 | 96.49 | 99.48 | 3.06 | 4.85 |
| July | 716 | 765 | 92.87 | 93.41 | 7.13 | 6.59 |
| August ${ }^{\text {S }}$. | 733 | 790 | 95.07 | 96.46 | 4.93 | ${ }_{3} 6.54$ |
| September | 747 | 803 | 96.89 | 98.05 | 3.11 | 1.95 |
| October ${ }^{\text {November }}$ | 752 769 | 803 819 | 97.54 | 98.05 | 2.46 | 1.95 |
| December | 771 | 819 783 | 99.74 $100: 00$ | 100.00 95.60 | . 26 | 4.40 |

3. Other Presentations.

| Classification. | 1899. | 1900. | Increase or Decrease in 1900. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | Ptct. |
| Smallest No. of persons employed.. | 707 | 753 | + +46 | 6.51 |
| Greatest No. of persons employed.. | 771 | 819 | + 48 | 6.23 |
| Average No. of persons employed.. | 736 |  | 53 | 7.20 |
| Average yearly earnings | \$367 32 | \$369 07 | \$1 75 |  |
| Average time in operation, days | 292 | 286 |  | 2.05 |
| No. of private firms | 46 |  | + 1 |  |
| No. of male partners | 65 | 61 | 4 | 6.15 |
| No. of female partners ............... | 2 |  |  | 6.15 |
| Total No. of partners | 67 |  | . 4 | $\stackrel{7}{5} 97$ |
| No. of corporations | 2 |  | 1 | 50.00 |
| No. of male stockholders | 11 |  | 5 | 45.45 |
| No. of female stockholders Total No. of stockholders |  |  |  |  |
| Total No. of stockholders ....... | 11 |  | 5 | 45.45 |
| holders . ........................ | 78 |  | 9 | 11.54 |
| Amount of capital invested | \$636,684 57 | \$608,60172 | - \$28,082 85 |  |
| Value of goods made or work done. | 1,070,025 05 | 1,115,297 32 | + 45,272 27 | 4.23 |
| Amount paid as wages .............. | 270,348 21 | 291,198 97] | + $\quad 20,85076$ | 7.71 |
| Av. capital to each perosn employed | 86506 | 75868 | 10638 | 12.29 |
| Av. product to each perosn employed | 1,453 84 | 1,413 56 | - 4028 | 2.77 |

## MANUFACTURERS' RETURNS, 1899-1900.

CHAIRS-12 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classified Webkly Earnings. | 1899 |  |  |  | 1900 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\begin{gathered} \text { Fe- } \\ \text { MALE. } \end{gathered}$ | Total. |  | Male. | $\underset{\text { MALE. }}{\text { Fe- }}$ | Total. |  |
|  |  |  | No. | Pr. ct. |  |  | No. | Pr.ct. |
| Under $\$ 5.00 \ldots$. | 423 | 253 | 676 |  |  |  | 599 | 15.61 6.80 |
| \$5.00 but under $\$ 9.000$ | ${ }^{215}$ | 45 | ${ }^{260}$ | 6.99 | - 212 | 48 3 | 260 1,109 | 6.80 29.01 |
| ${ }^{6.00}$ but under 7.00 | 1,449 | 2 | 1.451 | 39.02 | 1,106 | 3 | 1,109 | 19.85 |
| $\begin{array}{lll}7.00 & \text { but under } \\ 8.00 & 8.00 \\ \text { but under } & 9.00\end{array}$ | 660 181 | ...... | 660 181 | 17.75 4.86 | 759 <br> 322 |  | 729 329 | 19.85 8.42 |
| ${ }_{9} .00$ but under 10.00 | 170 |  | 170 | 4.57 | 336 |  | 336 | 8.79 |
| 10.00 but under 12.00 | 184 |  | 184 | 4.94 | 195 |  | 195 | 5.10 |
| 12.00 but under 15.00 | 79 |  | 79 | 2.13 | 140 |  | 140 | 3.66 |
| 15.00 but under 20.00 | 44 |  | 44 | 1.18 | 76 |  | 76 | 1.99 |
| 20.00 and over ....... | 13 |  | 13 | . 35 | 27 |  | 27 | . 71 |
| Totals .......... | 3,418 | 300 | 3,718 | 100.00 | 3,548 | 275 | 3,823 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons Employed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1899. | 1900. | 1899. | 1900. | 1899. | 1900. |
| January . | 3,378 | 3,299 | ${ }^{98.25}$ | 89.11 | 1.75 | 10.89 |
| February | 3,438 | 3,391 3,570 | 100.00 85.83 88 | 91.06 96.43 | 14.17 | 8.94 3.57 |
| March ... | $\stackrel{2,951}{3,057}$ | 3,570 3,609 | 85.83 88.92 | 96.43 97.49 | 11.08 | 2.51 |
| May . | 3,023 | 3,668 | 87.92 | 99.08 | 12.08 | . 92 |
| June | 2,951 | 3,567 | 85.83 | 96.35 | 14.17 | 3.65 |
| July | 3,051 | 3,372 | 88.74 | 91.09 | 11.26 | 8.91 |
| August | 3,121 | 3,537 | 90.78 | 95.54 | 9:22 | 4.46 |
| September | 3,063 | 3,619 | 89.09 | -97.75 | 10.91 | 2.25 |
| October ${ }^{\text {November }}$ | 3,336 3,413 | 3,762 3,667 | ${ }_{99.22}^{97.03}$ | 100.00 99.05 | 2.97 .78 | . 95 |
| December | 3,341 | 3,349 | 97.41 | 90.46 | 2.59 | 9.54 |

3. Other Presentations.

| Classification. | 1899. | 1900. | Increase or DeCREASE IN 1900. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | Pret. |
| Smallest No. of persons employed. | 2,951 | 3,299 | 348 | 11.79 |
| Greatest No. of persons employed | 3,438 | 3,702 | 264 | 7.68 |
| Average No. of persons employed.. | 3,177 | 3,529 | 352 | 11.08 |
| Average yearly earnings | \$310 60 | \$324 29 | \$13 69 | 4.41 |
| Average time in operation, days | 281 | 278 | 3 | 1.07 |
| No. of private firms | 2 |  | + 1 | 50.00 |
| No. of male partners | 3 |  |  |  |
| No. of female partners |  | 1 |  |  |
| Total No. of partners . | 3 |  | 1 | 33.33 |
| No. of corporations | 10 |  | 21 | 10.00 14.28 |
| No. of male stockholders. | 14 |  | 8 | 44.44 |
| No. of female stockholders <br> Total No. of stockholders | 165 | 136 | 29 | 17.57 |
| Total No. of partners and stockholders | 168 |  | 28 | 16.67 |
| Amount of capital invested | \$3,264,848 88 | \$3,362,286 48 | + \$97,437 60 | 2.98 |
| Value of goods made and work done | 2,370,132 59 | 3,859,994 80 | + 1,489,862 21 | 62.86 |
| Amount paid as wages............. | 986,802 09 | 1,144,425 30 | + 157,6\%321 | 15.93 |
| Av. capital to each person employed | 1,027 65 | 95276 | - 7489 | 74.23 |
| Av. product to each person employed | 746031 | 1,076 79\| | + $\quad 33076$ | 44.33 |

## MANUFACTURERS' RETURNS, 1899-1900.

CLOTHING-29 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classified WeeklyEarnings. | 1899 |  |  |  | 1900 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Fie- | Total. |  | Male. | $\underset{\text { MALE. }}{\text { Fe- }}$ | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr.ct. |
| Under $\$ 5.00 \ldots \ldots .$. | 43 | 1,110 | 1,153 | 36.80 | 57 | 1,124 | 1,181 | 37.83 |
| \$5.00 but under $\$ 6.00$ | 19 | -888 | 1,907 | 28.95 | 16 | 1,124 | -830 | 26.59 |
| $\begin{array}{ll}6.00 & \text { but under } \\ 7.00 \\ \text { but under } & 7.00 \\ 8.00\end{array}$ | 18 | 229 | 247 | 7.89 | 23 | 289 | 312 | 9.99 |
| 8.00 but under 9.00 | 51 <br> 34 | 178 | -299 | 7.31 | 34 44 | 150 | 184 | 5.89 |
| 9.00 but under 10.00 | 26 | 42 | 68 | 2.18 | 44 | 57 | 121 | 3.88 |
| 10.00 but under 12.00 | 105 | 42 | 147 | 4.69 | 96 | 29 | 106 | 3.31 |
| 12.00 but under 15.00 | 80 | 5 | 85 | 2.72 | 93 | 11 | 104 | 3.33 |
| 15.00 but under 20.00 | 65 |  | 65 | 2.08 | 76 |  | 76 | 2.43 |
| 20.00 and over ....... | 102 |  | 103 | 3.29 | 83 |  | 83 | 2.66 |
| Totals .......... | 543 | 2,590 | 3,133 | 100.00 | 576 | 2,546 | 3;122 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of fersons Employed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1899. | 1800. | 1899. | 1900. | 1899. | 1900. |
| January February | 2,592 | 2,956 | 86.20 | 94.08 | 13.20 | 5.92 |
| $\begin{aligned} & \text { February } \\ & \text { March. } \end{aligned}$ | $\stackrel{2,642}{2,747}$ | 3,028 | 87.86 | 96.37 | 12.14 | 3.63 |
| April | 2,751 | 3,103 | 91.49 | 98.57 | 88.65 | 1.12 |
| May | 2,785 | 3,077 | 92.62 | 97.93 | 7.38 | 2.07 |
| June | 2,781 | 3,067 | 92.48 | 97.61 | 7.52 | 2.39 |
| July | 2,871 | 3,095 | 95.48 | 98.50 | 4.52 | 1.50 |
| August | 2,889 | 3,050 | 96.07 | 97.07 | 3.93 | 2.93 |
| September | 2,950 | 3,132 | 98.10 | 99.68 | 1.90 | . 32 |
| October | 3,007 | 3,142 | 100.00 | 100.00 |  | . 8 |
| November | 2,976 | 3,058 | 98.97 | 97.32 | 1.03 | 2.68 |
| December | 2,959 | 2,913 | 98.40 | 92.71 | 1.60 | 7.29 |

3. Other Presentations.

| Classification. | 1899. | 1900. | Increase or DeCREASE IN 1900 . |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Amount. | $\mid$ Pret. |
| Smallest No. of persons employed.. | 2,592 | 2,913 |  | 321 | 12.35 |
| Greatest No. of persons employed.. | 3,007 | 3,142 |  | 135 | 4.49 |
| Average No. of persons employed.. | 2,829 | 3,061 | $+$ | 232 | 8.20 |
| Average yearly earnings ........... | \$341 60 | \$327 40 | - | \$14 20 | 4.16 |
| Average time in operation, days.... | 296 | 290 |  |  | 2.03 |
| No. of private firms.. | 10 |  |  | $\cdots$ | 10.00 |
| No. of maie partners ................. | 24 | 22 |  | 2 | 8.33 |
| No. of female partners ................ | 1. |  |  | 1 | 100.00 |
| Total No. of partners | 25 |  |  | 3 | 12.00 |
| No. of corporations ...... | 19 | 20 | + | 1 | 5.26 |
| No. of male stockholders ............ | 139 | 137 |  | 2 | 1.44 |
| No. of female stockholders .......... | 61 | 67 |  | 6 | 9.84 |
| Total No. of stockholders ............. | 200 | 204 |  | 4 | 2.00 |
| Total No. of partners and stock- holders . .................................. | 225 | 226 |  | 1 | . 44 |
| Amount of capital invested.. | \$2,415,091 51 | \$2,463,035 47 |  | \$47,943 96 | 1.99 |
| Value of goods made and work done | 5,609,780 36 | 5,416,803 79 | - | 192,976 57 | 3.44 |
| Amount paid as wages .............. | 966,393 94 | 997,536 58 | + | 31,152 64 | 3.22 |
| Av. capital to each person employed | 85369 | 80465 |  | 4904 | 5.74 |
| $A \nabla$. product to each person employed | 1,982 95 | 1,769 32 |  | 213 63\| | 10.77 |

## MANUFACTURERS' RETURNS, 1899-1900.

COOKING AND HEATIN'G APPARATUS-5 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classified Weekly Earnings. | 1899 |  |  |  | 1900 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\underset{\text { MALE. }}{\text { Fe- }}$ | Total. |  | Male. | $\begin{aligned} & \text { FE- } \\ & \text { MALE. } \end{aligned}$ | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr.ct. |
| Under $\$ 5.00 \ldots \ldots \ldots .00$ | 270 | 3 | 273 53 | 23.16 4.49 | 150 28 |  | 150 28 57 | $\begin{array}{r}13.97 \\ \\ \\ \hline\end{array}$ |
| $\$ 5.00$ <br> 6.00 <br> but under under <br> 8.00 <br> 7.00 | 40 |  | 40 | 3.39 | 57 |  | . 57 | 5.31 4.93 |
| 7.00 but under 8.00 | 56 |  | 56 | 4.75 | - 142 | …….. | 142 | 13.22 |
| 8.00 but under 9.00 | 131 |  | 131 | 11.11 | 143 |  | 143 | 13.31 |
| 9.00 but under 10.00 | 143 |  | 143 | 8.31 | 102 |  | 102 | 9.50 |
| 10.00 but under 12.00 | 188 |  | 184 | 15.61 | 175 |  | 175 | 16.30 |
| 12.00 but under 20.00 | 164 |  | 164 | 13.91 | 177 |  | 177 | 16.48 4.37 |
| 20.00 and over ...... | 37 |  | 37 | 3.14 |  |  |  |  |
| Totals | 1,176 | 3 | 1,179 | 100.00 | 1,074 | .... | 1,074 | 100.0 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons Emploted. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1899. | 1900. | 1899. | 1900. | 1899. | 1900. |
| January | 830 923 | 944 | 71.92 79.98 | 53.00 54.80 | 28.08 20.02 | $\begin{aligned} & 47.00 \\ & 45.20 \end{aligned}$ |
| February | 923 975 | 976 1,028 | 84.49 | 57.72 58.79 | 15.51 |  |
| Mapril | 1,015 | 1,047 | 87.96 | 58.79 | 12.04 8.84 | 41.33 |
| May | 1,052 | 1,045 | 91.42 | 5.92 | 8.58 | 44.08 |
| June | 1,055 | 977 | 97.75 | 54.86 | 2.25 | 45.14 |
| July . | 1,142 | - 970 | 98.96 | 54.46 | 1.04 | 45.54 |
| August ... | 1,154 | 985 | 100.00 | 55.36 |  | 44.64 |
| September | 1,146 | 1,001 | 99:30 | 56.20 | . 70 | 43.80 |
| October | 1,113 | 1,781 | ${ }_{86}^{96.45}$ | 100.00 | 3.55 13.17 |  |
| November | 1,002 | 930 | 86.83 | 52.22 | 13.17 | 47.78 |

3. Other Presentations.


## MANUFACTURERS' RETURNS, 1899-1900. CONFECTIONERY-13 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classified Weekly Earnings. | 1899 |  |  |  | 1900 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\begin{gathered} \text { Fe- } \\ \text { MALE. } \end{gathered}$ | Total. |  | Male. | $\underset{\text { MALE. }}{\text { Fer }}$ | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr. ct. |
| Under $\$ 5.00$ but under $\$ \ldots 6.00$ | 207 | 804 |  | 75.56 | 210 |  |  |  |
| $\begin{array}{r}\$ 0.00 \\ 7.00 \text { but under } \\ \\ \hline\end{array}$ | 31 <br> 25 | 18 | 1, 49 | 5.56 3.67 2.47 | $\stackrel{31}{31}$ | 887 44 | 1,090 75 | 71.25 4.91 |
| 7.00 but under 8.00 | 25 | 8 4 | 33 39 | 2.47 | 40 | 11 | 51 | 3.33 |
| 8.00 but under 9.00 | 31 | 4 | 31 | ${ }_{2}^{2.91}$ | 41 | 3 | 44 | 2.88 |
| 9.00 but under 10.00 | 39 |  | 39 39 | 2.91 | 36 | 4 | 40 | 2.61 |
| 10.00 but under 12.00 | 42 |  | 42 | 3.14 | 71 | 1 | 42 | 2.74 |
| 12.00 but under 15.00 | 54 |  | 54 | 4.03 | 70 |  | 70 | 4.57 |
| 15.00 but under 20.00 | 30 |  | 30 | 2.24 | 41 | . | 62 | 4.05 |
| 20.00 and over ....... | 10 |  | 10 | . 75 | 15 |  | 15 | 2.68 .98 |
| Totals .......... | 504 | 834 | 1,338 | . 100.00 | 587 | 943 | 1,530 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons Employed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1899. | 1900. | 1899. | 1900. | 1899. | 1900. |
| January | 879 | 1,128 | 67.20 | 73.78 | 32.80 | 26.22 |
| March . | ${ }_{963}^{940}$ | 1,128 | 71.87 | 73.78 | 28.13 | 26.22 |
| April | ${ }_{993}^{963}$ | 1,111 | 73.63 | 72.66 | 26.37 | 27.34 |
| May | 1,059 | 1,222 | 75.92 80 | 79.22 | 24.08 | 20.78 |
| June | 1,038 | 1,302 | 80.96 79.36 | 84.20 | 19.04 | 15.80 |
| July . | 1,011 | 1,318 | 79.36 77.29 | 85.16 85.55 | 20.64 22.71 | 14.84 |
| August ${ }_{\text {September }}$ | 1,114 | 1,328 | 85.17 |  | 22.71 14.83 | 14.45 13.15 |
| October . | 1,158 | 1,371 | 88.52 | 89.66 | 11.48 | 10.34 |
| November | 1,308 | 1,495 | 92.29 100.00 | 97.78 | 7.71 | 2.22 |
| December | 1,247 | 1,450 | 95.34 | 100.00 94.83 | 4.66 | 5.17 |

3. Other Presentations.

| Classification. | 1899. | 1900.) | Increase or DeCrease in 1900. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | Pret. |
| Smallest No. of persons employed. | 879 | 1,111 | 232 |  |
| Greatest No. of persons employed.. | 1,308 | 1,529 | 221 | 26.88 16.89 |
| Average No. of persons employed.. | 1,076 | 1,306 | 230 | 21.37 |
| Average yearly earnings .... Average time in operation | \$232 83 | \$243 48 | \$10 65 | 4.57 |
| No. of private firms |  |  |  |  |
| No. of male partners | $\stackrel{2}{2}$ | 2 |  |  |
| No. of female partners |  |  |  |  |
| Total No. of partners | ${ }^{7}$ |  |  |  |
| No. of corporations ${ }^{\text {No. }}$ of male | 7 | 7 |  |  |
| No. of male stockholders | 31 | 31 |  |  |
| Total No. of stockholders. | 6 37 | ${ }^{6}$ |  |  |
| Total No. of partners and stock- | 37 | 37 |  |  |
| holders . ....... | 39 | 39 |  |  |
| Amount of capital invested | \$1,052,181 68 |  |  |  |
| Value of goods made or work done. | 2,012,263 29 | \$1,193,520 83 | \$141,339 25 | 13.43 |
| Amount paid as wages ............. | 250,528 79 | 317,791 04 | 67,262 25 | 10.11 |
| Av. capital to each person employed | 97786 | 91387 | - 6399 | 6.34 |
| Av. product to each person employed | 1,870 13 | 1,696 60\| | 17353 | 6.84 9.28 |

1 establishment did not report as to kind of management and No. of partners.

MANUFACTURERS' RETURNS, 1899-1900.
COOPERAGE-17 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classified Weekly EARNINGS. | 1899 |  |  |  | 1900 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\begin{aligned} & \text { FE- } \\ & \text { MALE. } \end{aligned}$ | Total. |  | Male. | $\begin{gathered} \text { FE- } \\ \text { MALE. } \end{gathered}$ | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr.ct. |
| Under $\$ 5.00$. $\ldots \ldots \ldots$. | 12 | . | ${ }_{29}^{12}$ | 2.55 6.16 | 34 12 |  | 34 12 | 7.19 2.54 |
| $\$ 500$ but under ${ }^{(66.00}$ | 29 22 |  | 22 | 6.67 4.67 | 24 | ........ | 24 | 5.07 |
| $\begin{array}{lll}6.00 & \text { but under } \\ 7.00 & \text { but under } & 8.00\end{array}$ | 43 |  | 43 | 9.13 | 41 | ...... | 41 | 8.67 |
| 8.00 but under 9.00 | 71 | .... | 71 | 15.07 | 53 | ....... | +1938 | ${ }_{25} 11.16$ |
| 9.00 but under 10.00 | 123 |  | 123 | 26.11 | 119 |  | ${ }_{36}$ | 7.61 |
| 10.00 but under 12.00 | 17 40 |  | 77 40 | 16.35 8.49 | 81 |  | 81 | 17.12 |
| 12.00 but under 15.00 | 50 |  | 50 | 10.62 | 72 |  | 72 | 15.22 |
| 15.00 20.00 but under over $\ldots \ldots . .0$ | 5 |  | 4 | 10.65 | 1 |  | 1 | . 21 |
| Total | 471 | ........ | 471 | 100.00 | 473 |  | 473 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons Employed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1899. | 1900. | 1899. | 1900. | 1899. | 1800. |
| January |  |  | 85.97 85.07 | 77.73 77.94 | 14.03 14.93 | $\begin{aligned} & 22.27 \\ & 22.06 \end{aligned}$ |
| February | 376 401 | 378 407 | 85.07 90.72 | 84.33 | 14.98 1.28 | 15.67 |
| March . | 437 | 296 | 98.87 | 81.63 | 1.13 | 18.37 |
| April | 442 | $\stackrel{397}{ }$ | 100.00 | 81.86 |  | 18.14 |
| May. | 425 | 395 | 96.15 | 81.48 | 3.85 | 18.52 |
| June | 426 | 402 | 96.38 | 82.89 | 3.62 | 17.11 |
| August | 436 | 485 404 | 98.64 | 100.00 83.29 | 1.36 7.69 | 16.71 |
| September | 408 | 410 | 92.25 | 84.54 | 4.75 | 15.46 |
| October | 419 | 386 | 94.80 | 79.59 | 5.20 | 20.41 |
| November | 403 | 391 | 91.18 | 80.62 | 8.82 | 19.38 |

3. Other Presentations.


# MANUFACTURERS' RETURNS, 1899-1900. <br> COTTON AND LINEN GOODS-6 ESTABLISHMENTS. <br> 1. Classified Weekly Earnings. 

| $\underset{\text { Clarnings. }}{\text { Clemit }}$ | 1899 |  |  |  | 1900 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\underset{\text { MALE- }}{\text { Fe- }}$ | Total. |  | Male. | $\underset{\text { MALE. }}{\text { Fe- }}$ | Total. |  |
|  |  |  |  | ${ }_{5} \mathrm{Pr} . \mathrm{ct}$. |  |  | No. | Pr.ct. |
| Under $\$ 5.00$ but $\ldots \ldots \ldots$ | 67 | 178 | 245 | 50.20 | 80 | 170 | 250 | 49.80 |
| 6.00 but under ${ }^{(1000}$ | 32 | 46 | 78 | 15.98 | 34 | 55 | 89 | 17.72 |
| 7.00 but under 8.00 | 17 | 41 | 58 | 11.88 7 | 24 | 37 | 61 | 12.15 |
| 8.00 but under 9.00 | 13 | 14 5 | 35 | 7.17 | 25 | 13 | 38 | 7.72 |
| 9.00 but under 10.00 | 16 |  | 18 | ${ }_{3} 3.68$ | 22 | 2 | 24 | 4.75 |
| 10.00 but under 12.00 |  | i | 14 | 3.28 2.90 | $7{ }^{7}$ | 1 | 8 | 1.54 |
| 12.00 but under 15.00 | 15 |  | 15 | 2.90 3.07 | 20 |  | 20 | 3.98 |
| 15.00 but under 20.00 | 8 |  | 15 | 1.64 | 5 |  | 7 | 1.35 |
| 20.00 and over ....... | 1 |  | 1 | . 20 | 5 |  | 5 | . 99 |
| Totals .......... | 2031 | 285 | 488 | 100.00 | 224 | 278 | 502 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons Employed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1899. | 1900. | 1899. | 1900 | 1899. | 1900. |
| January Ferbuary | 464 | 440 | 97.27 | 94.62 | 2.73 | 5.38 |
| $\begin{aligned} & \text { Ferbuary } \\ & \text { March } \end{aligned}$ | 468 472 | 449 | 98.11 | ${ }^{96.56}$ | 1.89 | 5.38 3.44 |
| April . | 470 | 404 | ${ }_{98}^{98.53}$ | 86.88 | 1.05 | 13.12 |
| May . | 468 | 465 | ${ }_{98.11}^{98.53}$ | 100.00 | 11.47 |  |
| June . | 467 | 443 | 97.90 | 99.14 95 | 1.89 | . 86 |
| August | 464 | 464 | 97.27 | 99.78 | 2.73 | 4.73 .22 |
| September | 466 | 430 | 97.69 | 92.47 | 2.31 | 7.53 |
| October . | 471 | 442 | 97.69 | 95.05 | 2.31 | 4.95 |
| November | 474 | 443 | 98.74 | 93.33 | 1.26 | 6.67 |
| December | 477 | 440 | ${ }^{100.00}$ | 95.27 94.62 | . 63 | 4.73 |

3. Other Presentations.

| Classification. | 1899. | ,1900. | Incredse or DeCrease in 1900. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | Pret. |
| Smallest No. of persons employed.. | 464 |  |  |  |
| Greatest No. of persons employed.. | 464 477 469 | 465 | 60 12 | 12.93 2.52 |
| 俍 | 469 | 443 | 26 | 5.54 |
| Average yearly earnings ........... | \$245 89 |  |  |  |
| Average time in operation, days.... | \$200 | \$268 | $\pm \begin{array}{r}+ \\ -\quad \$ 266 \\ \hline\end{array}$ | 9.22 3.00 |
| No. of private firms |  |  |  |  |
| No. of male partners | 22 | 23 |  |  |
| No. of female partners .................. | 2 | $\begin{array}{r}3 \\ 3 \\ \hline\end{array}$ | $+\quad \frac{1}{1}$ | 4.54 50.00 |
| No. of corporations. | 24 | 26 | 2 | 8.33 |
| No. of male stockholders | 124 | 113 |  |  |
| No. of female stockholders | 124 | 113 | 11 | 8.87 |
| Total No. of stockholders | 174 | ${ }^{54}$ |  | 8.00 |
| Totai No. of partners and stock- | 174 | 167 | 7 | 4.02 |
|  | 198 | 193 | 5 | 2.53 |
| Amount of capital invested V . $\ldots$. $\ldots$. | \$757,047 44 | \$757,900 52 |  |  |
| Value of goods made or work done. | 667,928 34 | 682,495 77 |  | 2.18 |
| Av. capital to each person employed | 115,323 48 | 118,969 05 | 14,645 57 | 3.16 |
| Av. product to each person employed | 1,424 15 | 1,710 83 | 9666 11647 | 5.99 |

MANUFACTURERS' RETURNS, 1899-1900.
ELECTRIC AND GAS SUPPLIES-24 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classified Weekly Earnings. | 1899 |  |  |  | 1900 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\begin{gathered} \text { Fe- } \\ \text { MALE. } \end{gathered}$ | Total. |  | Male. | $\begin{aligned} & \text { FE- } \\ & \text { MALE. } \end{aligned}$ | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr.ct. |
| Under $\$ 5.00$ | 248 | 100 | 348 | 21.46 | 248 | 100 | 348 100 | 21.78 6.26 |
| $\$ 5.00$ but under \$6.00 | 82 | 17 | 99 | 6.10 | 82 | 18 | 100 | 4.26 |
| 6.00 but under 7.00 | 75 | 10 | 85 | 5.24 | 61 | 1 | 98 | 4.13 |
| 7.00 but under 8.00 | 112 | 10 | 122 | 7.52 | -123 | 2 | 125 | 7.82 |
| 8.00 but under 9.00 | 109 | $\stackrel{2}{2}$ | 111 | 6.84 14.18 | 123 | $\stackrel{2}{2}$ | 230 | 14.39 |
| 9.00 10.00 but under under 12.00 12.00 | 228 187 | 2 | 188 | 11.47 | 192 | 1 | 193 | 12.08 |
| 10.00 12.00 but under under 15.00 | 180 | . 1 | 180 | 15.42 | 251 |  | 251 | 15.71 |
| 15.00 but under 20.00 | 150 |  | 150 | 9.26 | 133 |  | 133 | 8.32 |
| \$20.00 and over ...... | 39 |  | 39 | 2.41 | 48 |  | 48 | 3.00 |
| Totals' | 1,480 | 142 | 1,622 | 100.00 | 1,463 | 135 | 1,598 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons Employed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1899. | 1900. | 1899. | 1900. | 1899. | 19C0. |
| January | 1,379 | 1,436 | 95.83 | ${ }_{99}^{98.76}$ | 4.17 | 1.24 .70 |
| February | 1,388 | 1,443 | 96.46 98.40 | 99.24 100.010 | 1.60 |  |
| Mpril | 1,421 | 1,453 | 98.75 | 99.93 | 1.25 | . 07 |
| May | 1,439 | 1,412 | 100.00 | 97.11 |  | 2.89 |
| June | 1,307 | 1,278 | 90.83 | 87.98 | 9.17 | 12.02 |
| July | 1,317 | 1,200 | 91.52 | 82.53 | 8.48 | 17.47 |
| August | 1,276 | 1,151 | 88.67 | ${ }_{81} 7.16$ | 11.30 | 20.84 |
| September | 1,283 | 1,190 | ${ }_{99}^{89.16}$ | 81.84 | 10.84 7.02 | 18.16 |
| October | 1,338 | 1,223 | 92.98 94.99 | 84.11 86.25 | 5.01 | 13.75 |
| November | 1,367 1,424 | 1,290 | 94.89 | 86.72 88.72 | 1.11 | 11.28 |

3. Other Presentations.

| Classtfication. | 1899. | 1900. | Increase or DeCREASE IN 1900. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Amount. | Pret. |
| Smallest No. of persons employed.. | 1,276 | 1,151 |  | 125 | 9.73 |
| Greatest No. of persons employed.. | 1,439 | 1,453 |  | 48 | 3.92 |
| Average No. of persons employed.. | 1,363 | 1,315 |  | 48 | 3.52 |
| Average yearly earnings ............ | \$482 24 | \$482 66 |  | \$19 58 | 4.06 |
| Average time in operation, days.... |  |  |  |  |  |
| No. of private firms | 9 |  |  | $1{ }^{*}$ | 6.25 |
| No. of male partners | 16 |  |  | 1 | 6.25 |
| No. of female partners | 16 |  |  | 1 | $\overleftrightarrow{6.25}$ |
| Total No. of partners No. of corporations .. | 15 | 15 |  |  |  |
| No. of male stckholders.... | 120 | 133 |  |  | 10.83 |
| No. of female stockholders........... | 25 |  |  | 13 | 52.00 |
| Total No. of stockholders | 145 | 145 |  |  |  |
| Total No. of partners and stockholders | 161 |  |  | 1 | . 62 |
| Amount of capital invested | \$2,602,954 09 | \$2,620,464 10 | + | \$17,510 01 | . 67 |
| Value of goods made and work done | 3,407,276 35 | 3,161,692 04 | - | 245,584 31 | 7.21 |
| Amount paid as wages .............. | 657,299 58 | 608,394 46 |  | 48,905 12 | 7.45 |
| Av. capital to each person employed | 1,909 72 | 1,992 75 |  | 83 95 95 | 4.35 3.82 |
| Av. product to each person employed | 2,499 84 | 2,404 33 |  | 9551 | 3.82 |

MANUFACTURERS' RETURNS, 1899-1900.
FLOUR AND FEED-70 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classified Weekly Earnings. | 1899 |  |  |  | 1900 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\begin{gathered} \text { FE- } \\ \text { MALE. } \end{gathered}$ | Total. |  | Male. | $\underset{\text { MALE. }}{\text { Fe- }}$ | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr.ct. |
| Under $\$ 5.00$ but under $\$ 6.0$ | 18 | 23 | 41 | 4.08 | 11 | 1 | 12 | 1.43 |
| 6.00 but under ${ }^{7.00}$ | 56 |  | ${ }_{58}^{6}$ | . 60 | 9 |  | 9 | 1.07 |
| 7.00 but under 8.00 | 61 | 3 | 64 | ${ }_{6} 5.76$ | 40 | 1 | 41 | 4.89 |
| 8.00 but under 9.00 | 99 | 3 | ${ }_{99}^{64}$ | 6.36 9.84 | 122 |  | 122 | 14.56 |
| 9.00 but under 10.00 | 178 |  | 178 | 17.69 | 156 |  | 111 | 13.25 |
| 10.00 but under 12.00 | 341 |  | 341 | 13.90 | 1208 |  | 156 208 | 18.62 |
| 12.00 but under 15.00 | 81. |  | 81 | 8.05 | 102 |  | 102 | 124.8 |
| 15.00 but under 20.00 | 97 |  | 97 | 9.64 | 63 |  | 63 | 12.15 |
| 20.00 and over . | 41 |  | 41 | 4.08 | 14 |  | 14 | 1.67 |
| Total ...........\| | 978 | 28 | 1,006 | 100.00 | 836 | 2 | 838 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons Employed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemplorment. |  |
|  | 1899. | 1900. | ${ }^{\circ} 899$. | 1900. | 1899. | 1900. |
| January | 678 |  |  |  |  |  |
| February <br> March | 678 677 | 683 | 71.29 | 98.70 87 | 28.71 | 9.61 11.30 |
| April . | 677 668 | 670 | 71.19 | 87.01 | 28.81 | 12.99 |
| Mà . | 668 922 | ${ }_{7} 672$ | 70.24 | 87.27 | 29.76 | 12.73 |
| June | 914 | 714 | ${ }_{96.11}^{96.95}$ | ${ }_{99}^{95.19}$ | 3.05 | 4.81 |
| July | 924 | 727 | ${ }_{97.16}^{96.11}$ | ${ }_{94}^{92.73}$ | ${ }_{2}^{3.89}$ | 7.27 |
| August | 926 | 753 | 97.37 | $\stackrel{94}{97.79}$ | 2.84 | ${ }_{2}^{5.58}$ |
| September | 951 | 752 | 100.00 | 97.66 | 2.63 | 2.21 |
| October | 854 | 757 | 89.80 | 98.31 | 10.20 | 2.34 1.69 |
| November | 861 | 770 | 90.54 | 100.00 | 9.46 | 1.69 |
| December | 756 | 757 | 79.50 | 98.31 | 20.50 | 1.69 |

3. Other Presentations.

| Classification. | 1899. | 1900. |  | Increase or DeCREASE IN 1900. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Amount | Pret. |
| Smallest No. of persons employed.. | 677 | 670 |  |  | 1.03 |
| Greatest No. of persons employed.. | 951 | 770 |  |  | 19.03 |
| Average No. of persons employed.. | 817 | 724 |  | 93 | 11.38 |
| Average yearly earnings | \$635 66 | \$601 64 |  |  |  |
| Average time in operation, days.... | \$ 282 | \$61 272 |  | \$34 10 | 5.35 3.55 |
| No. of private firms |  |  |  |  |  |
| No. of male partners .- | 71 |  |  |  | 1.41 |
| No. of female partners | 5 |  |  |  | 20.00 |
| Total No. of partners | 76 |  |  |  | 20.00 |
| No. of corporations ..... | 23 | 24 |  |  | 4.35 |
| No. of male stockholders. No. of female stockholders | 157 | 136 |  | 21 | 13.38 |
|  | 30 187 |  |  | 3 | 10.00 |
| Total No. of partners and stock- | 187 |  |  | 24 | 12.84 |
| holders | 263 | 239 |  | 24 | 9.12 |
| Amount of capital inevsted.......... | \$6,441, 67583 | \$5,705,074 49 |  | \$736,601 34 |  |
| Value of goods made or work done | 15,470.799 85 | 12,820.119 78 |  | 2,650,780 07 | 17.13 |
| Amount paid as wages ............. | 519,531 52 | 4335,588 84 |  | 83,942 68 | 16.15 |
| Av. capital to each person employed | 7,884 55 | 7,879 94 |  | 461 | . 06 |
| Av. product to each person employed\| | 18,936 11 | 17,707 21 |  | 1,228 90 | 6.49 |

[^1]MANUFACTURERS' RETURNS, 1899-1900.
FURS, GLOVES AND MITTENS-11 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classified WeeiklyEarntings. | 1899 |  |  |  | 1900 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | FeMALE. | Total. |  | Male. | $\underset{\text { MALE. }}{\text { Fe- }}$ | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr.ct. |
| Under \$5.00 | 8 | 120 | 128 | 38.55 | 14 | 137 | 151 | 42.54 |
| $\$ 5.00$ but under $\$ 6.00$ | 6 | 53 | 59 | 17.77 | 9 | 39 | 48 32 | 13.52 9.02 |
| 6.00 but under 7.00 | 15 | 24 | 39 | 11.75 | 12 | 20 | 32 | 9.48 |
| 7.00 but under 8.00 | 13 | 10 | 23 | 6.93 | 11 | 12 | 18 | 5.48 |
| 8.00 but under 9.00 | ${ }^{6}$ | 5 | 11 | 3.31 4.22 | 10 20 | 8 | $\stackrel{18}{26}$ | 7.32 |
| 9.00 but under 10.00 | 10 17 | 4 | $\stackrel{14}{23}$ | 4.22 6.93 | 15 | 5 | 20 | 5.63 |
| 10.00 12.00 but under under 15.00 | 17 17 | $\stackrel{6}{2}$ | 19 | ${ }_{5}^{6.93}$ | 24 | 1 | 25 | 7.04 |
| 15.00 but under 20.00 | 12 |  | 12 | 3.61 | 10 |  | 10 | 2.82 |
| 20.00 and over ........ | 4 |  | 4 | 1.21 | 2 |  | 2 | . 56 |
| Totals ........... | 108 | 224 | 332 | 100.00 | 127 | 228 | 355 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons Employed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1899. | 1900. | 1899. | 1900. | 1899. | 1900. |
| January | 194 | ${ }_{236} 217$ | 64.45 | 66.56 | 35.55 | 33.44 27.61 |
| March | 221 | 243 | 73.42 77.08 | 74.54 | 22.92 | 25.46 |
| April . | 241 | 253 | 80.07 | 77.61 | 19.93 | 22.39 |
| May . | 255 | 261 | 84.72 | 80.06 | 15.28 | 19.94 |
| June | 260 | 258 | 86.38 | 79.14 | 13.62 | 20.86 |
| July | 266 | 272 | 88.37 | 83.44 | 11.63 | 16.5 |
| August | 287 | 297 | 95.35 | ${ }_{94}^{91.10}$ | 4.65 | 5. ${ }^{\text {82 }}$ |
| September | 285 | 309 311 | ${ }_{96.01}^{94.68}$ | 94.78 95.40 | ${ }_{3.99}$ | 4.60 |
| October | 289 | 3136 | 96.01 100.00 | 95.40 100.00 | \........ | 4.6 |
| November | 251 | 260 260 | 103.35 | 79.75 | $\cdots 16.65$ | 20.25 |

3. Other Presentations.


## MANUFACTURERS' RETURNS, 1899-1900.

FURNITURE-44 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| $\underset{\text { Classified Weekly }}{\text { Earnings. }}$ | 1899 |  |  |  | 1900 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\underset{\text { MALE }}{\text { FE- }}$ | Total. |  | Male. | $\begin{aligned} & \text { Fe- } \\ & \text { MALE. } \end{aligned}$ | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr.ct. |
| Under $\$ 5.00 \ldots \ldots . . . . .$. | 439 |  | 476 | 14.56 | 419 | 15 | 434 | 17.06 |
| $\$ 5.00$ 6.00 but under | 159 | $\begin{array}{r}27 \\ 5 \\ \hline\end{array}$ | 186 | 5.69 | 132 | 15 | 147 | 5.78 |
| 7.00 but under 8.00 | 485 | 5 7 | 690 492 | 21.10 | 610 | $\stackrel{23}{3}$ | 23 | . 90 |
| 8.00 but under 9.00 | 431 | 3 | 434 | 13.27 | 61 | 3 | 613 364 | 24.10 14.31 |
| 9.00 but under 10.00 | 319 | 1 | 320 | ${ }_{9}{ }^{1} .79$ | 415 | 1 | 364 416 | 16.35 |
| 10.00 but under 12.00 | 302 |  | 302 | 9.23 | 258 |  | 258 | 10.14 |
| 12.00 but under 15.00 | 280 |  | 280 | 8.56 | 218 | i | 219 | 8.61 |
| 15.00 but under 20.00 | 76 |  | 76 | 2.32 | 66 |  | 66 | 2.59 |
| 20.00 and over ........ | 14 |  | 14 | . 43 | 4 |  | 4 | . 16 |
| Totals .......... | 3,190 | 80 | 3,27a | 100.00 | 2,486 | 58 | 2,544 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons Employed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment |  |
|  | 1899. | 1900. | 1899. | 1900. | 1899. | 1900. |
| January |  | 2,892 | 91.34 | 96.98 | 8.66 | 3.02 |
| February <br> March .. | 2,870 2,962 | $\stackrel{2}{2,937}$ | 94.81 | 98.49 | 5.19 | 1.51 |
| April ... | 2,962 2,937 | 2,965 2,982 | 97.85 97.03 | 99.43 100.00 | 2.15 | . 57 |
| May | 3,027 | 2,910 | 100.00 | 100.00 97.59 | 2.97 | 2.41 |
| June | 2,886 | 2,810 | 95.34 | 94.23 | 4.66 | 5.77 |
| July . | 2,914 | 2,381 | 96.27 | 79.85 | 3.73 | 20.15 |
| August ${ }_{\text {September }}$ | 2,945 | 2,762 | 97.29 | 92.62 | 2.71 | 7.38 |
| October | $\stackrel{2,978}{2,987}$ | 2,820 2,814 | 98.38 98.68 | 94.57 | 1.62 | 5.43 |
| November | 3,002 | 2,770 | ${ }_{99.17}^{98.18}$ | 92.89 | 1.32 | 7.65 |
| December | 2,917 | 2,531 | 96.37 | 84.88 | 3.63 | 15.12 |

3. Other Presentations.

| Classification. | 1899. | 1900. | Increase or DeCREASE IN 1900. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | $\mid \mathrm{Pr}$ ct. |
| Smallest No. of persons employed.. | 2,765 | 2,381 | 384 | 13.89 |
| Greatest No. of persons employed.. | 3,027 | 2,982 | 384 45 | 13.89 1.49 |
| Average No. of persons employed.. | 2,933 | 2,798 | 135 | 4.60 |
| Average yearly earnings | \$322 42 | \$343 23 |  | 6.45 |
| Average time in operation, days.... | 290 | 286 | + 4 | 1.38 |
| No. of private firms.. | 16 |  | - 1 | 6.25 |
| No. of male partners .................. | 36 |  | - $\quad 6$ | 16.67 |
| No. of female partners |  |  | + 2 |  |
| Total No. of partners | 36 |  | + ${ }^{1}$ | i1.7i |
| No. of corporations | 28 |  | 1 | 3.57 |
| No. of male stockholders | 373 | 381 | 8 | 2.14 |
| No. of female stockholders | 36 |  | + 1 | 2.78 |
| Total No. of stockholders ............ | 409 |  | 9 | 2.20 |
| Total No. of partners and stockholders | 449 | 450 | 1 | . 22 |
| Amount of capital invested. | \$3,061,319 44 | \$3,068,970 16 | \$7,650 72 | 25 |
| Value of goods made or work done | 3,743,969 86 | 3,804,121 76 | 60,151. 90 | 1.61 |
| Amount paid as wages | 945,653 63 | 960,365 81\| | 14,712 18 | 1.56 |
| Av. capital to each person employed | 1,046 26 | 1,096 84\| | 5058 | 4.83 |
| Av. product to each person employed | 1,276 50 | 1,359 59\| | + 83091 | 6.51 |

## MANUFACTURERS' RETURNS, 1899-1900. <br> IRON', MALLEABLE-23 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classified Weekly Earnings. | 1899 |  |  |  | 1900 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\underset{\text { MALE. }}{\text { Fex }}$ | Total. |  | Male. | Fe-MALE. | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr.ct. |
| Under \$5.00 $\ldots \ldots \ldots .$. | 276 | 3 | 283 |  | 305 129 | 6 | 311 129 | 6.35 2.63 |
| $\$ 5.00$ but under $\$ 6.00$ | 149 | 3 6 | 152 200 | 3.09 4.07 | 129 | ......... | 233 | 4.76 |
| 6.00 but under 7.00 but under 8.00 | 194 | 6 19 | 2200 | 4.07 6.06 | 538 |  | 538 | 10.99 |
| 8.00 but under 9.00 | 1,252 |  | 1,252 | 25.48 | 1,109 | ........ | 1,109 | 22.65 |
| 9.00 but under 10.00 | . 506 |  | 506 | 10.29 | 487 | ........ | 887 | 9.95 16.69 |
| 10.00 but under 12.00 | 849 | 8 | 657 800 | 13.57 16.28 | 821 |  | 821 | 12.68 |
| 12.00 but under 15.00 | 800 | ...... | 800 | 16.28 11.23 | 339 |  | 339 | 6.92 |
| 15.00 but under 20.00 20.00 and over ...... | 552 |  | $\stackrel{552}{214}$ | 14.35 | ${ }_{312}^{309}$ |  | 312 | 6.38 |
| Totals' | 4,871 | 43 | 4,914 | 100.00 | 4,890 | 6 | 4,896 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons Employed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1899. | 1900. | 1899. | 1900. | 1899. | 1900. |
| January | 4,133 4 244 | 4,577 4,435 | 88.98 91.37 | 100.00 96.89 | 11.02 | 3.21 |
| February | 4,244 4,245 | 4,435 4,304 | ${ }_{91.39}^{91.37}$ | 96.89 94.03 | 8.61 | 5.97 |
| March | 4,245 4,319 | 4,170 | 92.68 | 91.11 | 7.32 | 8.89 |
| April | 4,397 | 3,675 | 94.66 | 80.29 | 5.34 | 19.71 |
| June. | 4,645 | 3,612 | 100.00 | 78.92 | 4.39 | 21.08 |
| July | 4,341 | 2,815 | 95,61 | 61.50 | 5.39 | 38.50 39.42 |
| August | 4,393 | 2,773 | 94.57 | 60.58 80.27 | 5.43 3.36 | 19.73 |
| September | 4,489 4,347 | 3,674 | ${ }_{93.59}^{96.64}$ | 84.18 | 6.41 | 15.82 |
| October | 4,460 | 3.913 | 96.02 | 85.49 | 3.98 | 14.51 |
| December | 4,643 | 4,202 | 99.98 | 91.81 | . 02 | 8.19 |

## 3. Other Presentations.



1 establishment did not report as to kind of management and No. of partners,

## MANUFACTURERS' RETURNS, 1899-1900.

KNIT GOODS-18 ESTABLISHMENTS.

1. Classified Weekly Earnings.

\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline \multirow{3}{*}{Classtfied Weekly
Earnings.} \& \multicolumn{4}{|c|}{1899.} \& \multicolumn{4}{|c|}{1900.} <br>
\hline \& \multirow[t]{2}{*}{Male} \& \multirow[t]{2}{*}{Fe-} \& \multicolumn{2}{|r|}{Total.} \& \multirow{2}{*}{Male.} \& \multirow[t]{2}{*}{Fe-} \& \multicolumn{2}{|l|}{Total.} <br>
\hline \& \& \& No. \& Pr.ct. \& \& \& No. \& Pr.ct <br>
\hline Under $\$ 5.00$ but under $\$ 6.000$ \& 177 \& 1,816 \& 1,993 \& 63.35 \& 173 \& 1,552 \& 1,725 \& 52.37 <br>
\hline $\$ 5.00$
6.00
but under

0.000 \& 60
58 \& 1,815 \& 1,375 \& 11.92 \& 38 \& 1,548 \& 1,486 \& 14.75 <br>
\hline 7.00 but under 8.00 \& 58
75 \& 191 \& 249 \& 7.91 \& 41 \& 340 \& 381 \& 11.57 <br>
\hline 8.00 but under 9.00 \& 45 \& 121
34 \& 196 \& ${ }_{6}^{6.23}$ \& 71 \& 169 \& 240 \& 7.29 <br>
\hline 9.00 but under 10.00 \& 68 \& ${ }_{31}^{34}$ \& 99 \& 2.52 \& 74 \& 77 \& 151 \& 4.58 <br>
\hline 10.00 but under 12.00 \& 45 \& 21 \& 66 \& ${ }_{2}^{3.15}$ \& 70 \& 61 \& 131 \& 3.98 <br>
\hline 12.00 but under 15.00 \& 38 \& 2 \& 40 \& 1.27 \& 41 \& 40 \& 89 \& 2.70 <br>
\hline 15.00 but under 20.00 \& 31 \& 1 \& 32 \& 1.02 \& $\stackrel{41}{27}$ \& 4 \& 45 \& 1.36 <br>
\hline 20.00 and over ........ \& 17 \& \& 17 \& 1.02 \& 17 \& 2 \& 29
17 \& . ${ }_{5} 8$ <br>
\hline Totals ..........| \& 614 \& 2,532 \& 3,146 \& 100.00 \& 601 \& 2,693 \& 3,294 \& 100.00 <br>
\hline
\end{tabular}

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons Employed |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Emplorment. |  | Unemployment. |  |
|  | 1899. | 1900. | 1899. | 1900. | 1899. | 1900. |
| January | 2,566 | 2,732 | 83.39 | 83.34 | 16.61 | 16.66 |
| March . ${ }^{\text {Hebruary }}$ | $\stackrel{2,611}{2}$ | 2,820 | 84.86 | 86.03 | 15.14 | 13.97 |
| April | 2,784 | 3,023 | 88.56 | 92.22 | 11.44 | 7.78 |
| May | 2,869 | $\stackrel{3}{3,087}$ | ${ }_{93}^{93.73}$ | ${ }_{94} 92.95$ | 6.27 | 7.05 |
| June | 2,901 | 3,154 | 93.24 94.28 | ${ }_{96}^{94.17}$ | 6.74 | 5.83 |
| July | 2,992 | 3,229 | 97.23 | ${ }_{98.51}^{96.22}$ | 5.72 <br> 2.87 <br> 1 | 3.78 1.49 |
| August | 3,038 | 3,278 | 98.73 | 100.00 | 1.27 | 1.49 |
| September | 3,051 | 3,194 | 99.16 | 97.44 | 1.84 | 2.56 |
| October . | 3,077 | 3,169 | 100.00 | 96.68 | . 84 | 3.32 |
| November | 3,024 | 2,927 | 98.28 | 89.29 | 1.72 | 10.71 |
| December | 2,944 | .2,790 | 95.68 | 85.10 | 4.32 | 14.90 |



1 establishment did not report as to kind of management and No. of partners.

MANUFACTURERS' RETURNS, 1899-1900.
LAGER BEER-72 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classified Weekly Earnings. | 1899. |  |  |  | 1900. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\underset{\text { MALE. }}{\text { Fe. }}$ | Total. |  | Male | $\begin{aligned} & \text { ME- } \\ & \text { MALE. } \end{aligned}$ | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr.ct. |
| Under $\$ 5.00$ | 280 | 503 | 783 | 21.73 | 234 | 506 | 740 | 18.92 |
| $\$ 5.00$ but under $\$ 6.00$ | 32 | 23 | 55 | 1.53 | 45 | 201 | 246 | 6.29 |
| 6.00 but under 7.00 | 93 | 3 | 96 | 2.66 | 176 | 1 | 177 | 4.53 |
| 7.00 but under 8.00 | 53 | 2 | 55 | 1.53 | 100 | 1 | 101 | 2.58 |
| 8.00 but under 9.00 | 105 |  | 105 | 2.91 | 115 |  | 115 | 2.94 |
| 9.00 but under 10.00 | 177 |  | 177 | 4.91 | 257 |  | 257 | 6.57 |
| 10.00 but under 12.00 | 652 |  | 652 | 18.09 | 659 |  | 659 | 16.85 |
| 12.00 but under 15.00 | 1,322 |  | 1,322 | 36,68 | 1,059 |  | 1,059 | 27.08 |
| 15.00 but under 20.00 | 317 |  | 317 | 8.80 | 519 |  | 519 | 13.27 |
| 20.00 and over ........ | 42 |  | 42 | 1.16 | 38 |  | 38 | . 97 |
| Totals .......... | 3,073 | 531 | 3,604 | 100.00 | 3,202 | 709 | 3,911 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Montes. | Total No. of Persons Employed. |  | Percentages of - |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1899. | 1900. | 1899. | 1900. | 1899. | 1900. |
| January | 3,258 | 3,419 | 91.70 | 90.62 | 8.30 | 9.38 |
| February | 3,262 3,276 | 3,383 3,585 | ${ }_{92}^{91.81}$ | 89.66 95.02 | 8.19 | 10.34 4.98 |
| April | 3,367 | 3,590 | 94.76 | 95.15 | 5.24 | 4.85 |
| May | 3,374 | 3,624 | 94.96 | 96.05 | 5.04 | 3.95 |
| June | 3,400 | 3,764 | 95.69 | 99.76 | 4.31 | . 24 |
| July | 3,399 | 3,727 | 95.67 | - 98.78 | 4.33 | 1.22 |
| August | 3,400 | 3,735 | 95.69 | 99.00 | 4.31 | 1.00 |
| September | 3,442 | 3,773 | 96.88 | 100.00 | 3.12 |  |
| October | 3,553 | 3,526 | 100.00 | 93.45 |  | 6.55 |
| November | 3,455 | 3,402 | 97.24 | 90.17 | 2.76 | 9.83 |
| December | 3,381 | 3,355 | 95.44 | 89.21 | 4.56 | 10.79 |

3. Other Presentations.

| Classification. | 1899. | 1900. | Increase or DeCREASE IN 1900. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | Pret. |
| Smallest No. of persons employed.. | 3,258 | 3,355 | 97 | 2.97 |
| Greatest No. of persons employed.. | 3,553 | 3,773 | 220 | 6.19 |
| Average No. of persons employed.. | 3,381. | 3,574 | 193 | 5.71 |
| Average yearly earnings ........... | \$461 08 | \$514 33 | \$53 25 | 11.55 |
| Average time in operation, days.... | 301 |  | 14 | 4.65 |
| No. of private firms | 37 | 37 |  |  |
| No. of male partners | 60 | 50 | 10 | 16.67 |
| No. of female partners | 15 |  | 12 | 80.00 |
| Total N'o. of partners . . . . . . . . . . . . . | 75 |  |  | 29.33 |
|  | 34 |  |  |  |
| No. of male stockholders | 383 | 414 |  | 8.94 |
| No. of female stockholders | 66 449 |  | 16 | 24.24 |
| Total No. of stockholders ........... | 449 |  |  | 10.47 |
| Total No. of partners and stock- holders | 524 |  | 25 | 4.77 |
| Amount of capital invested. | \$35,097,827 40 | \$39,119,956 50 | \$4,022,129 10 | 11.46 |
| Value of goods made or work done | 19,728,386 43 | 22,165,940 04 | + 2,437,553 61 | 12.35 |
| Amount paid as wages ............. | 1,558,914 02 | 1,838,224 66 | 280,310 64 | 17.98 |
| Av. capital to each person employed | 10,38090 | 10,945 71 | + $\quad 56481$ | 5.44 |
| Av. product to each person employed | 5,835 07 | 6,202 00 | + 36693 | 6.29 |

1 establishment did not report as to kind of management and No. of partners.

## MANUFACTURERS' RETURNS, 1899-1900.

LEATHER-18 ESTABLISHMENTS.

1. Classlfied Weekly Earnings.

| Classified Weekly Earnings. | 1899. |  |  |  | 1900. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\begin{aligned} & \text { Fe- } \\ & \text { MALE. } \end{aligned}$ | Total. |  | Male. | $\underset{\text { MALE. }}{\text { ME- }}$ | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr.ct. |
| Under $\$ 5.00 \ldots \ldots \ldots .00$ | 157 | 204 | 361 | 8.25 | 160 | 7 | 167 | 3.74 |
| ${ }_{6.00}$ but under ${ }^{\text {a }}$ 7.00 | 115 | 77 | 192 | 4.39 | 89 | $\stackrel{2}{2}$ | 91 | 2.04 |
| 7.00 but under 8.00 | 758 | 1 | - $\quad 159$ | 6.33 17.36 | 216 | 1 | $\stackrel{218}{656}$ | $\stackrel{4.88}{ }$ |
| 8.00 but under 9.00 | 1,213 |  | 1,213 | 17.36 27.74 | 1,227 | 1 | 1, 220 | ${ }_{27.46}^{14.88}$ |
| 9.00 but under 10.00 | 578 | 2 | 1,280 | 13.26 | 1,277 | $\ddot{4}$ | , 881 | 19.72 |
| 10.00 but under 12.00 | 430 | 2 | 432 | 9.88 | 585 |  | 585 | 13.09 |
| 12.00 but under 15.00 | 435 |  | 435 | 9.95 | 531 |  | 531 | 11.88 |
| 15.00 but under 20.00 | 114 |  | 114 | 2.61 | 106 |  | 106 | $\begin{array}{r}1.87 \\ \hline\end{array}$ |
| 20.00 and over ....... | 10 |  | 10 | . 23 | 6 |  | 6 | . 14 |
| Totals ..........\| | 4,065 | 308 | 4,373 | 100.00 | 4,452 | 16 | 4,468 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons Employed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1899. | 1900. | -1899 | 1900. | 1899. | 1900. |
| January | 3,824 | 4,183 | 86.44 | ${ }^{99.26}$ | 13.56 | . 74 |
| March . | 3,884 3,920 | 4,214 | 87.79 | 100.00 | 12.21 |  |
| April | 3,892 | 4, 4,004 | 88.61 87.97 | ${ }_{95.02}^{99.48}$ | 11.39 | 4.58 |
| May | 3,911 | 3,926 | 88.40 | 93.17 | 11.60 | 6.83 |
| June | 3,986 | 3,996 | 90.10 | 94.83 | 9.90 | 5.17 |
| July | 4,193 | 4,028 | 94.78 | 95.59 | 5.22 | 4.41 |
| August | 4,261 | 4,043 | 96.32 | 95.94 | 3.68 | 4.06 |
| September | 4,302 | 4,101 | 97.24 | 97.32 | 2.76 | 2.68 |
| October | 4,232 | 4,049 | 95.66 | 96.08 | 4.34 | 3.92 |
| November | 4,193 | 4,078 | 94.78 | 96.77 | 5.22 | 3.23 |
| December | 4,424 | 4,012 | 1 L 0.00 | 95.21 |  | 4.79 |

3. Other Presentations.

| Classification. | 1899. | 1900. | Increase or DeCREASE IN 1900. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Amount. | Prect, |
| Smallest No. of persons employed.. | 3,824 | 3,926 | + | 102 | 2.67 |
| Greatest No. of persons employed.. | 4,424 | 4,214 |  | 210 | 4.75 |
| Average No. of persons employed.. | 4,085 | 4,069 |  |  | . 39 |
| Average yearly earnings | \$390 00 | \$406 27 | + | \$1621 | 4.18 |
| Average time in operation, days.... | 307 |  |  | $\$ 16$ | . 33 |
| No. of private firms | 5 | 5 |  |  |  |
| No. of male partners . | 11 | 10 |  | 1 | 9.09 |
| No. of female partners |  | 1 |  | 1 | . 0 |
| Total No. of partners | 11 | 11 |  |  |  |
| No. of corporations | 12 | 12 |  |  |  |
| No. of male stockholders | 3,099 | 5,510 |  | 2,411 | 77.80 |
| No. of female stockholders | 1,023 | 1,530 |  | 507 | 49.56 |
| Total No. of stockholders .......... | 4,122 | 7,040 |  | 2,918 | 0.86 |
|  | 4,133 | 7,054 |  | 2,921 | 70.68 |
| Amount of capital invested ....... | \|\$11.236.466 73 | \$11.012.268 3 |  | 224,198 37 | 2.00 |
| Value of goods made or work done | 13,057,737 $42 \mid$ | 14,937,946 52 | + | 1,880,209 10 | 14.40 |
| Amount paid as wages ........... | 1,593,137 67 | 1,653,112 51 |  | 1,59,974 84 | 3.76 |
| Av. capital to each person employed | 2,75067 | 2,706 38 |  | 4429 | 1.61 |
| Av. product to each person employed | 3,196 51\| | 3,671 16 | + | 47465 | 14.85 |

1 establishment did not report as to kind of management and No. of partners.

## MANUFACTURERS' RETURNS, 1899-1900.

LUMBER-98 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classified Weekly Earnings. | 1899. |  |  |  | 1900. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\underset{\text { MALE. }}{\text { Fe- }}$ | Total. |  | Male. | $\begin{gathered} \text { FE- } \\ \text { MALE. } \end{gathered}$ | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr. ct. |
| Under $\$ 5.00$ | 191 | 13 | 204 | 1.36 | 140 | 14 | 154 | 1.02 |
| $\$ 5.00$ but under $\$ 6.00$ | 165 | 5 | 170 | 1.13 | 166 |  | 166 | 1.10 |
| 6.00 but under 7.00 | 493 | 7 | 500 | 3.34 | 586 | 2 | 588 | 3.87 |
| 7.00 but under 8.00 | 1,683 | 4 | 1,687 | 11.25 | 1,023 | 4 | 1,027 | 6.76 |
| 8.00 but under 9.00 | 2,573 |  | 2,573 | 17.16 | 2,238 | 3 | 2,241 | 14.74 |
| 9.00 but under 10.00 | 5,384 | 2 | 5,386 | 35.92 | 5,110 | 1 | 5,111 | 33.08 |
| 10.00 but under 12.00 | 2,448 |  | 2,448 | 16.32 | 3,388 |  | 3,388 | 22.28 |
| 12.00 but under 15.00 | 1,094 | 1 | 1,095 | 7.30 | 1,476 | 1 | 1,477 | 9.72 |
| 15.00 but under 20.00 | 572 |  | 572 | 3.81 | 645 |  | 645 | 4.25 |
| 20.00 and over $\ldots \ldots$. | 361 |  | '361 | 2.41 | 413 |  | 413 | 2.72 |
| Totals | 14,964 | 32 | 14,996 | 100.00 | 15,210 | 25 | 15,235 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons Employed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1899. | 1900. | 1899. | 1900. | 1899. | 1900. |
| January | 7,003 | 8,470 | 55.44 | 68.83 | 44.56 | 31.17 |
| February | 7,179 | 8,827 | 56.84 | 70.07 | 43.16 | 29.93 |
| March | 7,718 9,701 | $\begin{array}{r}8,668 \\ 10,564 \\ \hline\end{array}$ | 61.11 | 68.81 83.87 | 38.89 23.19 | 31.19 16.13 |
| May | 12,117 | 12,286 | 95.94 | 97.54 | 4.06 | 2.46 |
| June | 12,627 | 12,358 | 99.98 | 98.11 | . 02 | 1.89 |
| July | 12,630 | 12,268 | 100.00 | 97.39 |  | 2.61 |
| August | 12,463 | 12,596 | 98.67 | 100.00 | 1.33 |  |
| September | 12,098 | 12,169 | 95.79 | 96.61 | 4.21 | 3.39 |
| October | 11,485 | 12,119 | 90.93 | 96.21 | 9.07 | 3.79 |
| November | 10,825 | 10,544 | 85.71 | 83.71 | 14.29 | 16.29 |
| December | 9,138 | 7,655 | 72.35 | 60.37 | 27.65 | 39.63 |

3. Other Presentations.


## MANUFACTURERS' RETURNS, 1899-1900. <br> MACHINERY-102 ESTABLISHMENTS. <br> 1. Classified Weekly Earnings.

| Classified Weekly Earnings. | 1899. |  |  |  | 1900. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\xrightarrow[\text { Fe- }]{\text { MALE. }}$ | Total. |  | Male. | $\underset{\text { MALE. }}{\text { Fe- }}$ | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr. ct. |
| Under $\$ 5.00 \ldots \ldots . . . .$. | 449 | 2 | 442 | 5.45 | 447 | 2 | 449 | 5.73 |
| $\$ 5.00$ but under $\$ 6.00$ | 103 | 1 | 104 | 1.28 | 157 | 4 | 161 | 2.06 |
| 6.00 but under 7.00 | 352 | 2 | 354 | 4.37 | 292 | 2 | 294 | 3.75 |
| 7.00 but under 8.00 | 657 | 1 | 658 | 8.12 | 711 | 1 | 712 | 9.08 |
| 8.00 but under 9.00 | 1,030 | $\stackrel{2}{2}$ | 1,032 | 12.73 | 870 | 3 | 873 | 11.13 |
| 9.00 but under 10.00 | 1,343 | 3 | 1,346 | 16.60 | 1,257 | 4 | 1,261 | 15.92 |
| 1.000 but under 12.00 | 1,025 | 3 | 1,032 | 12.73 | 1,015 | 3 | 1,018 | 12.98 |
| 12.00 but under | 1,445 |  | 1,445 | 17.82 | 1,458 |  | 1,458 | 18.59 |
| 20.00 but over ....... | 1,397 | . | 1,397 | 17.23 3.67 | 1,364 |  | 1,364 | 17.38 |
| Totals . ........ |  |  |  |  |  |  |  |  |
| Totals . ......... | ,093 | 14 | 8,107 | 100.00 | 7,830 | 19 | 7,849 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. OF Persons Employed |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employmont. |  | Unemployment. |  |
|  | 1899. | 1900. | 1899. | 1900. | 1899. | 1900. |
|  |  |  |  |  |  |  |
| March . | 5,885 6,116 | 7,044 | 81.89 | 97.05 | 18.11 | 2.95 |
| April . | 6,415 | 7,090 7,070 | 85.11 89.27 | 97.67 97.41 | 14.89 10.73 | 2.33 |
| May | 6,513 | 7,041 | 90.63 | 97.01 | 9.37 | 2.99 |
| June | 6,793 | 7,258 | 94.67 | 100.00 | 5.33 | 2.95 |
| July | 6,933 | 7,222 | 96.48 | 99.52 | 3.52 | . 48 |
| August | 7,142 | 7,251 | 99.39 | 99.93 | . 61 | . 07 |
| September | 7,070 | 7,213 | 98.39 | 99.38 | 1.61 | . 62 |
| October | 7,122 | 7,054 | 49.11 | 97.19 | . 89 | 2.81 |
| November | 7,186 | 7,115 | 100.00 | 98.03 |  | 1.97 |
| December | 7,003 | 7,224 | 97.45 | 99.53 | 2.55 | . 47 |

3. Other Presentations.

| Classification. | $1899 .$ | 1900. | Increase or DeCREASE IN 1900. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | Pret. |
| Smallest No. of persons employed.. | 5,687 | 7,041 | $+\quad 1,354$ | 23.63 |
| Greatest No. of persons employed.. | 7,186. | 7,258 | + $\quad 72$ | 1.00 |
| Average No. of persons employed.. | 6,656 |  |  | 7.31 |
| Average yearly earnings | \$543 94 | \$545 45 | + $\$ 151$ | . 29 |
| Average time in operation, days | 297.10 | 299.20 | + 2.10 | . 71 |
| No. of private firms.. | 52 |  | - 3 | 5.77 |
| No. of male partners | 99 | 85 | - 14 | 14.14 |
| No. of female partners | 3 | 5 | + $+\quad 2$ | 66.67 |
| Total No. of partners | 102 |  | - 12 | 11.76 |
| No. of corporations | 46 | 49 | + $\quad 3$ | 6.52 |
| No. of male stockholders | 264 |  | + 2 | . 76 |
| No. of female stockholders | 43 | 42 |  | 2.32 |
| Total No. of stockholders. | 307 |  |  | . 32 |
| Total No. of partners and stockholders | 409 | 308 | 11 | 2.70 |
| Amount of capital invested. | 1\$12,043,735 00 | \$13,073,725 96 | \$1,029,890 96 | 8.55 |
| Value of goods made or work done | 12,836,120 76 | 14,656,607 80 | + 1,820,487 04 | 14.19 |
| Amount paid as wages | 3,620,466 71 | 3,896,124 21 | + 275,65750 | 7.61 |
| Av. capital to each person employed | 1,824 48 | 1,830 28 | + 580 | . 32 |
| Av. product to each person employed | 1,928 50 | 2,151.88 | + 22338 | 11.59 |

[^2]
## MANUFACTURERS' RETURNS, 1899-1900. MISCELLANEOUS-54 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classified Weekly Earnings. | 1899. |  |  |  | 1900. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\begin{gathered} \text { Fe- } \\ \text { MALE. } \end{gathered}$ | Total. |  | Male. | $\begin{gathered} \text { FE- } \\ \text { MALE. } \end{gathered}$ | Total. |  |
|  |  |  | No. | Pr. ct. |  |  | No. | Pr. ct. |
| Under \$5.00 ......... | 224 | 360 | 584 | 23.05 | 235 | 423 | 658 132 | 23.82 4.78 |
| $\$ 5.00$ but under $\$ 6.00$ | $\begin{array}{r}67 \\ \hline\end{array}$ | 38 | 105 | 4.14 5 | 147 | 60 34 | 181 | 6.56 |
| 6.00 but under 7.00 | 129 | 22 9 | 193 | 7.61 | 190 | 15 | 205 | 7.43 |
| $\begin{array}{lll}7.00 & \text { but under } \\ 8.00 \\ \text { but under } & 8.00\end{array}$ | 1823 | 5 | 228 | 9.00 | 139 | 4 | 143 | 5.11 |
| 9.00 but under 10.00 | 214 | 2 | 216 | 8.54 | 305 | 7 | 312 | 11.30 |
| 10.00 but under 12.00 | 556 | 1 | 557 | 21.98 | 508 | 3 | 377 | 13.65 |
| 12.00 but under 15.00 | 280 78 | 1 | 281 78 | 11.08 3.07 | 377 |  | 73 | 12.65 |
| 15.00 but under 20.00 20.00 and over ..... | 140 |  | 140 | 5.54 | 171 |  | 171 | 6.19 |
| Totals | 2,095 | 438 | 2,533 | 100.00 | 2,217 | 546 | 2,763 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons Employed |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1899. | 1900. | 1899. | 1900. | 1899. | 1900. |
| January | 2,037 | 2,248 | 86.79 89.26 | 92.66 94.52 | 13.21 10.74 | 7.34 5.48 |
| February | 2,095 2,347 | 2,293 | 89.26 100.00 | 94.52 100.00 |  |  |
| March . | 2,276 | 2,411 | ${ }^{96.96}$ | 99.79 | 3.04 | . 21 |
| April | 2,081 | 2,276 | 89.66 | 93.82 | 10.34 | 6.18 |
| May . | 1,958 | 2,199 | 83.43 | 90.64 | 16.57 | 9.36 |
| June | 1,623 | 1,820 | 69.15 | 75,02 | 30.85 | 24.98 |
| August | 1,659 | 1,767 | 70.58 | 72.83 | 29.42 | 137.17 |
| September | 1,957 | $\stackrel{2}{2,110}$ | 83.38 89.73 | 86.98 89.78 | 16.62 10.27 | 110.22 |
| October | 2,106 | 2,178 | 92.41 | 89.48 93.49 | 7.59 | 6.51 |
| November | 2,144 | 2,244 | 91.35 | 92.49 | 8.65 | 7.51 |
| December . | 2,144 | 2,244 | 91.35 |  |  |  |

3. Other Presentations.

| Classification. | 1899. | 1900. | Increase or DeCrease in 1900. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | Pret. |
| Smallest No. of persons employed.. | 1,623 | 1,767 + | 144 | 8.88 3.36 |
| Greatest No. of persons employed.. | 2,347 | $\stackrel{2,426}{187}$ |  | 7.25 |
| Average No. of persons employed.. | 2,039 | 2,187 |  |  |
| Average yearly earnings.. | \$424 14 | \$42484 | \$0 70 | ${ }_{1} .16$ |
| Average time in operation, days.... | 297 |  |  |  |
| No. of private firms | 24. |  | ${ }_{12}^{2}$ | 8.33 |
| No. of male partners | 48 |  | 12 | ${ }_{75.00}$ |
| No. of female partners | 4 |  |  | 28.85 |
| Total No. of partners.. | ${ }_{28}$ |  | 2 | 7.14 |
| No. of corporations ${ }^{\text {a }}$ (................ | 1,347 | 1,559 | 212 | 15.74 |
| No. of male stockholders ............ | 1,347 17 | 1, 43 | 6 9 | 35.30 |
| Total No. of stockholders ........... | 1,364 | 1,582 | 218 | 15.98 |
| Total No. of partners and stockholders | 1,416 | 1,619 | 203 | 14.3 |
|  | \$4,769,142 02 | \$4,784,800 191+ | \$15,658 17 | . 33 |
| Value of goods made or work done | 4,450,050 00 | 4,795,250 $00+$ | 345,20000 | 7.75 |
| Amount paid as wages ............. | $864.816{ }^{29}$ | 929.176 ${ }^{2} 19361+$ | + $\quad 64,299648$ | 7.4 |
| Av. capital to each person employed | 2,182 40 | 2,192 2,188301 | - $\quad 15050$ | 6.4 |
| Av. product to each person employed | 2,338 90 | 2,188 30- | 15050 | 6.4 |

2 establishments did not report as to kind of management and number of partners and stockholders.

## MANUFACTURERS' RETURNS, 1899-1900. OFFICE FIXTURES, 15 LSSTABLISHMENTS. <br> 1. Chassified Weekly Earnings.

| $\underset{\text { Elarnings. }}{\text { Claty }}$ | 1899. |  |  |  | 1900. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\begin{gathered} \text { Fe- } \\ \text { MALE. } \end{gathered}$ | Total. |  | Male. | Fme- | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr.ct. |
| Under $\$ 5.00 \ldots \ldots .$. | 69 |  | 69 |  |  |  |  |  |
| \$5.00 but under $\$ 6.00$ | 42 |  | 42 | 4.57 | 18 |  | 77 18 | 9.24 2.16 |
| ${ }^{6.00}$ but under ${ }^{7.00}$ | $\stackrel{27}{109}$ |  | 27 | 2.94 | 30 |  | 30 | 3.60 |
| $\begin{array}{lll}8.00 & \text { but under } \\ 9.00\end{array}$ | 109 |  | 109 | 11.86 | 82 |  | 82 | 9.85 |
| 9.00 but under 10.00 | 150 | .... | 83 | 9.03 | 75 |  | 75 | 9.00 |
| 10.00 but under 12.00 | 224 |  | 150 | 11.32 | 131 | ........ | 131 | 15.73 |
| 12.00 but under 15.00 | 128 |  | 128 | 11.34 13.93 | 145 | . | 233 | 27.97 |
| 15.00 but under 20.00 | 78 |  | 78 | 13.49 8.49 | 145 37 |  | 145 37 | 17.41 4.44 |
| 20.00 and over ........ | 9 |  | 9 | . 98 | 5 |  | 5 | 4.44 .60 |
| Totals' | 919 |  | 919 | 100.00 | 833 |  | 833 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of <br> Persons Employed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1899. | 1900. | 1899. | 1900. | 1899. | 1900. |
| January | 738 | 672 | 89.24 | 89.48 | 10.76 | 10.52 |
| March . | 753 809 | 706 | 91.05 | 94.01 | 8.95 | 5.99 |
| April . | 813 | 773 | ${ }_{98}^{97.82}$ | 95.47 | 2.18 | 4.53 |
| May | ${ }_{813}$ | 751 | ${ }_{98.31}^{98.31}$ | $\begin{array}{r}97.87 \\ 100.00 \\ \hline 9\end{array}$ | 1,69 | 2.13 |
| June . | 818 | 744 | 98.91 | 109.07 99.07 | 1.69 |  |
| July. | 825 | 730 | 99.76 | 97.20 | 1.24 | 2.80 |
| August | 827 | 740 | 100.00 | 98.53 | . 24 | 1.47 |
| September | 824 | 737 | 99.64 | 98.13 | . 36 | 1.87 |
| October ${ }^{\text {November }}$ | 802 | 736 | 96.96 | 98.00 | 3:04 | 2.00 |
| November | 801 | 748 | 96.86 | 99.60 | 3.14 | . 40 |
| December | 737 | 713 | 89.12 | 94.94 | 10.88 | 5.06 |

3. Other Presentations.

| Classification. | 1899. | 1900. | Increase or DeCrease in 1900. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | Pret. |
| Smallest No. of persons employed.. | 737 | 672 | 65 | 8.82 |
| Greatest No. of persons employed.. | 827 | 751 | 76 | ${ }_{9.19}$ |
| Average No. of persons employed.. | 797 |  | 70 | 8.78 |
| Average yearly earnings | \$398 93 |  |  |  |
| Average time in operation, days.... | 296 | 295 | \$24 1 | 3.38 |
| No. of private firms | 6 | 6 |  |  |
| No. of male partners ................. | 13 | 13 |  |  |
| No. of female partners |  |  |  |  |
| Total N'o. of partners | 13 | 13 |  |  |
| No. of corporations | 9 | ${ }_{9}$ |  |  |
| No. of male stockholders ............ | 123 | 165 | ${ }^{42}$ | $3{ }^{34} 10$ |
| No. of female stockholders |  |  | 22 |  |
| Total No. of partners and stock- | 123 | 187 | 64 | 52.03 |
| holders . ............................... | 136 | 200 | 64 | 47.06 |
| Amount of capital invested ......... | \$816,711 29 | \$765,213 78 |  | 6.31 |
| Value of goods made or work done. | 1,064,284 87 | 1,016.227 47- | 48,057 40 | 4.51 |
| Amount paid as wages ............. | 317,951 131 | 307,797 92- | 10,153 21T | 3.19 |
| Av. capital to each person employed | 1,024 73 | 1,052 56T+ | - 2783 | 2.71 |
| Av. product to each person employed | 1,335 36 | 1,39784 + | 6248 | 4.68 |

## MANUFACTURERS' RETURNS, 1899-1900. <br> PAINTS-7 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classified Weekly Earnings. | 1899. |  |  |  | 1900. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 'Male. | $\begin{gathered} \text { FE- } \\ \text { MALE. } \end{gathered}$ | Total. |  | Male. | $\underset{\text { MALE. }}{\text { FE- }}$ | Total. |  |
|  |  |  | No. | Pr.et. |  |  | No. | Pr. ct. |
| Under $\$ 5.00$. $\ldots$ but under $\$ 6.00$ | 14 1 | 10 | 24 1 | 17.02 | 9 5 | 11 | 20 5 | 12.05 3.01 |
|  | 12 |  | 12 | 8.51 | 6 |  | 6 | 3.61 |
| 7.00 but under 8.00 | 1 |  | 1 | 8.71 | 10 | ........ | 10 | 6.02 |
| 8.00 but under 9.00 | 18 |  | 18 | 12.76 | 23 | ........ | 23 | 13.86 |
| 9.00 but under 10.00 | 36 |  | 36 | 25.53 | 40 | ........ | 40 | ${ }^{24.10}$ |
| 10.00 but under 12.00 | 20 | ...... | 20 | 14.18 | 20 | ........ | 20 | 12.05 |
| 12.00 but under 15.00 | 11 | ....... | 11 | 7.81 1.42 | 30 3 | $\ldots$ | 30 3 | 18.01 |
| ${ }_{20}^{15.00}$ but under $\$ 20.00$ | ${ }_{16}^{2}$ |  | 16 | 11.35 | 3 |  | 3 9 | 5.42 |
| 20.00 and over $\ldots \ldots$. | 16 |  |  |  |  |  |  |  |
| Totals . ........ | 131 | 10 | 141 | 100.00 | 155 | 11 | 166 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months, | Total No. of Persons Employed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1899 | $190)$. | 1899. | 1900. | 1899. | 1900. |
| January | 129 | 139 | 92.14 | 94.56 | 7.86 | 5.44 5.44 |
| February | 129 | 139 | 92.14 | 94.56 | 7.86 | 5.44 |
| March . | 134 | 143 | 95.71 | 97.28 | 4.29 | 2.72 |
| April . | 138 | 146 | 98.57 | 99.32 | 1.43 | . 68 |
| May . . | 140 | 144 | 100.00 | 97.96 | 17... | 17.69 |
| June . | 115 | 121 | 82.14 | 82.31 | 17.86 | 17.69 |
| July | 138 | 147 | 98.57 | 100.00 | 1.43 | 9.79 |
| August | 138 | 143 | 98.57 | 97.28 | 1.43 | 2.72 |
| September | 138 |  | 98.57 | 97.96 | 1.43 | 2.04 |
| October . | 138 | 143 | 98.57 | 97.28 99.32 | 1.43 | 2.72 |
| November | 139 | 146 | 99.29 95.00 | 99.32 95.24 | .71 5.00 | $\stackrel{.68}{ } 4.76$ |
| December | 133 | 140 | 95.00 | 95.24 | 5.00 | 4.76 |

3. Other Presentations.


## MANUFACTURERS' RETURNS, 1899-1900.

PAPER AND PULP-30 ESTABLISHMENTS.

1. Classifled Weekly Earnings.

| Classified Weekly Earnings. | 1899. |  |  |  | 1900. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\underset{\text { MALE }}{\text { Fe }}$里男 | Total. |  | Male. | $\begin{gathered} \text { Fe- } \\ \text { MALE. } \end{gathered}$ | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr.ct. |
| Under $\$ 5.00 \ldots \ldots \ldots$ | 101 | 604 | 705 | 19.24 | 87 | 595 | 682 | 16.75 |
| 6.00 but under ${ }^{(1000}$ | 268 | 28 | $\begin{array}{r}76 \\ 289 \\ \hline\end{array}$ | 2.07 7 | 99 214 | ${ }_{34}^{60}$ | 159 | 3.91 |
| 7.00 but under 8.00 | 634 | 13 | 647 | 17.65 | 214 | 34 11 | 248 | 6.09 10.93 |
| 8.00 but under 9.00 | 333 |  | 333 | 9.09 | 769 | 11 | 769 | 18.88 |
| 9.00 but under 10.00 | 932 |  | 932 | 25.43 | 1,058 |  | 1,058 | 25.98 |
| 10.00 but under 12.00 | 307 | 3 | 310 | 8.46 | 1,323 | ... | 1,323 | 7.93 |
| 12.00 but under 15.00 | 148 |  | 148 | 4.04 | 156 |  | 156 | 3.83 |
| 15.00 but under 20.00 | 192 |  | 192 | 5.24 | 195 |  | 195 | 4.79 |
| 20.00 and over ........ | 33 |  | 33 | . 90 | 37. |  | 37 | . 91 |
| Totals | 2,990 | 675 | 3,665 | 100.00 | 3,372 | 700 | 4,072 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

3. Other Presentations.

| Classification. | 1899. | 1900. | Increase br DeCREASE IN 1900. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Amount. | Pret. |
| Smallest No. of persons employed. | 2,934 | 3,256 | + | 322 | 10.97 |
| Greatest No. of persons employed.. | 3,456 | 3,828 |  | 372 | 17.64 |
| Average No. of persons employed.. | 3,265 |  | $+$ | 286 | 8.76 |
| Average yearly earnings ............ | \$401 69 | \$399 27 | - | \$2 42 | . 60 |
| Average time in operation, days.... | 295 | 295 |  |  | . 60 |
| No. of private firms. | 4 | 4 |  |  |  |
| No. of male partners | 11 | 11 |  |  |  |
| No. of female partners |  | 11 |  |  |  |
| Total No. of partners.................. | ii | ii |  |  |  |
| No. of corporations ..................... | 25 | 25 |  |  |  |
| No. of male stockholders ............ | 320 | 284 |  | - ${ }^{6}$ | 11.25 |
| No. of female stockholders .......... <br> Total No. of stockholders | 41 | 48 |  | 7 | 17.07 |
| Total No. of partners and stock- | 361 |  |  | 29 | 8.03 |
| holders | 372 | ¢43 |  | 29 | 7.80 |
| Amount of capital invested | \$10,295,994 07 | \$10,905,416 60 |  | \$609,422 53 | 5.82 |
| Value of, goods made or work done. | 8,783,114 60 | 9,066,774 95 |  | 283,660 35 | ${ }_{3.23}$ |
| Amount paid as wages ............. | 1,311,536 19 | 1,417,818 28 | + | 106,282 09 | 8.10 |
| Av. capital to each person employed Av. product to each person employed | 3,153 44 | 3,071 08 |  | 8236 | 2.61 |
| Av. product to, each person employed | 2,690 08 | 2,553 30 |  | 13678 | 5.08 |

1 establishment did not report as to kind of management and number of partners and stockholders.

## MANUFACTURERS' RETURNS, 1899-1900.

SADDLERY-7 ESTABLISHMENTS.

1. Classified Weekly Narnings.

| Classified Weekly Earnings. | 1899. |  |  |  | 1900. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\underset{\text { MALE. }}{\text { FE- }}$ | Total. |  | Male. | $\underset{\text { MALE. }}{\text { Fe- }}$ | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr.ct. |
| Under \$5.00 .......... | 29 | 71 | 100 | 36.90 9 | 46 | ${ }_{24}^{92}$ | $\begin{array}{r}138 \\ 39 \\ \hline\end{array}$ | 37.91 10.71 |
| $\$ 5.00$ but under $\$ 6.00$ | 10 | 15 | 25 | 9.23 7.75 | 12 | ${ }_{2}^{24}$ | 14 | 3.85 |
| 6.00 but under 7.00 | 16 | 5 | 19 | 7.01 | 25 | 2 | 27 | 7.42 |
| 7.00 <br> 8.00 but under | 19 |  | 26 | 9.59 | 22 | 7 | 29 | 7.97 |
| 8.00 but under 10.00 | 19 |  | 19 | 7.01 | 20 |  | 32 | - 5.41 |
| 10.00 but under 12.00 | 26 |  | 26 | 9.59 | 39 |  | 35 | 9.62 |
| 12.00 but under 15.00 | 28 |  | 28 | 10.38 | 18 |  | 18 | 4.95 |
| 15.00 but under 20.00 | 4 |  | 4 3 | 1.11 | 5 |  | 5 | 1.37 |
| 20.00 and over ........ |  |  |  |  |  |  |  |  |
| Totals | 190 | 91 | 271 | 100.00 | 237 | 127 | 364 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons Employed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1899. | 1900. | 1899. | 1900. | 1899. | 1900. |
| January | 204 | 240 | 79.07 | 72.73 77.88 | 20.93 22.87 | 27.27 22.12 |
| February | 199 | 257 | 77.13 | 84.85 | 14.73 | 15.15 |
| March . | 220 | 280 | 85.27 | 84.85 88.48 | 10.85 | 11.52 |
| April . | 230 | 292 | 89.15 | 92.42 | 7.75 | 7.58 |
| May | 238 | 305 293 | 89.53 | 88.79 | 10.47 | 11.21 |
| June | 214 | 271 | 82.95 | 82.12 | 17.05 | 17.88 |
| July | 199 | 259 | 77.13 | 78.47 | 22.87 | 21.53 |
| August | 199 | 226 | 64.34 | 68.48 | 35.66 | 31.52 |
| September | 166 | 226 | 77.52 | 76.36 | 22.48 | 23.64 |
| October . | 217 | 285 | 84.11 | 86.36 | -15.89 | 13.64 |
| November . | 258 | 330 | 100.00 | 100.00 |  |  |

3. Other Presentations.


## MANUFAC'TURERS' RETURNS, 1899-1900.

SASH, ETC.-66 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| $\underset{\text { Clarnings. }}{\text { Clified }}$ | 1899. |  |  |  | 1900. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Fe- | Total. |  | Male | $\begin{gathered} \text { FE- } \\ \text { MALE. } \end{gathered}$ | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr.ct. |
| Under $\$ 5.00$ but | 692 | 43 | 635 |  |  |  |  |  |
| $\$ 5.00$ <br> 6.00 <br> but under <br> buder <br> 6.00 <br> $\$ 7.00$ | 165 | $\stackrel{2}{2}$ | 167 | 4.10 | 140 | $\stackrel{3}{2}$ | 610 142 | 14.13 3.31 |
| 7.00 but under: 8.00 | 570 712 | ${ }_{1}^{2}$ | 572 | 14.03 | 477 | 1 | 478 | 11.13 |
| 8.00 but under 9.00 | 512 | 1 | 512 | 17.49 | 696 |  | 696 | 16.20 |
| 9.00 but under 10.00 | 613 | 1 | 614 | 12.56 | 650 |  | 650 | 15.13 |
| 10.00 but under 12.00 | 368 |  | ${ }_{368}$ | 10.06 9.03 | 705 | 1 | 706 | 16.44 |
| 12.00 but under 15.00 | 311 |  | 311 | 9.03 | 485 |  | 355 | 8.26 |
| 15.00 but under 20.00 | 165 |  | 165 | 4.05 | 487 |  | 487 | 11.34 |
| 20.00 and over . | 19 |  | 19 | . 47 | 19 |  | 165 19 | 3.62 .44 |
| Totals | 4,027 | 49 | 4,076 | 100.00 | 4,262 | 36 | 4,298 | 100.00 |

2. Number of Persons Employed Range of Employment-By Months.

| Months. | Total No. of Persons Employed |  | Percentages of-' |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Emplorment. |  | Unemployment. |  |
|  | 1899. | 1900. | 1899. | 1900. | 1899. | 1900. |
| January |  |  |  |  |  |  |
| March . | 3,020 3,286 3 | 2,871 3,267 3,478 | 79.43 | 77.45 88.13 | 22.98 20.57 | 22.55 11.87 |
| April. | 3,286 3,669 | 3,478 | 86.20 | 93.82 | 13.80 | 6.18 |
| May. | 3,635 | 3,687 3,683 | 94.68 97 | 99.46 | 5.32 | . 54 |
| June | 3,802 | 3,683 3,626 | ${ }_{95.38}^{97.98}$ | 99.35 | 2.02 | . 65 |
| July | 3,626 | 3,518 | ${ }_{95.12}^{90.38}$ | 98.09 94.90 | 4.62 4.88 | 1.91 |
| August | 3,812 | 3,500 | 100.00 | 94.42 | 4.88 | 5.10 |
| September | 3,766 | 3,607 | 98.79 | 97.30 | 1.21 | 2.70 |
| November | 3,699 3,735 | 3,414 $3,70 \%$ | 97.04 | 92.09 | 2.96 | 7.91 |
| December | 3,411 | 3,53 3,53 | 97.72 89.48 | 100.00 95 | 2.28 |  |

3. Other Presentations.


MANUFACTURERS' RETURNS, 1899-1900.

## SHEET METAL GOODS—21 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Cl assified Weekly Earnings. | 1899. |  |  |  | 1900. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\begin{gathered} \text { FE- } \\ \text { MALE. } \end{gathered}$ | Total. |  | Male. | $\begin{gathered} \text { Fe- } \\ \text { MALE. } \end{gathered}$ | Total. |  |
|  |  |  | No. | Pr. ct. |  |  | No. | Pr.ct. |
| Under $\$ 5.00 \ldots \ldots . .$. | 749 | 470 | 1,219 | 53.23 | 576 | 353 | 929 | 44.02 |
| \$5.00 but under $\$ 6.00$ | 164 | 7 | - 171 | 7.47 | 187 | 28 | 215 | 10.19 9 |
| 6.00 but under 7.00 | 161 | 1 | 162 | 7.07 | 203 | 4 | 207 | 9.81 |
| 7.00 but under 8.00 | 140 | 1 | 141 | 6.16 | 149 | 1 | 150 | 7.11 |
| 8.00 but under <br> 9.00 but under <br> 10.00 <br> 1000 | 125 | ......... | 125 | 5.46 5.06 | 150 128 |  | 150 128 | 7.11 |
| ${ }_{10} 1000$ but under 12.00 | 133 |  | 133 | 5.81 | 135 |  | 135 | 6.40 |
| 12.00 but under 15.00 | 125 |  | 125 | 5.46 | 106 |  | 106 | 5.02 |
| 15.00 but under 20.00 | 70 |  | 70 | 3.06 | 66 |  | 66 | 3.13 |
| 20.00 and over ........ | 28 |  | 28 | 1.22 | 24 |  | 24 | 1.14 |
| Total . .......... | 1,811 | 479 | 2,290 | 100.00 | 1,724 | 386 | 2,110 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons Employed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1899. | 1900. | 1899. | 1900. | 1899. | 1300. |
| January | 1,850 | 1,777 | 82.22 | 88.72 | 17.78 | 11.28 |
| February | 1,910 | 1,834 | 84.89 | 91.56 | 15.11 | 8.44 |
| March | 1,958 | 1,823 | 87.02 | 91.01 | 12.98 | 8.99 |
| April | 2,006 | 1,753 | 89.16 | 87.52 | 10.84 | 12.48 |
| May | 2,044 | 1,662 | 90.84 | 82.98 | 9.16 | 17.02 |
| June | 2,053 | 1,461 | 91.24 | 72.94 | 8.76 | 27.06 |
| July | 2,087 | 1,829 | 92.75 | 91.31 | 7.25 | 8.69 |
| August | 2,606 | 1,914 | 96.27 | 95.56 | 3.73 | 4.44 |
| September | 2,211 | 1,942 | 98.27 | 96.95 | 1.73 | 3.05 |
| October | 2,250 | 2,003 | 100.00 | 100.00 |  |  |
| November |  |  | 94.98 | 84.07 | 5.02 | 15.93 |
| December | 2,048 | 1,711 | 91.02 | 85.42 | 8.98 | 14.58 |

3. Other Presentations.

| Classification. | 1899. | 1900. | Increase or Decrease in 1900. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. |  | Prct. |
| Smallest No. of persons employed.. | 1,850 | 1,461 |  | 389 | 21.02 |
| Greatest No. of persons employed.. | 2,250 | 2,003 |  | 247 | 10.98 |
| Average No. of persons employed.. | 2,060 | 1,783 | - | 277 | 13.45 |
| Average yearly earnings | \$280 \% 6 | \$317 36 | $+$ | \$36 58 | 13.03 |
| Average time in operation, days | 301 | 301 |  |  |  |
| No. of private firms | 16 | 16 |  |  |  |
| No. of male partners | 29 |  |  | 1 | 3.45 |
| No. of female partners |  |  |  |  |  |
| Total No. of partners | 29 |  |  | 1 | 3.45 |
| No. of corporations | 5 |  |  |  |  |
| No. of male stockholders | 17 | 17 |  |  |  |
| No. of female stockholders | $\stackrel{2}{19}$ |  |  |  | 50.00 |
| Total No. of stockholders ............ | 19 |  |  |  | 5.26 |
| Total No. of partners and stock- | 48 | 48 |  |  |  |
| Amount of capital invested | \$2,463,317 89 | \$2,517,191 65 |  | \$53,873 76 | 2.19 |
| Value of goods made or work done. | 3,619,991 98 | 2,897.199 66 |  | 722,792 32 | 19.97 |
| Amount paid as wages | 578,404 05 | 565,848 52 |  | 12,555 53 | 2.17 |
| Av. capital to each person employed | 1,195 79 | 1,411 77 |  | 21598 | 18.06 |
| Av. product to each person employed | 1,757 23 | 1,624.90 |  | 13233 | 7.53 |

## MANUFACTURERS' RETURNS, 1899-1900. SHIP BUILDING-7 ESTABLISHMENTS

1. Clְassified Weekly Earnings.

| Classified Weekly Earnings. | 1899. |  |  |  | 1900. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\begin{aligned} & \text { FE- } \\ & \text { MALE. } \end{aligned}$ | Total. |  | Male. | $\underset{\text { MALE. }}{\mathrm{Fe}}$ | тотal. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr.ct. |
| Under $\$ 5.00$ but $00 . . . . .$. |  | - | 2 |  | 4 |  | 4 | . 29 |
| $\$ 0.00$ 6.00 but under under $\$ 8.00$ 7.00 |  | 3 | $3{ }^{\circ}$ | . 19 | 13 | 3 | 6 | . 43 |
| 7.00 but under 8.00 | 140 |  | 140 | 4.16 8.96 | 13 |  | 13 | . 9.58 |
| 8.00 but under 9.00 | 9 |  | 9 | . 58 | 154 |  | 154 | 11.03 |
| 9.00 but under 10.00 | 490 |  | 490 | 31.37 | 276 |  | 276 | 19.77 |
| 10.00 but under 12.00 | 276 |  | 276 | 17.67 | 248 |  | 248 | 17.77 |
| 12.00 but under 15.00 | 311 |  | 311 | 19.91 | 283 |  | 283 | 20.27 |
| 15.00 but under 20.00 | 243 |  | 243 | 15.56 | 306 |  | 306 | 21.92 |
| 20.00 and over ........ | 23 |  | 23 | 1.47 | 56 |  | 56 | 4.01 |
| Totals . ......... | 1,559 | 3 | 1,562 | 100.00 | 1,393 | 3 | 1,396 | 100.00 |

2. Niumber of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons Employed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1899. | 1900. | 1899. | 1900. | 1899. | 1900. |
| January | 913 | 854 | 66.11 | 67.99 | 33.89 | 32.01 |
| March |  | 829 | 70.81 | 73.96 | 29.19 | 26.04 |
| April. | 1,105 | 1,193 | 87.62 | ${ }_{99}^{94.98}$ | 12.38 | 5.02 |
| May | 1,381 | 1,256 | 100.00 | 99,76 100.00 | 19.98 | . 24 |
| June | 1,014 | 1,048 | 73.43 | 83.44 | 26.57 |  |
| July | -830 | 1,783 | 60.10 | 62.44 | 36.57 39.90 | 16.56 37.66 |
| August | 668 | 591 | 48.37 | 47.05 | 51.63 | 52.95 |
| September | 850 | 710 | 61.55 | 56.53 | 38.45 | 43.47 |
| October | 753 | 630 | 54.52 | 50.16 | 45.48 | 49.84 |
| November | 707 | 627 | 51.19 | 49.92 | 48.81 | 50.08 |
| December | 830 | 678 | 60.10 | 53.98 | 39.90 | 46.02 |

3. Other Presentations.

| Classification. | 1899. | 1900. | Increase or Decrease in 1900. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | Pret. |
| Smallest No. of persons employed.. | ${ }^{6} 668$ | ${ }_{1}^{591}$ | 77 | 11.53 |
| Greatest No. of persons employed. | 1,381 | 1,256 | 125 | 9.05 |
| Average No. of persons employed.. | 937 | 879 | 58 | 6.19 |
| Average yearly earnings | \$454 05 | \$451 39 | \$2 66 | . 59 |
| Average time in operation, days.... | 279 |  |  | 4.66 |
| No. of private firms | 3 | 3 |  |  |
| No. of male partners | 5 | 5 | ........ |  |
| No. of female partners |  |  |  |  |
| Total No. of partners | 5 | 5 |  |  |
| No. of corporations | 2 | 2 |  |  |
| No. of male stockholders | 11 | 11 |  |  |
| No. of female stockholders | 1. | 1 |  |  |
| Total No. of stockholders | 12 | 12 |  |  |
| Total No. of partners and stockholders | 17 | 17 |  |  |
| Amount of capital invested | \$1,149,325 19 | \$1,158,444 32 | \$9,119 13 | 79 |
| Value of goods made or work done. | 992,151 11 | 1,227,266 40 | + 305,115 29 | 33.09 |
| Amount paid as wages.. | 425,447 34 | 396,771 63 | 28,675 71 | 6.74 |
| Av. capital to each person employed | 1,226 60\| | 1,317 91 | $+\quad 9130$ | 7.44 |
| Av. product to each person employed] | 1,055 34\| | 1,396 21 | 34087 | 32.30 |

2 establishments did not report as to kind of management and No. of partners.

MANUFACTURERS' RETURNS, 1899-1900.
SOAP, LYE AND POTASH-9 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classified WeeklyEarnings. | 1899. |  |  |  | 1900. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\underset{\text { MALE. }}{\text { Fe- }}$ | Total. |  | Male. | $\begin{gathered} \text { FE- } \\ \text { MALE. } \end{gathered}$ | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr.ct. |
| Under \$5.00 | 16 | 80 | 96 | 46.60 | 11 | 50 31 | 61 35 | 31.60 18.13 |
| $\$ 5.00$ but under $\$ 6.00$ | 5 | 6 | 11 | ${ }_{2}^{5.34}$ | 4 |  | 7 | ${ }^{18.63}$ |
| 6.00 but under 7.00 | 5 |  | 5 | 8.73 | 13 |  | 13 | 6.74 |
| 7.00 but under 8.00 | 18 |  | ${ }_{21}$ | 10.19 | 22 |  | 22 | 11.40 |
| 8.00 but under 9.00 | 17 |  | 17 | 8.25 | 17 |  | 17 | 8.81 |
| ${ }^{9.00}$ but under 10.00 | 14 |  | 14 | 6.79 | 12 |  | 12 | 6.22 |
| 10.00 but under 12.00 | 14 |  | 14 | 6.80 | 13 |  | 13 | 6.73 |
| 12.00 but under ${ }^{1500}$ but under 20.00 | 7 |  | 7 | 3.40 | 11 |  | 11 | 5.70 |
| ${ }_{20}^{15.00}$ but under 20.00 | ${ }_{3}$ |  | 3 | 1.46 | 2 |  | 2 | 1.04 |
| Totals . ........ | 120 | 86 | 206 | 100.00 | 112 | 81 | 193 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons Employed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1899. | 1900. | 1899. | 1900. | 1899. | 1900. |
| January . | 201 | 191 | 100.00 99 | 100.00 98.95 | 1.00 | 1.05 |
| February | 199 198 | 189 | 99.00 98.51 | 98.95 99.48 | 1.49 | 1.52 |
| March | 198 | 191 | 96.02 | 100.00 | 3.98 |  |
| April | 192 | 187 | 95.52 | 97.91 | 4.48 | 2.09 |
| Mane. | 201 | 184 | 100.00 | 96.33 |  | 3.67 |
| July | 193 | 177 | ${ }_{9} 96.02$ | 92.67 | 3.98 | 7.33 |
| August | 192 | 174 | 95.52 | ${ }_{9}^{91.10}$ | 4.48 | 7.33 |
| September | 195 | 177 | 97.01 99.00 | 92.67 97.38 | 1.00 | 2.62 |
| October | 199 | 167 | ${ }_{97.01}^{99}$ | 87.43 | 2.99 | 12.57 |
| November . . | 197 | 162 | 98.01 | 84.82 | 1.99 | 15.18 |

3. Other Presentations.

| Classification. | 1899. | 1900. | Increase or DeCREASE IN 1900. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | Pret. |
| Smallest No. of persons employed.. | ${ }_{201}$ | ${ }_{191}^{162}$ - | 24 10 | 12.50 4.98 |
| Greatest No. of persons employed.. | 201 196.30 | 191 - | 16.30 | 4.80 8.80 |
| Average No. of persons employed.. | 196.30 |  | 16.30 | 8.00 |
| Average yearly earnings ............. | \$378 90 | \$349 99 | \$28 91 | 7.63 1.65 |
| Average time in operation, days.... | 303 |  |  |  |
| No. of private firms .................. | 9 | ${ }_{9}^{6}$ |  |  |
| No. of male partners | 1 |  |  |  |
| No. of female partners .............. | 10 | 10 |  |  |
|  | ${ }_{3}$ |  |  |  |
| No. of corporations ${ }^{\text {No.... }}$ | 42 | 42 |  |  |
|  | 4 |  |  |  |
| 'Total No. of stockholders' ............ | 46 |  |  |  |
| Total No. of partners and stockholders | 56 | 56 |  |  |
|  | \$534,693 75 | \$465,459 33 | \$69,2 | 12.94 |
| Amount of capita | 856,347 85 | 846,750 52 |  | 1.12 |
| Value of goods made or work do..... | 64,265 161 | 62,998 33- |  | 1.97 |
| Amount paid as wages ……pioyed | 2,728 03 | 2,585 89 |  | 17 <br> 1.21 |
| Av. capitact to each person employed | 4,362 44\| | 4,704 171+ |  | \| 7.83 |

# MANUFACTURERS' RETURNS, 1899-1900. <br> STAVES AND HEADING-15 ESTABLISHMENTS. <br> 1. Classified Weekly Earnings. 

| Classified Weekly Earnings. | 1899. |  |  |  | 1900. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\underset{\text { MALE. }}{\text { Fe- }}$ | Total. |  | Male | $\begin{gathered} \text { Fe- } \\ \text { MALE. } \end{gathered}$ | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr. ct. |
| Under $\$ 5.00 \ldots \ldots \ldots .$. | 71 |  | 71 | 13.45 | 48 |  | 48 | 9.25 |
| 6.00 but under ${ }^{(1000}$ | 28 |  | ${ }_{33}^{28}$ | 5.30 | 29 |  | 29 | 5.59 |
| 7.00 but under 8.00 | 124 |  | $\begin{array}{r}33 \\ 124 \\ \hline\end{array}$ | ${ }_{23}^{6.25}$ | 33 |  | 33 | 6.36 |
| 8.00 but under 9.00 | 100 |  | 124 | 23.48 | 107 |  | 107 | 20.61 |
| 9.00 but under 10.00 | 80 |  | 100 80 | 18.94 | 108 |  | 108 | 20.81 |
| 10.00 but under 12.00 | 40 |  | 40 | $\begin{array}{r}18.15 \\ 7.58 \\ \hline\end{array}$ | 47 | $\ldots$ | 77 40 | 14.83 |
| 12.00 but under 15.00 | 24 |  | 24 | 4.55 | 34 |  | 40 34 | 7.71 |
| 15.00 but under 20.00 20.00 and over | 25 |  | 25 | 4.73 | 36 |  | ${ }_{36}$ | 6.55 6.94 |
| 20.00 and over ........ | 3 |  | 3 | . 57 | 7 |  | 7 | 1.35 |
| Totals . ........ | 528 | ....... | 528 | 100.00 | 519 |  | 519 | 100.00 |

2. N'umber of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons Employed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1899. | 1900. | 1899. | 1900. | 1899. | 1900. |
| January . |  |  |  |  |  |  |
| February | 376 376 425 | 3488 | 83.37 81.21 | 76.82 79.03 | 16.63 10.79 | 23.18 20.97 |
| April . . | 425 463 | 417 | 91.79 100 | 92.05 | 8.21 | 7.95 |
| May | 443 | 441 | 100.00 | 100.00 |  |  |
| June | 399 | 441 | 95.68 | 97.35 | 4.32 | 2.6 b |
| July . | 333 | 392 | 86.18 71.92 | 886.15 | 13.82 28.08 | $\begin{array}{r}6.84 \\ \\ \hline 1.47\end{array}$ |
| August | 279 | 358 | 60.26 | 86.03 79 | 389.75 | 13.47 20.97 |
| September | 239 | 281 | . 51.62 | 62.03 | 48.38 | 20.97 37.97 |
| October ${ }^{\text {O }}$ - | 239 | 249 | - 51.62 | 54.97 | 48.38 | 45.03 |
|  | ${ }_{342} 264$ | 270 | ${ }_{7}^{57.02}$ | 61.81 | 42.98 | 38.19 |
| December | 342 | 322 | 73.87 | 71.08 | 26.13 | 28.92 |

3. Other Presentations.

| Classification. | 1899. | 1900. | Increase or DeCREASE IN 1900. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | Pret. |
| Smallest No. of persons employed.. | 239 | 249 + | 10 | 4.18 |
| Greatest No. of persons employed.. | 463 349 | 453 - | 10 | 2.16 |
| Average No. of persons employed.. | 349 | 359 | 10 | 2.87 |
| Average yearly earnings | \$311 73 | \$333 88 |  |  |
| Average time in operation, days | 244 | 246 | \$22 ${ }^{15}$ | 7.82 |
| No. of private firms | 7. |  | 1 |  |
| No. of male partners. | 14 | 18 | 4 | 14.29 28.57 |
| No. of female partners |  |  |  |  |
| No. of corporations ... | 14 | 18. | 4 | 28.57 |
| No. of male 'stockholders | 31 |  | 1. | 12.50 |
| No. of female stockholders | ${ }_{1} 1$ | 1 | 3 | 9.68 |
| Total No. of stockholders.............. | 32 | 29 |  |  |
| Total No. of partners and stockholders | 46 | 29 | 3 | 9.38 |
|  | 46 | 47 | 1 | 2.17 |
| Amount of capital invested .......... | \$266,656 44 | \$272,302 65 |  |  |
| Value of goods made or work done. | 377,998 11 | $398,06064+$ | 20,072 53 | 5.31 |
| Amount paid as wages .............. | 108,772 31 | 119,862 $22+$ | 11,089 91 |  |
| Av. capital to each person employed | ${ }^{7} 76406$ | 13,758 50才- | 11,059 56 | 10. 73 |
| Av. product to each person employed\| | 1,083 06 | 1,108801+ | 2574 | 2.38 |

## MANUFACTURERS' RETURNS, 1899-1900.

 STONE-3 ESTABLISHMENTS.1. Classified Weekly Earnings.

| Classified Weekly Earnings. | 1899. |  |  |  | 1900. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\begin{gathered} \text { Fe- } \\ \text { MALE. } \end{gathered}$ | Total. |  | Male. | $\begin{gathered} \text { FE- } \\ \text { MALE. } \end{gathered}$ | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr. ct. |
| Under \$5.00 ......... | 8 |  | 8 | 1.65 | 10 |  | 10 | 2.12 |
| \$5.00 but under $\$ 6.00$ | 2 |  | 2 | . 41 | 4 | ........ | 4 | ${ }_{1} .85$ |
| 6.00 but under 7.00 | 3 |  | 3 | . 6.6 | 5 | ...... | 5 | 1.06 |
| 7.00 but under 8.00 | 63 |  | 63 | 12.99 | 59 | ........ | 59 15 | 12.50 3 |
| 8.00 but under 9.00 | 15 |  | 15 | 3.09 | 15 |  | 15 59 | $\stackrel{3}{3} \mathrm{H} .50$ |
| 9.00 but under 10.00 | 84 |  | 84 | 17.32 | 59 |  | $\stackrel{59}{52}$ | 12.50 |
| 10.00 but under 12.00 | 89 |  | 89 | 18.35 | 52 |  | 52 | 11.02 |
| 12.00 but under 15.00 | 93 |  | 93 | 19.18 | 114 |  | 114 | 24.15 |
| 15.00 but under 20.00 | 47 |  | 47 | 9.69 | 93 |  | 93 | 19.70 |
| 20.00 and over ........ | 81 |  | 81 | 16.70 | 61 |  | 61 | 12.92 |
| Totals . ........ | 485 |  | 485 | 100.00 | 472 |  | 472 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons Empleyed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment: |  | Unemployment. |  |
|  | 1899. | 1900. | 1899. | 1900. | 1899. | 1900. |
| January | 163 | 213. | 38.90 | 50.35 | 61.10 | 49.65 |
| February | 118 | 164 | 28.16 | 38.78 | 71.84 | 61.22 |
| March | 191 | 221 | 45.58 | 52.25 | 54.42 | 47.75 |
| April | 320 | 368 | 76.37 | 87.00 | 23.63 | 13.00 |
| May | 370 360 | 401 | 88.31 85.92 | 94.80 95.98 | 11.69 14.08 | 5.20 4.02 |
| June | 360 400 | 406 416 | 85.92 95.47 | 95.98 98.35 | 14.08 | 4.02 1.65 |
| August | 387 | 423 | 92.36 | 100.00 | 7.64 |  |
| September | 419 | 413 | 100.00 | 97.64 |  | 2.36 |
| October . | 347 | 332 | 82.82 | 78.49 | 17.18 | 21.51 |
| November | 301 | 286 | 74.22 | 67.61 | 25.78 | 32.39 |
| December | 239 | 191 | 57.04 | 45.15 | 42.96 | 54.85 |

3. Other Presentations.

| Classification. | 1893. | 1900. | Increase or DeCREASE IN 1900. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | Pret. |
| Smallest No. of persons employed.. | 118 | 164 | 46 | 38.98 |
| Greatest No. of persons employed.. | 419 | 423 | 4 | ${ }^{.95}$ |
| Average No. of persons employed.. | 301 | 320 | 19 | 6.31 |
| Average yearly earnings | \$538 57 | \$576 34 | \$37 77 | 7.01 |
| Average time in operation, days.... | 266 | 262 | 4 | 1.50 |
| No. of private firms | 10 | 10 |  |  |
| No. of male partners | 17 | 22 | 5 | 29.41 |
| No. of female partners................ | 2 |  |  |  |
| Total No. of partners | 19 | 24 | 5 | 26.32 |
|  | 3 | 3 |  | ...... |
| No. of male stockholders ............ | 22 | 22 |  |  |
| No. of female stockholders |  |  |  |  |
| Total No. of stockholders | 22 | 22 | .............. |  |
| Total No. of partners and stock- | 41 | 46 | 5 | 12.20 |
| Amount of capital invested | \$523,577 14 | \$569,022 71 | \$45,445 57 | 8.68 |
| Value of goods made or work done. | 527,131 25 | 600,981 25 | ${ }^{1} 3,85000$ | 14.01 |
| Amount paid as wages ............. | 162,111 14 | 183,427 80 | 21,316 66 | 13.15 |
| Av. capital to each person employed | 1,739 46 | 1,780 07 | 4061 | 2.33 |
| Av. product to each person employed | 1,751 27 | 1,878 06 | 12679 | \| 7.24 |

2 establishments did not report as to kind of management and No. of partners.

## MANUFACTURERS' RETURNS, 1899-1900.

## STRAW GOODS-3 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classtfied Wfekly Earnings. | 1899. |  |  |  | 1900. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | $\underset{\text { MALE. }}{\text { Fe. }}$ | Total. |  | Male. | Fe- | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr. ct. |
| Under $\$ 5.00 \ldots \ldots \ldots$ | 60 | 237 | 297 | 35.66 | 48 | 216 | 264 | 34.51 |
| ${ }_{6.00}$ but under ${ }^{\text {a }}$ | 50 <br> 52 | 240 4 | - 295 | 35.42 6.72 | 50 57 | 192 | 242 | 31.63 |
| 7.00 but under 8.00 | 55 | ${ }_{6}^{4}$ | 61 | 7.32 | 62 | 6 | 63 68 | 8.24 |
| 8.00 but under 9.00 | 35 | 10 | 45 | 5.40 | 30 | 10 | 40 | 8.83 |
| 9.00 but under 10.00 | 17 | 8 | 25 | 3.00 | 21 | 8 | 29 | 3.79 |
| 10.00 but under 12.00 | 16 | 6 | 22 | 2.64 | 16 | 6 | 22 | 2.88 |
| 12.00 but under 15.00 | 16 |  | 16 | 1.92 | 21 |  | 21 | 2.74 |
| 15.00 but under 20.00 | 11 |  | 11 | 1.32 | 11 |  | 11 | 1.44 |
| 20.00 and over ........ | 5 |  | 5 | . 60 | 5 |  | 5 | . 65 |
| Totals . . . . . . . 1 | 322 | 511 | 833 | 100.00 | 321 | 444 | 765 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons Employed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1899. | 1900. | 1899. | 1900. | 1899. | 1900. |
| January . .................. | 515 - 589 |  | 63.04 | 78.01 | 36.96 | 21.99 |
| March . | 672 765 | 675 | 82.25 | 89.40 94.70 | 17.75 6.36 | 10.605.30 |
| April . | 817772 | 775 | 100.00 | 100.00 | …… ${ }^{\text {a }}$ |  |
| May . |  | 647 | 104.49 | +85.70 |  | . 14.30 |
| June | 493507 | 427 | ${ }_{60.34}^{94.49}$ | 85.70 56.56 | 5.5139.6637.94 | 43.4440.26 |
| July |  |  | 62.06 | 59.74 |  |  |
| August . | 623649 | 691506 | 76.25 | 99.74 91.52 | $\begin{aligned} & 37.94 \\ & 23.75 \\ & 20.56 \end{aligned}$ | 8.48 |
| September |  |  | 79.4483.97 | 67.0276.16 |  | 32.9823.8455.63 |
| October | 686 469 | $575$ |  |  | ${ }_{16}^{20.56}$ |  |
| December | 538 | 335 499 | $\begin{aligned} & 57.41 \\ & 6.45 \end{aligned}$ | $44.37$ | 42.59 | $\begin{aligned} & 55.63 \\ & 33 \end{aligned}$ |

3. Other Presentations.

| Classification. | 1899. | 1900. | In crease or DeCREASE IN 1900. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | Pret. |
| Smallest No. of persons employed.. | 469 | 427 | 42 | 8.96 |
| Greatest No. of persons employed.. | 817 | 755 | 62 | 7.59 |
| Average N'o. of persons employed.. | 627 |  | 55 | 8.77 |
| Average yearly earnings ........... | \$285 69 | \$299 10 | \$13 41 | 4.69 |
| Average time in operation, days.... | 293 | + 276 | 17 | 5.80 |
| No. of private firms | 1 | 1 |  |  |
| No. of male partners. | 1 | 1 |  |  |
| No. of female partners |  |  |  |  |
| Total No. of partners | 1 | 1 |  |  |
| No. of corporations ... | 2 |  |  |  |
| No. of male stockholders. | 11 |  | 1 | 9.09 |
| No. of female stockholders | 2 |  |  |  |
| Total No. of stockholders ............ | 13 |  | 1 | 7.69 |
| Total No. of partners and stock- holders . ................................. | 14 | 15 | 1 | 7.14 |
| Amount of canital invested . ......... | \$466,489 22 | \$450,207 . 41 | \$16,281 82 | 3.49 |
| Value of goods made or work done. | 708,752 181 | 724,672 361 | + 15,920 18 | 2.25 |
| Amount paid as wages .............. | 179,127 42 | 171,085 46 | - 8,041 96 | 4.49 |
| Ar. capital to each person employed | 743051 | 787881 | + 44031 | 5.93 |
| Av. product to each person employed | 1,130 39\| | 1,266 91\| | $+\quad 13652$ | 12.08 |

## MANUFACTURERS' RETURNS, 1899-1900. <br> TOYS AND GAMES-6 ESTABLISHMENTS.

## 1. Classified Weekly Earnings.

| Classified WeeklyEarnings. | 1899. |  |  |  | 1900. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\underset{\text { FALe- }}{\text { Fer }}$ | Total. |  | Male. | $\underset{\text { MALE. }}{\text { Fe- }}$ | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr. ct. |
|  | 220 60 | 45 | $\begin{array}{r}265 \\ 60 \\ \hline\end{array}$ | 36.65 8.30 | $\begin{array}{r}142 \\ 45 \\ \hline\end{array}$ | 26 1 | 168 46 | 30.22 8.27 |
|  | 202 |  | 202 | 27.94 | 182 |  | 182 | 32.73 |
| 7.00 but under 8.00 | 69 |  | 69 | 9.54 | 61 |  | 61 36 | 10.97 |
| 8.00 but under 9.00 | 24 |  | 24 | 3.32 | 36 |  | 17 | 6.47 3.06 |
| 9.00 but under 10.00 | 39 |  | 39 | 5.39 | 17 |  | 12 | 3.96 |
| 10.00 but under 12.00 | 31 |  | ${ }_{20} 21$ | 4.29 2.77 | 13 |  | 13 | 2.34 |
| 12.00 but under 15.00 | 20 |  | 10 | 1.38 | 13 9 |  | 9 | 1.62 |
| ${ }_{20}^{15.00}$ but under 20.00 | 10 |  | 10 3 | 1.72 .42 | 2 |  | , | . 36 |
| 20.00 and over .. |  | 45 | 723 | 100.00 | 529 | 27 | 556 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

3. Other Presentations.


1 establishment did not report as to kind of management and No. of partners.

## MANUFACTURERS' RETURNS, 1899-1900.

 TRUNKS AND VALISES-9 ESTABLISHMENTS.1. Classified Weekly Earnings.

| Classified WeeklyEarnings. | 1899. |  |  |  | 1900. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\underset{\text { MALE- }}{\text { Fe- }}$ | Total. |  | Male. | $\underset{\text { MALE }}{\text { Fe- }}$ | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | 'Pr.ct. |
| Under $\$ 5.00 \times \ldots . . . .0$ | 196 | 135 | 321 | 37.11 | 172 | 147 | 319 | 35.60 |
| 6.00 but under 700 | 57 | 37 | 94 | 10.87 | 54 | 40 | $\stackrel{34}{94}$ | 35.60 10 |
| 7.00 but under 8.00 | 90 | 11 | 61 | 7.05 | 53 | 16 | 69 | 7.70 |
| 8.00 but under 9.00 | 93 |  | 93 | 10.75 | 89 |  | 89 | 9.93 |
| 9.00 but under 10.00 | 71 |  | 67 7 | 7.75 | 93 | 1 | -94 | 10.49 |
| 10.00 but under 12.00 | 73 | 1 | 74 | 8.31 | 75 | 1 | 76 | 8.48 |
| 12.00 but under 15.00 | 58 |  | 58 | 8.56 6.71 | 80 48 |  | 80 | 8.93 |
| 15.00 but under 20.00 | 20 |  | 20 | 6.71 2.31 | 48 |  | 48 | 5.36 |
| 20.00 and over ... | 5 |  | 5 | 2.58 | 23 4 |  | 23 4 | 2.57 .45 |
| Totals . ........ ${ }^{\text {\| }}$ | 690 | 175 | 865 | 100.00 | 691 | 205 | 896 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons Employed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemplosment. |  |
|  | 1899. | 1900. | 1899. | 1900. | 1899. | 1900. |
|  |  |  |  |  |  |  |
| March | 793 | 806 | 92.22 94.86 | 92.08 95.27 | 7.78 5.14 | 7.92 |
| April . | 827 | 838 | 98.92 | 99.05 | 1.08 | 4.73 .95 |
| May. | 826 | 840 | 98.80 | 99.29 | 1.20 | . 71 |
| June . | 836 | 841 | 100.00 | 99.53 |  | . 47 |
| July | 827 | 844 | 98.92 | 99.76 | 1.08 | . 24 |
| August | 818 | 831 | 97.85 | 98.23 | 2.15 | 1.77 |
| September | 812 | 833 | 97.13 | 98.46 | 2.87 | 1.54 |
| October . | 8 | 846 | 99.76 | 100.00 | . 24 |  |
| November | 784 | 818 798 | 95.69 | 96.69 | 4.31 | 3.31 |
| December | 760 | 798 773 | 93.78 90.91 | 94.33 91.37 | 6.22 | 5.67 |
|  |  | 773 | 90.91 | 91.37 | 9.09 | 8.63 |


| Classification. | 1899. | 1500 | Increase or De. CREASE IN 1900. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | Pret. |
| Smallest No. of persons employed.. | 760 |  |  |  |
| Greatest No. of persons employed.. | 836 | 846 | 13 10 | 1.71 |
| Average No. of persons employed.. | 807 | 821 | 14 | 1.73 |
| Average yearly earnings ........... |  |  |  |  |
| Average time in operation, days..... | \$396 | \$321 290 | $\pm$+ <br> $+\quad \$ 1721$ | 5.66 2.03 |
| No. of private firms |  |  |  |  |
| No. of male partners. | ${ }_{3}$ | ${ }_{3}^{1}$ |  |  |
| No. of female partners ................. |  |  |  |  |
| No. of corporations | ${ }_{8}^{3}$ | 3 |  |  |
| No. of male stockholders | ${ }_{56}^{8}$ | 8 |  |  |
| No. of female stockholders | 16 | 52 | 4 | 7.14 |
| Total No. of stockholders ............. | 16 | 18 | 2 | 13.13 |
| Total No. of partners and stock- | 72 | 70 | - 2 | 2.78 |
| holders . ............................... | 75 | 73 | - 2 | 2.67 |
| Amount of capital invested |  |  |  |  |
| Value of goods made or work done. | \$1.089,185 47 | \$1.092.864 571 | \$5,523 20 | . 51 |
| Amount paid as wages ............... | -245,383 15 | 1,385,905 38 | 96,719 91 | 7.50 |
| Av. capital to each person employed | 1,347 39 | 263,731 1,34 | 18,387 49 | 7.49 |
| Av. product to each person employed | 1,597 50\| | 1,688 071 | + <br> $+\quad 9057$ | 1.22 5.67 |

## MANUFACTURERS' RETURNS, 1899-1900.

VENEER-8 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classtfred Weekly Earnings. | 1899. |  |  |  | 1900. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male: | $\begin{gathered} \text { Fe- } \\ \text { MALE. } \end{gathered}$ | Total. |  | Male | $\begin{aligned} & \text { FE- } \\ & \text { MALE } \end{aligned}$ | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr.ct. |
| Under $\$ 5.00 \ldots \ldots .$. | 103 |  | 103. | 19.18 | 56 |  | 56 | 10.71 |
| $\$ 5.00$ but under $\$ 6.00$ | 19 | ........ | 19 | 3.54 | 39 |  | 39 | ${ }_{1} 7.46$ |
| 6.00 but under 7.00 | 85 |  | 85 | 15.83 | 71 |  | 71 | 13.57 |
| 7.00 but under 8.00 | 110 |  | 110 | 20.00 | 163 |  | 163 | 31.17 |
| 8.00 but under 9.00 | 77 |  | 77 | 14.34 | 78 | .... | 78 | 14.91 |
| 9.00 but under 10.00 | 50 |  | 50 | 9.31 | 61 |  | 61 | 11.66 4.78 |
| 10.00 but under 12.00 | 50 |  | 50 | 9.31 | 25 |  | 25 | 4.78 |
| 12.00 but under 15.00 | 32 |  | 32 | 5.96 | 25 |  | 25 | 4.78 |
| 15.00 but under 20.00 | 11 |  | 11 | 2.05 | 5 |  | 5 | . 96 |
| 20.00 and over ......... |  |  |  |  |  |  |  |  |
| Totals . ........ | 537 | ...... | 537 | 100.00 | 523 |  | 523 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons Employed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1899. | 1900. | 1839. | 1900. | 1899. | 1900. |
| January | 368 | 339 | 71.46 | 70.33 | 28.54 | 29.67 |
| February | 392 | 377 | 76.12 88.74 | 78.22 87.14 | 23.88 11.26 | 21.78 12.86 |
| April . | 510 | 431 | 99.03 | 89.42 | 1. 97 | 10.58 |
| May | 494 | 430 | 95.92 | 89.21 | 4.08 | 10.79 |
| June | 515 | 442 | 100.00 | 91.70 |  | 8.30 |
| July | 504 | 446 | 97.67 | 92.53 | 2.33 | 7.47 |
| August | 491 | 482 | 95.34 | 100.00 | 4.66 |  |
| September | 477 | 463 | ${ }_{8 \times}^{92.62}$ | ${ }_{89}^{96.06}$ | 7.38 |  |
| October ${ }^{\text {November }}$ | 457 360 | 433 | 88.74 69.90 | 89.83 81.33 | 11.26 30.10 | 10.17 18.67 |
| December | 358 | 374 | 69.51 | 77.59 | 30.49 | 22.41 |

3. Other Presentations.

| Classification. | 1899. | $1{ }^{1} 0^{\prime}{ }^{\text {a }}$ | Increase or DeCrease in 1900. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | Pret. |
| Smallest No. of persons employed.. | 358 | 339 | 19 | 5.31 |
| Greatest No. of persons employed.. | 515 |  | 33 | 6.41 |
| Average No. of persons employed.. | 449 | 419 | 30 | 6.68 |
| Average yearly earnings | \$311 21 . | \$315 15 | 3884 | 12.48 |
| Average time in operation, days | 282 | 282 |  |  |
| No. of private firms | 3 | 3 |  |  |
| No. of male partners . | 4 | 4 |  |  |
| No. of female partners |  |  |  |  |
| Total No. of partners | 4 | 4 |  |  |
| No. of corporations ${ }^{\text {Nomers }}$ | 31 | 29 |  | 6.45 |
| No. of female stockholders | $\xrightarrow{3}$ | 3 |  | 50.9 |
| Total No. of stockholders | 33 |  | 1 | 3.03 |
| Total No. of partners and stockholders | 37 |  | 1 |  |
| A mount of capital invested | \$247.804 87 | \$290.349 82\% + | \$42.544 95 | 17.17 |
| Value of goods made or work done. | 559.87106 | 586.300 981+ | $32.429 .9 ?$ | 6.05 |
| Amount paid as wages ............. | 139,776 65 | 146,715 $81.1+$ | 6.97916 | + 4.96 |
| Av. capital to each person employed | 551901 | ${ }_{699} 961+$ | 141 nf | 25.56 |
| Av. nroduct to each person employed | 1,231 34 | 1,399 28\|+ | 16794 | \| 13.64 |

## MANUFACTURERS' RETURNS, 1899-1900. WAGONS-55 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| C'lassified Weekly Earnings. | 1899. |  |  |  | 1900. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Fe- | Total. |  | Male | $\begin{gathered} \text { Fe- } \\ \text { MALE. } \end{gathered}$ | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr.ct. |
| Under $\$ 5.00$.........0 | 151 | 22 | 173 | 5.39 | 141 | 21 | 162 | 5.34 |
| 6.00 but under 7.00 | 215 | 1 | 82 | ${ }_{6} .49$ | 71 | 1 | 72 | 2.37 |
| 7.00 but under 8.00 | 497 | 10 | 507 | 15.80 | 453 | 11 | 204 | 6.72 |
| 8.00 but under 9.00 | 270 | 8 | 278 | 8.67 | 433 | 11 | 464 <br> 333 | ${ }_{10}^{15.97}$ |
| 9.00 but under 10.00 | 605 | 5 | 610 | 19.01 | 553 | $\stackrel{\square}{5}$ | $\stackrel{3}{58}$ | 18.38 |
| 10.00 but under 12.00 | 465 | 1 | 466 | 14.53 | 425 |  | 425 | 14.00 |
| 12.00 but under 15.00 | 587 | 2 | 589 | 18.36 | 514 |  | 514 | 16.93 |
| 15.00 but under 20.00 | 235 | 1 | 236 | 7.36 | 248 |  | 248 | 8.17 |
| 20.00 and over ........ | 47 |  | 47 | 1.47 | 55 |  | 55 | 1.48 |
| Totals . ...... | 3,115 | 571 | 3,208 | 100.00 | 2,991 | 44 | 3,035 | 100.00 |

2. Number of Persons Mmployed, Range of Employment-By Months.

| Months. | Total No. of Persons Employed |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1899. | 1900. | 1899. | 1900. | 1898. | 1900. |
| January | 2,629 | 2,804 | 92.34 | 96.49 | 7.66 | 3.51 |
| February March | 2,655 | 2,806 2 | ${ }_{97}^{93.36}$ | 96.56 | 6.74 | 3.44 |
| April . | 2,78 2,819 | 2,906 2,881 | 97.47 99.02 | 100.00 99.14 | 2.53 .98 |  |
| May | 2,847 | 2,811 | 100.00 | 99.73 | . 98 | . 3.27 |
| June | 2,809 | 2,813 | 98.67 | 96.80 | 1.33 | 3.20 |
| July | 2,799 | 2,768 | 38.31 | 95.25 | 1.69 | 4.75 |
| August. | 2,706 | 2,626 | 95.04 | 90.36 | 4.96 | 9.64 |
| September | $\stackrel{2,624}{ }$ | 2,551 | 92.17 | 87.77 | 7.83 | 12.23 |
| October N Nevember | $\xrightarrow{2,688}$ | $\stackrel{2,518}{2,572}$ | 94.41 | 86.65 | 5.59 | 13.35 |
| December | 2,793 | 2,689 | 98.10 | 82.53 | 4.11 1.90 | 11.50 7.47 |

3. Other Presentations.

| Classification. | 1899. | 1900. |  | InCREASE OR De-CREASE IN 1900. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Amount. | Pret. |
| Smallest No. of persons employed.. | 2,624 | 2,518 |  | 106 | 4.04 |
| Greatest No. of persons employed.. | $\stackrel{2,847}{ }$ | 2,906 |  |  | 2.07 |
| Average No. of persons employed.. | 2,740 | 2,729 |  | 11 | . 40 |
| Average yearly earnings | \$450 66 | \$440 61 |  | \$10 05 | 2.23 |
| Average time in operation, days.... | 300 | 296 |  |  | 1.33 |
| No. of private firms ................. | 39 |  |  |  | 2.56 |
| No. of male partners | 59 |  |  | 3 | 5.09 |
| No. of female partners | 3 |  |  | 1 | 33.33 |
| Total No. of partners | 62 |  |  |  | 3.22 |
| No. of corvorations No. of maie | 16 |  |  |  | 6.25 |
| No. of mate stockholders . | 303 |  |  | 60 | 19.80 |
| No. of female stockholders .... | 55 | 106 | + | 51 | 92.73 |
| Total No. of partners and stock- | 358 | 349 |  | 9 | 2.52 |
| holders' . ............................... | 420 |  |  | 11 | 2.62 |
| Amount of capital invested | \$5,850,957 62 | \$5,901,092 86 |  | \$50,135 24 |  |
| Value of goods made or work done. | 5,419,507 66 | 5,713,099 57 |  | 293,591 91 | 5.39 |
| Amount paid as wages ............ | 1,234,809 42 | 1,202,427 71 |  | 32,381 71 | 26.22 |
| Av. capital to each person employed | 2,135 39 | 2,162 36 |  | 2697 | 1.26 |
| Av. product to each person employed | 1,977 92 | 2,093 48 |  | 11556 | 5.85 |

## MANUFACTURERS' RETURNS, 1899-1900. WOODENWARE-9 ESTABLISHMENTS.

1: Classified Weekly Earnings.

| Classtfied Weekly Earnings. | 1899. |  |  |  | 1900. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\begin{aligned} & \text { Fe- } \\ & \text { MALE. } \end{aligned}$ | Total. |  | Male. | $\begin{gathered} \text { Fe- } \\ \text { MALE. } \end{gathered}$ | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr.ct. |
| Under $\$ 5.00$.........0 | 248 48 |  | 248 48 | 16.04 3.10 | 104 81 |  | $\begin{array}{r}104 \\ 81 \\ \hline 10\end{array}$ | 6.81 5.32 8.88 |
|  | 132 |  | 132 | 8.54 | 126 |  | 126 | 8.28 |
| 7.00 but under 8.00 | 348 |  | 348 | 22.51 | 379 |  | 379 440 | ${ }_{28}^{24.92}$ |
| 8.00 but under 9.00 | 422 |  | 422 | 27.29 | 440 |  | 227 | 14.93 |
| 9.00 but under 10.00 | 173 |  | 173 | 11.18 | 83 |  | 83 | 5.46 |
| 10.00 but under 12.00 | 72 |  | 48 | 4.09 3.10 | 23 |  | 23 | 1.51 |
| 12.00 but under 15.00 | 48 |  | 42 | 2.72 | 44 |  | 44 | 2.90 |
| 15.00 but under 20.00 | 12 |  | 13 | . 85 | 14 |  | 14 | 92 |
| 20.00 and over ......... | 1,546 |  | 1,546 | 100.00 | 1,521 |  | 1,521 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No of Persons Employed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1899. | 1900. | 1899. | 1900. | 1899. | 1900. |
| January | 1,415 | 1,481 | 99.67 93.19 | 99.79 98.38 | 7.33 6.81 | .21 1.62 |
| February | 1,423 | 1,460 | ${ }_{98.36}$ | 97.51 | 1.64 | 2.49 |
| March | 1,469 | 1,466 | 96.47 | 98.79 | 3.53 | 1.21 |
| April . | 1,489 | 1,456 | 97.57 | 98.06 | 2.43 | 1.94 |
| June . | 1,503 | 1,478 | 98.43 | 99.59 | 1.57 | 1.41 |
| July | 1,485 | 1,462 1,484 | ${ }_{99} 97.25$ | 98.52 100.00 | 2.75 .46 | 1.48 |
| August | 1,520 | 1,484 | 99.54 | 108.05 | 2.42 | 1.95 |
| September | 1,490 | 1,455 | 97.58 100.00 | 97.77 | 2.42 | 2.23 |
| October | 1,503 | 1,437 | 98.43 | 96.83 | 1.57 | 3.17 |
| December | 1,513 | 1,422 | 99.08 | 95.82 | . 92 | 4.18 |

3. Other Presentations.

| Classification. | 1899. | 1900. | Increase or Decrease in 1900. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | Pret. |
| Smallest No. of persons employed.. | 1,415 | 1,422 | 43 | .49 2.82 |
| Greatest No. of persons employed.. | 1,527 | 1,484 | ${ }_{29}$ |  |
| Average No. of persons employed.. | 1,487 | 1,458 |  |  |
| Average yearly earnings ............ | \$320 90 | \$328 29 | $\$ 739$ 2 | 2.30 .73 |
| Average time in operation, days.... |  |  |  |  |
| No. of private firms | $\stackrel{2}{2}$ | $\stackrel{2}{2}$ |  |  |
| No. of male partners |  |  |  |  |
| No. of female partners | 2 | 2 |  |  |
| Total No. of partners | 7 | 7 |  |  |
| No. of corporations No. of male stock | 31 | 31 |  |  |
| No. of female stockholdeirs | 45 | 4 |  |  |
| Total No. of stockholders . ${ }^{\text {N }}$ St..... | 35 |  |  |  |
| Total No. of partners and stockholders | 37 | 37 |  |  |
|  | \$847,073 13 | \$870,368 91 | + \$23,295 78 | 2.75 |
| Vmoun of goods made or work done. | 1,872,025 58 | 1,799,378 04 | - 72,64754 | 3.98 |
| Amount paid as wages ............. | 487,170 869 | 478,644 48 | $+\quad 8,52638$ $+\quad 2662$ | 1.75 4.67 |
| Av. capital to each person employed | $\begin{array}{r}\text { 569 } \\ 1,258 \\ \hline 18\end{array}$ | 1,234 14 | - $\quad 2479$ | 1.97 |

## MANUFACTURERS' RETURNS, 1899-1900. <br> WOOLEN AND WORSTED GOODS- 17 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classtried Weekly <br> Earnings. | 1899. |  |  |  | 1900. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\xrightarrow[\text { Fe- }]{\text { MALE. }}$ | Total. |  | Male. | $\begin{aligned} & \text { FE- } \\ & \text { MALE. } \end{aligned}$ | Total, |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr.ct. |
|  |  |  |  |  |  |  |  |  |
| $\$ 5.00$ <br> 6.00 <br> but under <br>  <br> 800 | 22 101 | 65 | 87 | 7.84 | 24 | - 58 | 463 82 | 41.56 7.38 |
| 7.00 but under 8.00 | 101 | ${ }_{33}^{61}$ | 162 | 14.60 | 101 | 68 | 169 | 15.18 |
| 8.00 but under 9.00 | 29 | 33 <br> 32 | 103 | 5.28 | 85 | 63 | 148 | 13.29 |
| 9.00 but under 10.00 | 69 | 32 44 | ${ }^{61}$ | 5.50 | 39 | 18 | 57 | 5.12 |
| 10.00 but under 12.00 | ${ }_{39}$ | 44 1 | 113 | $\begin{array}{r}10.18 \\ 3.60 \\ \hline\end{array}$ | ${ }_{33}$ | 28 | 81 | 7.27 |
| 12.00 but under 15.00 | 43 | 4 | 47 | 4.6 | 33 30 | 11 | 44 | 3.94 |
| 15.00 but under 20.00 | 31 |  | 31 | ${ }_{2}^{4.79}$ | 30 29 |  | 30 | ${ }_{2} .69$ |
| 20.00 and over ...... | 10 |  | 10 | $\begin{array}{r}\text { 2.90 } \\ \hline 1\end{array}$ | 11 |  | 11 | 2.60 |
| Totals . ........ | 515 | 595 | 1,110 | 100.00 |  |  |  |  |
|  |  |  |  |  | 508 | 606 | 1,114 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons Employed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employmeut. |  | Unemployment. |  |
|  | 1899. | 1900. | 1899. | 1900. | 1899. | 1900. |
| January | ${ }_{953}^{973}$ | 1,077 | 90.34 | ${ }^{98.90}$ | 9.66 | 1.10 |
| March . | ${ }_{971}^{953}$ | 1,081 | 88.49 | 99.27 | 11.51 | . 73 |
| April | 991 | 1,089 | 90.16 92.01 | 100.00 98.81 | 9.84 7.99 |  |
| May | 994 | 1,057 | ${ }_{92.29}$ | ${ }_{97.06}^{98.81}$ | 7.99 | 1.19 2.94 |
| July | 883 | 946 | 82.00 | 86.87 | 18.00 | ${ }_{13}{ }^{2.13}$ |
| August | 1,011 | 1,041 | 93.87 | 95.59 | 6.13 | 4.41 |
| September | 1,021 | 1,004 990 | 94.80 | 92.19 | 5.20 | 7.81 |
| October | 1,077 | 975 | 96.94 100.00 | 90.90 | 3.06 | 9.10 |
| November | 1,058 | 903 | 100.00 98.24 | 89.53 |  | 10.47 |
| December | 1,028 | 927 | ${ }_{95.45}^{98.44}$ | 82.92 85.12 | 1.76 4.55 | 17.08 |

3. Other Presentations.


1 establishment did not report as to kind of management and No. of vartners.

## ALL INDUSTRIES.

SUMMARIES OF THE FOREGOING 46 INDUSTRIES.
Classified Weekly Earnings.

| Classified Weekly Earnings. | 1899 |  |  |  | 1900 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male, | $\begin{gathered} \text { Fe- } \\ \text { MALE. } \end{gathered}$ | Total. |  | Male. | $\underset{\text { MALE. }}{\text { ME. }}$ | Total. |  |
|  |  |  | No. | Pr, ct. |  |  | No. | Pr. ct. |
| Under \$5.00 | 8,020 | 9,128 | 17,149 | 17.71 | 7,202 | 8,615 | 15,817 | 16.23 5.25 |
| \$5.00 but under $\$ 6.00$ | 2,609 | 2,362 | 4,971 | ${ }_{8} 5.15$ |  |  | 5,120 | 7.36 |
| 6.00 but under 7.00 7.00 but under 8.00 | 6,976 10,396 | 919 530 | 7,895 10,926 | 8.15 11.28 | 5,995 9,975 | 1,182 | 10;552 | 10.83 |
| $\begin{array}{lll}7.00 & \text { but under } \\ 8.00 & \text { but under } & 9.00\end{array}$ | 11,093 | 274 | 11,367 | 11.74 | 12,053 | 291 | 12,344 | 12.67 |
| 9.00 but under 10.00 | 15,352 | 214 | 15,566 | 16.08 | 15,983 | 237 | 16,220 | 16.65 |
| 10.00 but under 12.00 | 11,285 | 135 | 11,420 | 11.79 | 12,079 | 142 | 12,221 | 12.54 |
| 12.00 but under 15.00 | 9,982 | 33 | 10,015 | 10.34 | 10,021 | 35 | 10,056 | 10.32 |
| 15.00 but under 20.06 | 5,665 | 3 | 5,668 | 5.85 | 5,910 | 2 | 5,912 | 6.07 |
| 20.00 and over | 1,857 | 3 | 1,860 | 1.93 | 2,030 | 1 | 2,031 | 8 |
| Totals | 83,236 | 13,601 | 96,837 | 100.00 | 83,737 | 13,713 | 97,450 | 100.00 |

Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons Employed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1899. | 1900. | 1899. | 1900. | 1899. | 1900. |
| January . | 71,301 | 77,379 |  | 93.46 94.42 | 15.21 13.26 | 6.54 5.58 |
| February | 72,942 75,267 | 78,173 79,687 | 86.74 89.50 | 94.42 96.25 | 13.26 10.50 | 3.75 |
| April. | 78,575 | 81,514 | 93.43 | 98.46 | 6.57 | 1.54 |
| May. | 82,131 | 82,639 | 97.66 | 99.82 | 2.34 | . 18 |
| June | 83,111 | 82,792 | 98.83 | 100.00 | 1.17 |  |
| July | 83,547 | 80,777 | 99.34 | 97.57 | . 66 | 1.46 |
| August | 84,096 | 81,585 81,424 | 100.00 99 | 98.54 98.35 | . 89 | 1.46 |
| September | 83,351 82,548 | 81,424 80,713 | ${ }_{98.16}^{99.11}$ | 98.35 97.49 | 1.84 | 2.51 |
| October N ( ${ }^{\text {Ovember }}$ | 82,006 | 79,455 | 97.51 | 95.97 | 2.49 | 4.03 |
| December | 79,571 | 75,770 | 94.62 | 91.52 | 5.38 | 8.48 |

Other Presentations.

| Classification. | 1899. | 1900. | Increase or DeCREASE IN 1900. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | Pret. |
| Smallest ployed No. of persons em-............................... | 71,301 | 75,770 | + 4,469 | + 6.27 |
| Greatest ployed No. of persons em-.............................. | 84,096 | 82,792 | 1,304 | - 1.55 |
| Average No. of persons employed | 79,871 $\$ 39458$ | 80,159 $\$ 411$ | + $+\quad 1688$ $+\quad 10.90$ | ( $+\quad 0.36$ +4.28 |
| Average yearly earnings ....... | \$394 58 | \$411 48 | + 16.90 |  |
| Av. time in operation, days..... | 280 571 |  | - $\quad 14$ | - 1.20 |
| No. of private firms No. of male partners $\ldots \ldots \ldots \ldots .$. | 571 1,029 | 557 934 | - $\quad 147$ | - 9.4 .43 |
| No. of male partners ............. | 1,029 | 43 4 | 12 | - 21.82 |
| Total No. of partners............ | 1,084 | 977 | 107 | - 9.87 |
| No. of corporations ............. | 551 | 569 12.882 | + $\quad 3.394$ | +3.87 +35.77 |
| No. of male stockholders ...... <br> No. of female stockholders .... | 9,488 1,809 | 12,882 2,440 | - 3,394 |  |
| Total No. of stocckholders .... | 11,297 | 15,322 | + 4,025 | + 35.63 |
| Total No. of partners and stockholders | 12,381 | 16,299 | + 3,918 | $+31.65$ |
| Amount of capital invested.... | \$172,179,926 09 | \$179,415,635 38 | + \$7,235,709 29 | $+4.20$ |
| Value of goods made or work done . | 193,555,784 97 | 209,942,633 59 | +16,386,848 62 | +8.46 $+\quad 466$ |
| Amount paid as wages ........ | 31,515,194 38 | 32,983,768 79 | $+1,468,57441$ | + 4.66 |
| Av. capital to each person employed . | 2,155 73 | 2,238 25 |  | + 3.83 |
| Av. product to each person employed | 2,423 36 | 2,619 08 | $1+\quad 19572$ | $\underline{+8.08}$ |

## ANALYSIS.

In the preceding pages are found statistical presentations covering 4.6 manufacturing industries in this state. These presentations were compiled from returns, or reports, from 1,152 separate establishments. One page has been devoted to the facts for each industry, and one additional page to those for all industries when combined. There are thus 47 tables, one for each industry and one for all industries, covering that many pages. The returns covered the business or financial years 1899 and 1900 and for both years were obtained from identical establishments.

Each table includes first the facts, in totals and averages, which were compiled directly from the returns, and second numerous comparisons and calculations drawn from these facts. The tables therefore contain not only the basic data, but certain analysis of this data. The importance of this method is readily seen when it is remembered that the value of statistics largely consist in the comparisons which they make possible. The analysis in the tables, however, owing to the lack of space, could not be carried as far as desirable or as far as the basic data warrant. For this reason it was thought advisable to continue the analysis under the above head.

## CLASSIFIED WEEKLY EARNINGS.

The tables may be said to be divided into three parts, the first of which relates to classified weekly earnings. The wage receiving class is by far the largest of all the classes who take part in production and share in the products. In fact, those who are employed for wages in our manufacturing industries together with those who directly depend upon their earnings for a living outnumber several times all other persons who are in some way connected with these institutions. As the wage earners are the most numerous so the amount paid as wages is also greater than the share which goes to any of the other classes who take part in production. The amount required to meet interest charges is often considerable, but it is not to be compared to that which goes
to pay for the labor employed. Profits, salaries, depreciation and other expenses also foot up to respectable sums, but usually fall a good deal below wages. While wages is the biggest of all the items of expense, when considered as a whole, the amount of wages that goes to each worker is usually much smaller than that which goes to each person among those who receive salaries, interest, or profit. Those who furnish the capital more often belong to the wealthier classes. Salaried officers receive much greater compensation for their services than mechanics and laborers. The party who brings these forces together and takes the profits often pockets a handsome sum. Each receives more than he who works by the day in the shop. The amount which goes to each of a large proportion of those who are employed at common labor certainly seems small.

It is because the earnings, when compared with the wants, are small that the wage question has arisen. There are occupations where the competition among the workers for employment has resulted in so lowering the rate of wages that the amount earned can hardly be called a living wage. Happily such instances are not very numerous. At the same time there is no question but that wants of the working classes are increasing much more rapidly than their earnings. This in turn causes restlessness and dissatisfaction. It results in frictions and disputes. The workers at least believe that their share of the common products is smaller than that to which they are justly entitled. They endeavor by individual and concerted actions to remedy this, to better their conditions. These efforts often end in industrial struggles and strikes that are injurious to all. It is with earnings of those whose condition have become a social question that these tables deal.

The information conveyed, however, is limited to earnings. No attempts have been made to show whether they receive their just share or whether they earn enough to satisfy all reasonable wants. To throw any real light upon such problems as this would require a more far-reaching investigation than this, and to solve them would require greater wisdom than any so far employed to that end. The main purpose of these investigations is to show the earnings from year to year. This purpose does
not sound big. Perhaps it is not. The efforts may not be worth the cost. The fact, however, remains that without knowiedge, there is no solution. Intelligent efforts to improve the conditions of the wage-earners are out of the question until their present condition is known. The vital point in their condition is their earnings. Facts which sets forth these earnings can therefore not be entirely without value.

The table which follows deals with•the weekly earnings of the mechanics, operatives and laborers who were employed in the manufacturing industries during the period covered. It shows the classes into which the earnings were divided and the number of persons in each of these classes. The classifications in the table have even been extended so as to show the earnings for males and females separately. The table is important and worthy of the closest study.

NUMBER OF PERSONS RECEIVING CLASSIFIED WEEKLY EARNINGS
IN 1899 AND 1900.

| Classified WeeieklyEarnings. | 1899 |  |  | 1900 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female. | Total. | Male. | Female. | Total. |
|  |  |  |  |  |  |  |
| 6.60 but under ${ }^{\text {c }}$ 7.00. | 2,609 | 2,362 | 4,971 | 2,489 | 2,631 | 5,120 |
| 7.00 but under 8.00 . | 6,976 10,396 | 919 530 | $\begin{array}{r}7,895 \\ \hline 10926\end{array}$ | 5,995 | 1,182 | 7,177 |
| 8.00 but under 9.00. | 11,093 | ${ }_{274}$ | 10,926 | 9,975 | 577 | 10,552 |
| 9.00 but under 10.00 | 15,352 | 214 | 11,566 | 12.053 | 291 | 12,344 |
| 10.00 bza under 12.00 . | 11,285 | 135 | 11,420 | 12,079 | 237 142 | 16,220 |
| 15.00 but under ${ }^{20.00}$ | 9,982 | - 33 | 10,015 | 10,021 | 35 | 10,056 |
| Totals <br> Per cent | $\begin{array}{r}5,665 \\ 1 \\ \hline\end{array}$ | 3 | 5,668 | 5,910 | 2 | 5,912 |
|  | 1,857 | 3 | 1,860 | 2,030 | 1 | 2,031 |
|  | 83,236 | 13,601 | 96,837 | 83,737 | 13,713 | 97,450 |
|  | 85.95 | 14.05 | 100.00 | 85.93 | 14.07 | 100.00 |

The preceding table shows the number of persons who received less than $\$ 5.00$ per week; the number who received $\$ 5.00$ per week, but less than $\$ 6.00$; the number who received $\$ 6.00$, but less than $\$ 7.00$ and so on. These facts are shown for both years and for males and females separately. The table as a whole offers many opportunities for a close and effective study of the earnings of those who are employed in factories. As the figures for the two years are given, the changes which took place as between them may also be followed up and studied.

In order to afford still better opportunities for comparison the facts in the above table have been reduced to four classes only, and in this form are presented as follows:

| Classification. | 1899 |  |  | 1900 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males. | Females. | Total. | Males, | Females. | Total. |
| \$9.00 and over | 44,141 | 388 |  |  | 417 1.285 | $46,440$ |
| 7.00 and over... | 65,630 72606 | 1,192 | 66,822 74,717 | 68,051 74,046 | 1,285 $\mathbf{2 , 4 6 7}$ | 69,336 76,513 |
| 6.00 and over.. Under $\$ 6.00 . .$. | 72,606 10,630 | r $\begin{array}{r}1,111 \\ 11,490\end{array}$ | 74,717 22,120 | 74,046 9,690 | -11,246 | 20,937 |

Here we find the number of persons who received $\$ 9.00, \$ 7.00$, $\$ 6.00$, per week and over, respectively, and also the number who received less than $\$ 6.00$ per week.

Reduced to the above form, the figures may be more easily compared and analyzed. In the first place; the classifications have been reduced to about two-thirds of their former size, thus lessening the number of comparisons necessary and enabling definite results to be much more quickly obtained. In studying figures of this nature the number of difficulties in the way are usually in proportion to the number of the facts that must be considered and the comparisons that must be instituted. Then again the classifications in the condensed table were, as far as possible, adiusted so as to correspond to the amount actually received by the greatest number. From actual experience it is well known that those who receive such sums per day as $\$ 1.50$, $\$ 1.25, \$ 1.00$, etc., greatly out-number those who receive any sum between these amounts. In compiling the preceding table these facts received special consideration and it is believed that a classification of earnings based upon them cannot fail to be of some value.

In comparing the total number of persons employed as between the two years, the following facts are developed:

The total number of persons employed in 1899 was 96,837 , and of these 83,236 were males and 13,601 were females.

The total number employed in 1900 was 97,450 , of which 83,737 were males and 13,713 were females.

Between the two years there was thus an increase of 501 males and of 112 females, or in all of 613 persons.

In order to still further facilitate comparisons and enhance the value of the figures, the per cent. relation which the number in each earnings-class bear to the total number employed, has been ascertained and presented in the following table:

PER CENT. OF PERSONS RECEIVING CLASSIFIED WEEKLY EARNINGS IN 1899 AND 1900.

| $\underset{\text { Classified Weekly }}{\text { Earnings. }}$ | 1899 |  |  | 1900 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. <br> Per cent | Female. <br> Per cent. | Total. <br> Per cent | Male. Per cent. | Female. <br> Per cent. | Total. <br> Per cent |
| Under $\$ 5.00$ | 9.64 | 67.11 | 17.70 |  |  |  |
| \$5.00 but under ${ }_{6} \mathbf{8 6}$ but.00. | 3.13 | 17.37 | 5.13 | ${ }_{2}{ }^{8} .97$ | ${ }_{19.19}^{62.82}$ | 5.25 |
| 7.00 but under 8.00 . | 12.49 | 6.76 3.90 | ${ }_{11} 8.15$ | 7.16 | 8.62 |  |
| 8.00 but under 9.00 | 13.33 | ${ }_{2}^{2.02}$ | 11.77 | 14.39 | ${ }_{2.12}^{4.21}$ | 12.67 |
| 9.00 but under 10.00 | 18.44 | 1.57 | 16.07 | 19.09 | 1.72 | 16.65 |
| 110.00 but under 12.00 . | ${ }^{13.56}$ | . 99 | 11.79 | 14.43 | 1.04 | 12.54 |
| 15.00 but under 20.00 | 11.98 | . 22 | 10.34 | 11.97 | . 25 | 10.32 |
| 20.00 and over ... | ${ }_{2.23}$ | .02 | ${ }_{1.92}$ | 7.42 | . 02 | ${ }_{2}^{6.07}$ |
| Totals' . ....... | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |

The next preceding table deals with percentages. For the males, females, and the total of both it shows the per cent. of the number in each class.

This table is interesting. It discloses the relation of those in each class to the whole and therefor bear much more forcibly upon the state of the earnings than any of the preceding tables. Take the columns for the total of both male and females as an instance and ascertain what they show. In the first place we find that in 1899, 17.70 per cent. of the total number employed received less than $\$ 5.00$ per week, while in the following year, or $1900,16.23$ per cent. received less than this amount. As between the two years there was thus a change of nearly one and one-half per cent. As this change represents a decrease for the latter year, we are justified in saying that the proportion who received under $\$ 5.00$ was smaller in 1900 than in the preceding year and that therefore the proportion who received more than this amount was correspondingly greater.

This is thereforz an encouraging change. Moving downwards through the column until the class $\$ 7.00$ but under $\$ 8.00$ is reached, we find conditions about the same. In this class the proportion stood at 11.28 per cent. for the former and 10.83
for the latter year. Another move of two classes brings us to the class $\$ 9.00$ but under $\$ 10.00$, or to those who mostly receive $\$ 1.50$ per day, and whose earnings cannot exceed $\$ 1.66$ per day. In this case we find that the per cent. stood at 16.07 and 16.65 respectively for the two years. This means that a greater proportion earned this amount in 1900 than in 1899, also an encouraging sign. This increase for 1900 continues practically throughout all the higher classes. Between the two years, therefore, several changes occurred. While these changes cannot be exactly measured they indicate at least a slight increase in earnings and are therefore in the right direction.
In the other two columns those for the male and female, respectively, the same tendency may be observed. In the class under $\$ 5.00$ the change is most noticeable for the females. In this case the proportion who received less than $\$ 5.00$ decreased from 67.11 to 62.82 per cent. This decrease is certainly in the right direction and is again apparent by an increase in those who earned greater amounts. For the males, the changes are more even. In most classes, however, they can be readily noticed.

The table showing the number who received classified weekly earnings was condensed into fewer classes. The same process has also been applied to the above, the one giving percentages and for the same reasons. In the condensed forms the figures are more readily compared. The results of thus condensing the facts in the next preceding table are as follows:

| Classification. | 1899 |  |  | 1900 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female. | Total. | Male. | Female. | Total. |
| \$9.00 and over | 53.03 | 2.87 | 46.05 | ${ }^{54.96}$ | 3.04 9.37 | 47.64 71.15 |
| 7.00 and over . | 78.85 | 8.76 15.52 8 | 69.00 77.16 | 88.43 | 17.99 | 78.52 |
| 6.00 and 9ver .. | 87.24 | 15.52 84.48 | 72.16 | 11.57 | 82.01 | 21.48 |
| Under \$6.00 | 12.77 | 84.48 | 22.84 | 11.57 | 82.01 |  |

Here we have the facts in the preceding table boiled down from ten to four classes. Here the order in which the wage classes come is also reversed. In the table from which it is compiled the lowest classes come first in order, here they come last. This is a change that should be borne in mind.

The table shows separately for males, females, and the total of
both the per cent. of persons who received $\$ 9.00, \$ 7.00$, and $\$ 6.00$ per week and over, respectively, as well as of those who received less than $\$ 6.00$ per week.

Considering the total for both males and females first, we find that in $1900,47.64$ per cent. of the whole received $\$ 9.00$ per week and over, as against 46.05 per cent. in 1899. This is an increase for 1900 of about 1.59 per cent. In the next class in order, that of $\$ 7.00$ and over, the percentage stood at 69.00 and 71.15 per cent., respectively, for the two years, an increase of 1.15 per cent. In $\$ 6.00$ and over, there was an increase from 77.16 to 78.52 per cent. or of 1.36 per cent., while those who received less than $\$ 6.00$ decreased 1.36 per cent. The increase for the highest class, the first in order, was thus fairly well maintained throughout for the other classes. It seems to have affected those in the lowest as well as those in the highest. The results here fully corroborate the conclusions which were drawn from the facts in the table preceding it.

As said this applies to all without regard to sex. In considering the facts for each sex separately the same upward tendency is noticeable. For males as well as for females the earnings seems to have grown larger. As to whether these two classes have shared alike in the general advance the figures do not exactly disclose. From the facts as they stand, however, it certainly appears that the women have held their own.

For the two years included the males who received $\$ 9.00$ and over constituted 53.03 and 54.96 per cent. respectively of tho total; the males who received $\$ 7.00$ and over constituted 78.85 and 81.29 per cent. respectively; those who received $\$ 6.00$ and over 87.24 and 88.43 per cent. respectively; and those who received less than $\$ 6.00,12.77$ and 11.57 per cent. respectively.

The proportion of the females who received $\$ 9.00$ and over was extremely small. In 1899 they constituted only 2.87 per cent., in 19003.04 per cent. For those receiving $\$ 7.00$ and over the proportion was 8.76 and 9.37 respectively; for those in the class $\$ 6.00$ and over it was 15.52 and 17.99 ; while for those under $\$ 6.00$ it stood 84.48 and 82.01 per cent. respectively. When the figures for 1899 are thus placed in comparison with those for 1900 the changes between the two years are easily seen.

The data relating to classified weekly earnings has thus been presented and compared. As to the presentations it can be said that they are fairly complete, especially in this so when the detailed tables are included. The comparisons, however, are more limited. Only such points were brought together and explained as were regarded as of the greatest importance. Outside of this the facts have been left to tell their own story. All generalizations have been omitted and few deductions are made. Considering the importance of this data together with the comprehensive ground it covers it is plain that it has not received the thorough analysis it deserves. The purpose here only was to call attention to the more important features. This has been done as briefly as possible.

Besides the weekly earnings the tables also show the proportion of male and female employes. This is an important presentation. Questions as to the number of women employed in factories and whether the proportion of women employes are gradually increasing are constantly asked. The only way in which these questions can be answered satisfactorily is through the collection and presentation, from year to year, of reliable data upon these points. This the bureau is doing. The first efforts in this line were made in 1896, and it has been continued every year since. The results show plainly what proportion of those employed in factories are females. If continued for a series of years they will also show whether this proportion is increasing.

The following table shows for the two years the proportion of male and female employes. These facts are given not only for each class but for the total number employed.

PER CENT. OF MALE AND FEMALE RECEIVING CLASSIFIED WEEKLY EARNINGS IN 1899 AND 1900.

| Classified Weekly Earnings. | 1899 |  |  | 1900 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. Per cent. | Female. Per cent. | Total. Per cent. | Male. Per cent. | Female. Per cent. | Total. Per cent. |
| Under $\$ 5.00$ | 46.77 | 53.23 | 100 | 45.53 | 54.47 | 100 |
| $\$ 5.00$ but under $\$ 6.00$. | 52.48 | 47.52 | 100 | 48.61 | 51.39 | 100 |
| 6.00 but under 7.00. | 88.36 | 11.64 | 100 | 83.53 | 16.47 | 100 |
| 7.00 but under 8.00. | 95.15 | 4.85 | 100 | 94.53 | 5.47 | 100 |
| 8.00 but under 9.00.. | 97.59 | 2.41 | 100 | 97.64 | 2.36 | 1.00 |
| 9.00 but under 10.00 . | 98.63 | 1.37 | 100 | 98.54 | 1.46 | 100 |
| 10.00 but under 12.00 . | 98.82 | 1.18 | 100 | 98.84 | 1.16 | 100 |
| 12.00 but under 15.00 . | 99.67 | . 33 | 100 | 99.65 | . 35 | 100 |
| 15.00 but under 20.00 . | 99.95 | . 05 | 100 | 99.97 | . 03 | 100 |
| 20.00 and over | 99.84 | . 16 | 100 | 99.95 | . 05 | 100 |
| Total | 85.95 | 14.05 | 100 | 85.93 | 14.07 | 100 |

This table deals with the proportion of the males and females. It shows the respective per cent. of the two sexes not only in each class of earnings but of the total number employed.

As is plain the figures here were computed from those in the table showing, for the 46 industries, the number of persons who received classified weekly earnings and therefore represents "all industries."

Considering the totals first we find: That of the total, or 96,837 persons who received classified earnings in 1899, 85.95 per cent. were males and 14.05 per cent. were females. That of the total, or 97,450 persons who received classified earnings in $1900,85.93$ per cent. were males and 14.07 per cent. were females.

These figures can safely be regarded as representing the situation in the manufacturing industries in this state.

Since this is the case it can also be said that of those who are employed in our factories there are about seven men to one woman.

This table also throws much light upon the respective earnings of the males and females. As a rule women receive much less per week than men. This is not only well known; but is substantiated in this table. Thus we find that in the class under $\$ 5.00,53.23$ per cent. of the total were females while the males constituted only 46.77 per cent. These figures are for 1899 and do not differ very much from those for 1900. This, the lowest class in point of earnings, is however, the only one in which the females were the most numerous. Even in the next class in order quite a change is noticed in this respect, though the females even here constitute nearly one-half. In the class $\$ 6.00$ but under $\$ 7.00$ the proportion of women had fallen to 11.64 and 16.47 per cent. respectively for the two years. This fall continues at nearly the same rate in the three succeeding classes and the proportion then dwindles into an insignificant figure. It is hardly necessary to say that the facts thus discussed represent all industries and are therefore not typical of any one industry.

Conditions vary with the industry. In some the earnings are comparatively speaking high, in others low. In some the proportion of women children is much greater than in others. Among the first conditions which make for high wages are skill
and physical exertion. Little skill and light work, whether occurring separately or together, means small pay. High skill and heavy labor means higher pay. Women and children are usually employed in occupations which require less skill and where the work is light and this is one of the reasons why they earn less. Of course there are women workers who are both skilled and efficient in their work, and also many who perform labor that would seem to be beyond their strength and who earn considerably above the average of their class, but such instances are met with less often. These facts are mentioned in order that those who may desire the facts for some particular industry will consult the table for that industry instead of that for all industries.

But conditions vary not only as between the different industries, but as between the same establishments in the same industry. This is well known. Some employers pay better wages and provide better conditions than others. The reasons for this are not easily explained. In some cases it is undoubtedly due to the character of the employer, while in others it may be found in superior managing ability and greater foresight. Local conditions may also have their effect in this respect. That all of these facts are true in actual experience is beyond dispute. Even in establishments in the same locality there is often considerable variation in the conditions which are provided for the workers. The figures for individual establishments, however, have not been presented, hence what has been said in this connection is not directly supported by the tables.

The facts thus presented clearly show that earnings increased during the period. This increase is also supported by the figures relating to yearly earnings and amount paid as wages as shown later on. Now what does this change mean? Did it result in improving the condition of the workers? These are questions that cannot be fully answered from the facts submitted alone. The condition of the employes depends upon the number of wants that are satisfied and the comforts secured from the amount earned. In other words, it is real wages rather than nominal wages that determines the standard of living. From this it is plain that an increase in earnings without a correspond-
ing increase in prices of the necessaries and comforts of life would tend to better conditions. On the other hand it is also plain that if prices of these things increased as fast, or faster than earnings, conditions would remain the same or even grow worse. What then is the situation with regard to prices? Have they increased, remained stationary or decreased? The answers to these questions cannot be had except from a careful study of both wage and price schedules and the price schedules have not been included in the present investigation. This part is limited to a study of wage schedules only. It therefore supplies only one-half or a part of the material needed for an exhaustive study of conditions. That prices as well as earnings have increased during the period will hardly be denied. Common experience tells us this. As to the relative increase in two cases nothing has been shown. The above facts are merely mentioned in order that the data submitted may not lead to misleading conclusions.

## NUMBER OF PERSONS EMPLOYED BY MONTḢS.

The second part of the basic tables deal with the number of persons employed each month. As said in the introduction this number was ascertained by first adding together from the time books the number employed each week during the month and then dividing the sum obtained by the number of the weeks thus included for the month. The quotient which was obtained through this operation was regarded as the number employed for the month in question. That the figures in these tables which show how many persons were at work each month thus represent the average number need hardly be said.

The following table shows for 1899 and 1900 the number of persons employed each month throughout each year:

NUMBER OF PERSONS EMPLOYED EACH MONTH IN 1899-1900.


In the preceding table is found the number of persons employed each month during the two years included.

In looking over this table many features bearing upon the situation during the period may be seen. Among other things the conditions appear to have been more even, or business less subject to fluctuations in 1900, than in the preceding year. The average number employed was also slightly greater the latter year.

From 1899, the smallest number, or 71,301 , persons were employed in January, while for 1900, the greatest number, or 84,096 persons, are found in August. Between the two points there was thus a difference of 12,795 persons.

For 1900 the sm.allest and greatest number were employed in December and June, respectively. In the former case the number was 75,770 persons, in the latter 82,792 persons, a difference of 7,022 persons.

The variations as between the months were considerably greater in 1899. This is evident not only from the figures themselves, but also from the fact that the difference between the smallest and greatest number was 12,795 persons for that year, as against 7,022 persons in 1900. This indicates that production was more spasmodic or fluctuating in the former year.

In both cases employment was lightest during the first few months of the year, but for 1899 this fact is much more apparent. The first three months of that year show a smaller num-
ber than at any time the year following. As an off-set to this, however, the number during the four summer months was greater than those for any month in 1900. The revival of business which begun in the latter part of 1898, continued throughout the following year, though not without sharp changes. In 1900 , the high level which was reached the preceding year was steadily maintained. These facts can be deducted from the figures and are in accord with general observation upon this matter.

The average number employed during the year was 79,871 , in 1899 , and 80,159 , in 1900, a difference in favor of the latter year of 288 persons, or less than one-half of one per cent. This is also a slight indication of a more satisfactory state of business in the latter year.

From the figures in the preceding table have been computed the per cent. of employment and unemployment for each month during the two years and these facts are presented in the following table:

PER CENT. OF EMPLOYMENT AND UNEMPLOYMENT.

| Monthe. |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |

The preceding table is concerned exclusively with the range of employment and unemployment, that is, with the proportion of the workers who had employment or were without employment during the different months each year. The figures in this table were computed from those in the one which precedes it, and the operation is simple. It consists simply of this: The number of persons for the month when the greatest number were employed was regarded as 100 per cent., while the number for each
of the other months were regarded in their per cent. of this. In other words, the highest number for any month was regarded as full employment, and the number for each of the other months as less than full employment in proportion to the difference between this number and the highest number. This may be illustrated by an example directly from the table. In 1899, the greatest number were employed in August. For this month there was therefore full employment. During each of the other months of the year a smaller number were employed and the proportion or per cent. relation which each of these smaller numbers bear to the highest number is regarded as the state of employment for that month. The difference between this per cent. and one hundred is regarded as the proportion who were unemployed. This explanation is not very clear, but a glance at the table itself will show what is meant.

Going back to the table we find that in 1899 the greatest number of persons were employed in August, while in 1900, June shows the greatest number. During these months there was therefore full employment. No other month during either year shows as many persons employed. In January, 1899, the number employed constituted 84.79 per cent. of those where employed in August of the same year. The balance between these two months were thus unemployed. In January, 1900, the number employed constituted 93.46 per cent. of those employed in June, which month showed the greatest number. The proportion who were unemployed in the first month of the year was thus 6.54 per cent. of the total.

January seems to be the dullest month. The number employed were then the smallest and the number unemployed the greatest. The range of unemployment, however, was much wider in 1899. In fact more than twice as many were then without work as in the same month in 1900. This is amply shown by the figures which places the unemployed at 15.21 and 6.54 per cent. respectively. In February, however, the unemployed had decreased considerably and this decrease continued up to the time each year when all were at work. From the highest point in August and June respectively there was again a gradual increase in the unemployed until the end of the year. The
course of unemployment therefore ran, from 15.21, and 6.54 per cent. respectively, as stated, up to full employment, then it grad-' ually widened again until in December when it stood at 5.38 and 8.48 per cent. respectively.

These figures certainly throw a great deal of light upon the course of employment. They show the range for each month, and thus point out when the greatest as well as the smallest number were out of work. They also show that the number of the unemployed was much smaller in 1900 than in the preceding year. This fact is also borne out by the last figures in the table, those giving the averages. For these figures show that the number unemployed amounted to 5.02 per cent. in 1899 as against only 3.18 per cent. in 1900 .

What value, if any, do these figures possess? This question has often been asked and discussed. Some claim and have attempted to prove that their value is small. While they admit that the figures constitute a fair index to the condition in the industry they may represent, they cannot throw much light upon the situation as a whole because all industries are not represented. This view has weight. It is based upon many facts that cannot be overlooked. As a general proposition there is only one way in which the absolute number of those who are unemployed at a given time can be ascertained, and that is by a completed census, including every industry and all kinds of employment. Such a census is possible though so costly that it cannot be undertaken by the bureau. But while all this is true there are still a good many reasons why the question should not be dismissed without an examination. Such an examination, however, it is not our intention to make. But attention will be called to a few of the facts that have a close bearing upon this matter.

Now what are the facts? In the first place most occupations are full if not overcrowded already. Those localities are few where the supply of workers do not, as a rule, exceed the demand. There is also a strong tendency to stick to the work which one has become familiar with. Once a factory hand, factory work is likely to be preferred, perhaps not always from choice, but from the force of circumstances. A change is always inconvenient. It may mean the learning of a new trade, a change of residence,
separation from family or friends. Few workers are making such changes unless forced to do so. In fact the tendency, artificial or natural, to stick to an occupation already entered is so strong that many persons prefer to remain idle during the quiet spell in their line rather than break in at something else. Depression in one line is also likely to be reflected in others. When workers in a large number are let out in any industry it is therefore unlikely that any considerable part of them can immediately find employment elsewhere. For these and other reasons it is very probable that the figures in these tables do not only show the condition in the industries which they directly represent but also that they throw much light upon the course of employment in general. The figures should therefore not be thrown aside without at least a thorough examination.

## OTHER PRESENTATIONS.

The figures in the two first parts of the tables have now been considered and we are approaching the third part. The first part is devoted to weekly earnings, the second to persons employed. Both of these have been covered in the preceding pages. The third part appears under the head of "other presentations" and contains a most varied assortment of facts and calculations. This assortment, however, while varied comes entirely within the subject in hand as may be seen from the heads under which the facts are in a way sub-divided.
The facts under "other presentations" appear under four different sub-heads, or (a) under smallest, greatest, and average number of persons employed; (b) average yearly earnings and time in operation; (c) establishments and kind of management; (d) capital, product and wages, etc.

## SMALLEST NUMBER OF PERSONS EMPLOYED.

By this is meant the number employed during that month each year when the smallest number of persons were employed.

As we have seen above and as we know from observation and other sources, the number of persons employed vary greatly from time to time. This is true not only of manufacturing industries
but of practically all undertakings where people are employed. The main reasons for this are found in the ups and downs in the course of business. When business is brisk there is a demand for help, when it falls off fewer persons are needed, and, as employers cannot afford to pay wages for any more help than they have employment for, those who are not needed are let out. This is an important fact from several points of view. It is the outward phenomena of one of the greatest industrial evils. Those who are laid off usually suffer from it. Most of them depend upon their earnings for a living and as a rule the earnings are not large enough to permit of much idleness. The off season is also apt to be felt by the employers as well. It is not a rare thing to find that some of them are even unable to make expenses while it lasts.

From the table for "all industries" it is found that the smallest number of persons employed each year stood as follows:

$$
\begin{aligned}
& \text { Smallest number in } 1900 \text {. . . . . . . . . . . . . . . . . } 75,770 \\
& \text { Smallest number in } 1899 \\
& \text { 71,301 } \\
& \text { Excess for } 1900
\end{aligned}
$$

The smallest number of persons employed was thus 75,770 , in 1900, and 71,301 in 1899. This gives an excess to the former year of 4,469 persons, or 6.27 per cent.

In 1899, the smallest number were employed in January, in 1900 they are found in December. December to February inclusive are usually the quietest months in the manufacturing line. Of course there are individual industries which have their busy time in the winter, but these are comparatively few in number.

## GREATEST NUMBER OF PERSONS EMPLOYED.

We have thus called attention to the smallest number employed. The next step will be to consider the greatest number.

By the greatest number of persons employed is meant the number for the month each year when the greatest number were employed.

These are the figures which represent full employment.

When there is full employment conditions in general are also, as a rule, favorable. The workers are then earning the biggest wages and are good consumers as well as producers. The employers are making profits and all are better satisfied. Unfortunately, however, these conditions are not always with us. They come, stay awhile, and then disappear. A period of uncertainty sets in. Conditions which inspired confidence are displaced by conditions which inspire only doubt. How labor fares during these changes is well known. No class suffers more in times of depression than the wage earning class. At the first real sign of adversity the first act is to restrict production or to let out the hands. When things begin to pick up they are not put to work until old stocks are worked off. But even in good times labor is more or less uncertain. This has been plainly illustrated in the preceding pages. During the period covered here times have been better than the average. Still considerable fluctuation in the number employed from month to month has been noticed. Between the smallest and greatest number there has been quite a range. Even at best conditions are such that a considerable portion must remain idle.

The causes of these industrial uncertainties are too numerous to mention. It is likely however, that if analyzed to their final point they would be found in the very imperfections of human nature. No one is infallible. The workers are not intelligent enough to guard their own interest. Precisely the same is true of the employers. Shrewd and farsighted as they may be they cannot always see far enough into the future to be able to tell what is going to happen. Few are also able to calculate with absolute certainty the effect of this or that policy, even for a single industry. The result is that those harmonious relations between production and consumption which are so necessary to stable conditions are constantly in danger of being disturbed. And once out of joint the break is sure to follow.

The following figures deal with the greatest number of persons employed for any month during the two years covered. As is plain, these facts also have been taken from the table for all industries.
Greatest number in 1899 ..... 84,096
Greatest number in 1900 ..... 82,792
Excess in 1899 ..... 1,304
Per cent. of excess ..... 1.55

The above figures give the number of persons during the month each year when the greatest number were employed.

In 1899 the greatest number were employed in January, in 1900 in . June. The number in the former case was 84,096 , while in the latter it was 82,792 . This means a decrease for 1900 of 1,304 persons, or 1.55 per cent.

While 1900 thus shows a decrease in the greatest number it had, as was seen above, a very decided increase the smallest number. As will be seen later the average number was also siightly greater for this year. On the whole therefore it can be said that the industrial conditions were rather better in 1900 , than in the preceding year, at least as far as steady employment is concerned.

The table which follows gives for each industry in 1899 and 1900 the smallest number of persons employed together with month in which they were found, and the greatest number employed, together with the month when this number was found. The facts in each case have been taken from the tables for the respective industries. No calculations have been made upon the figures, and the table as a whole is merely a compilation of facts which appear elsewhere in this part. The reason for presenting it is to get these facts together into one place, in such form that the smallest and greatest number together with the months in which they occurred could be easily found. As to the importance of this table there is little to say. Perhaps it is not of any. It seemed, however, that there might be persons who would like to compare the facts given for the different industries. If this should be the case the arrangement of these facts in one table will certainly be of some convenience.

SMALLEST AND GREATEST NUMBER OF PERSONS EMPLOYED, TOGETHER WITH THE MONTH WHEN THEY WERE FOUND.

| Industrieg. | Smallest No. Persons |  |  |  | Greatest No. Persons. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1899 |  | 1900. |  | 1899. |  | 1900. |  |
|  | Month. | No. | Month. | No. | Month. | No. | Month. | No. |
| Agricultural implements | Oct... | 2,412 | Sept.. | 1,466 | Mar .. | 3,431 | Feb .. | $3,5 \times 1$ |
| Artisan tools............ | June | 815 | June . | 456 | Heb .. | 1,251 | Jan. | ${ }^{4} 6$ |
| Beef and pork packing | Sept.. | 1,226 | Apr... | 1,151 | Jan .. | 1, ti37 | an .. | , 756 |
| Boots and shoes....... | May.. | 2,304 | May . | 2,199 | Jan .. | 2,496 | Mar .. | 2,542 |
| loxes, paper | Jan... | , 374 | Jan .. | 383 1.140 | Nov.. | 1,343 | Dec ${ }^{\text {June }}$ | 1, $\begin{array}{r}4 \div 8 \\ 3 \\ 3\end{array}$ |
| Boxes, packing and cigars. | Mar.. | 1,110 | Feb .. | 1,140 118 | Sept.. | 1,343 | June | 1,326 $>27$ |
| Brick, tile ond sewer pipe | Jan .. | 71 169 | Jan .. | 118 | Juiy.. | 259 | June.. | 245 |
| Brooms, etc | Dec .. | 169 | Jan .. | 356 | Dec ... | 358 | Dec . . | 360 |
| Burial cases | Jan .. | 30+ | Jan Jan .. | - 46 | July.. | 1,423 | July. | 1,448 |
| (ement, lime and piast | Jan .. | 233 | Jan .. | 281 | June . | 602 | June. | 564 |
| Cigars ...... .......... | Jan | r.07 | Feb | 753 | Dec .. | 771 | Nov | 819 |
| Chairs | Mar .. | 2, 951 | Jan .. | 3,299 | Feb .. | 3,438 | Oct... | 3,702 |
| Clothing | Jan .. | 2,592 | Dec | 2,913 |  |  |  | 3,142 |
| Cooking and heating apparatus. | Jan .. | 830 | Dec .. | 930 | Sept.. | 1,154 | Nov .. | 1,781 |
| Confectionery .................... | Jan .. | 879 | Mar .. | 1,111 | Nov | 1,308 | Nov .. | 1,529 |
| Cooperage .... | Feb .. | 376 | Jan .. | 377 | May . . | 412 | Aug .. | 485 |
| Cotton and linen goods | Jan .. | 464 | Mar .. | $40 \pm$ | Nov .. | 1,439 | Apr... | 1, 453 |
| Electric and gas apparatus.. | Aug... | 1,276 | Aug .. | 1,151 | May .. | 1, 439 | Apr... | 1,453 770 |
| Flour and feed .............. | Mar .. | 677 | Mar .. | 670 217 | Sept.. | 951 301 | Nov.. | 770 326 |
| Furs, gloves and mittens. | Jan .. | 2, 19, ${ }^{19}$ | Jan ... | 2,381 | Mov.. | 3,027 | Apr... | 2, 982 |
| Furniture ...... | Jan . | 2, 4,138 | Jugy... | 2, 2,773 | June. | 3,645 | Jan .. | 4,577 |
| Iron, malleable | Jan .. | 4, 2,56 | Aug .. | -,738 | Oct... | 3,077 | Aug .. | 3,278 |
| Knit goods | Jan .. | 3, 3 ,258 | Dec .. | 3,355 | Oct... | 3,553 | Sept.. | 3,773 |
| Lager beer | Jan .. | 3, 3 , 824 | May.. | 3, 326 | Dec.. | 4, 424 | Feb.. | 4,214 |
| Lumber | Jan .. | 7,003 | Dec .. | 7,655 | July .. | 12,630 | Aug .. | 12,596 |
| Machinery | Jan .. | 5,687 | May.. | 7,041 | Nov.. | T, 186 | June. | 7,258 |
| Miscellaneous | July .. | 1,623 | Aug .. | 1,76. | Mar .. | 2,347 | M | 2,426 |
| Office fixtures | Dec.. | 737 | Jan .. | 672 | Aug .. | 827 | May .. | 751 |
| Paint | June . | 2 115 | June . | - 121 | May . | 3,456 | july.. | 3,828 |
| Paper and pulp... ........... | Jan.. | 2,93i | Jan .. | 3,256 | Dec . | 3,456 258 | Nov | 3, 828 |
| Saddlery.. | Sept.. | 166 2,936 | Sept.. | 2,811 | Dec '.. | 3,812 | Nov | 3,707 |
| Sash, etc...... | Jan .. | 2,936 | Jun .. | 1,461 | Oct. . . | 2, 250 | Oct. | 2.003 |
| Sheet ruetal goods | Jan .. | 1,850 668 | June . | 1,461 | May . | 1,381 | May . ${ }^{\text {. }}$ | 1,256 |
| Ship building..... | Aug... | 192 | Dec ... | 162 | Jan .. | 1,201 463 | Jan .. | 181 483 |
| Staves and heading | Oct. | 239 | Oct. | 249 | Apr... | 463 | Apr... | 4.3 |
| Stone . . . . . . . . . . . . | Feb | 118 | Feb .. | 164 | Sept.. | 419 | Aug . | 423 |
| Straw goods . . . . . . . . . . . . . . . . | - Nov | 469 | June. | 427 | Apr... | 817 | Apr.. | 595 |
| Toys and games .............. | Jan | 517 760 | July.. | 773 | Mov... | 836 | Sopt | 818 |
| Trunks and valises. | Dec | 350 | Dec .. | 339 | June ${ }^{\text {Ma }}$ | 515 | Aug | 482 |
| Wagons | Sept... | 2,624 | Oct. | 2,518 | May | 2,847 | Mar | 2,90t |
| Wooden war | Jan .. | 1,415 | Dec | 1,422 | Oct. | 1,527 1,077 | Aug | 1,484 1,080 |
| Woolen and worsted goods .. | - June | 883 | Nov | 903 | Oct. | 1,077 | Mar | 1,089 |

## AVERAGE NUMBER OF PERSONS EMPLOYED.

The average number of persons employed was obtained by adding together the number for each month and dividing the sum thus obtained by the number of the months, or by twelve. This applies to the figures for each industry as well as to those for all industries.

The average number employed for all industries was as follows:

$$
\begin{aligned}
& \text { Average number in } 1900 \text {. . . . . . . . . . . . . . . . . } 80,159 \\
& \text { Average number in } 1899
\end{aligned}
$$

In 1900 the average number of persons employed was 80,159, in 1899 it was 79,871 . There was thus an increase for the year first mentioned of 288 persons amounting to .36 per cent.

The smallest, greatest and average number of persons employed have thus been given and this for several reasons. In the first place they give quite closely the extreme changes in employment; then again they point out a good many things concerning the industrial situation. They also throw some light on the employing capacity of the factories in this state.

These figures are of course of the greatest value when considered together. In that case those in one group act as a check upon those in the others. This is especially true of the averages. For this reason, and also because they measure the condition as between the two years, the figures giving the average number are also the most important.

The following table show.s, by industries for the two years, the average number of persons employed together with the increase or decrease in 1900 as compared with 1899.

AVERAGE NUMBER OF PERSONS EMPLOYED IN 1899-1900.

| Industries. | No. of estab-lishments. | Average No. of Persons Employed in |  | InCREASE + Decrease in 1900. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1899. | 100. | Amount. | Per cent. |
| Agricultural implements ${ }^{\bullet}$ | 27 | 3,025 | 2,567 | - 458 | 15.14 |
| Artisans' tools ........... | 9 | 969 | 710 | - 259 | 26.73 |
| Beef and pork packing | 9 | 1,400 | 1,401 | + 1 | . 07 |
| Boots and shoes ....... | 28 | 2,427 | 2,414 | - 7 | . 29 |
| Boxes, paper | ${ }^{6}$ | + 408 | 1.399 | - 9 | 2.21 |
| boxes, packing and cigars .......... | 29 | ${ }^{1}, 263$ | 1,248 | $\begin{array}{r}\square \\ +\quad 15 \\ \hline\end{array}$ | 1.195 |
| Brick, tile and sewer pipe .......... | 18 | 441 | ${ }_{213} 2$ | + 13 | 1.91 |
|  | 18 | ${ }_{353}^{209}$ | 213 | $+\quad 4$ <br> $+\quad 5$ | 1.13 |
| Canning, vegetable | 16 | 465 | 444 | - 21 | 4.52 |
| Cement, lime and plaster | 12 | 443 | 434 | - 9 | 2.03 |
| Cigars ........................ | 48 | 736 | - 789 | + 53 | 7.20 |
| Chairs | 12 | 3,177 | 3,529 | $+\quad 352$ $+\quad 232$ | 11.08 |
| Clothing | 29 | 2,829 | 3,061 | + 232 | 8.20 |
| Cooking and heating apparatus | 5 | 1,045 | 1,057 | $+\quad 12$ $+\quad 230$ | 1.15 |
| Confectionery | 13 | 1,076 | 1,306 | + 230 | 21.37 |
| Cooperage | 17 | 415 | 394 | - 21 | 5.06 |
| Cotton and linen goods | 6 | 469 | 443 | - 26 | 5.54 |
| Electric and gas apparatus supplies | 24 70 | 1,363 | 1,315 | - $\quad 48$ | 11.38 |
| Flour and Feed .............. | 11 | $\stackrel{8}{257}$ | 270 | $\begin{array}{r} \\ +\quad 13 \\ \hline\end{array}$ | 5.06 |
| Furniture ....... | 44 | 2,933 | 2,798 | - 135 | 4.60 |
| Iron, malleable | 23 | 4,221 | 3,834 | - 387 | 9.17 |
| Knit goods | 18 | 2,882 | 3,038 | + 156 | 5.41 |
| Lager beer | 72 | 3,381 | 3,574 | + 193 | 5.71 |
| Leather | 18 | 4,085 | 4,069 | - 16 | . 39 |
| Lumber | 98 | 10,415 | 10,710 | + 295 | 2.83 |
| Machinery | 102 | ${ }_{2}^{6,656}$ | 7,143 | [ | 7.31 |
| Miscellaneous | 54 | 2,038 | 2,187 | 149 $+\quad 70$ | 8.25 |
| Office fixtures | 15 | 797 <br> 134 | 727 |  | ${ }_{5} .22$ |
| Paint Paper and pulp |  | 3,265 |  |  | 8.76 |
| Paper and pulp | 70 7 | 3,265 | 3,573 | $\begin{array}{r}+\quad 58 \\ +\quad 58 \\ \hline\end{array}$ | 26.98 |
| Saddlery | 66 | 3,537 | 3,492 | 士 $\quad 45$ | 26.98 1.27 |
| Sheet metal goods | 21 | 2,060 | 1,783 | - 277 | 13.45 |
| Ship building ..... | 7 | 937 | 879 | - 58 | 6.19 |
| Soap, lye and potash | 9 | 196 | 180 | - 16 | 8.30 |
| Staves and heading | 15 | 349 | 359 | + 10 | 2.87 |
| Strne ...... |  | 627 | 372 | $\begin{array}{r}+\quad 19 \\ \hline \quad 55\end{array}$ | 8.37 |
| Straw goods .... | 3 | 608 | 559 | - 49 | 8.06 |
| Toys and games ${ }_{\text {Trunks }}$ | $\stackrel{6}{9}$ | 807 | 821 | + $\quad 14$ | 1.73 |
| Veneer ............... | 8 | 449 | 419 | - 30 | 6.68 |
| Wagons | 55 | 2,740 | 2,729 | - 11 | . 40 |
| Wooden ware | ${ }^{9}$ | 1,487 | 1,458 | - 29 | 1.95 |
| Woolen and worsted goods | 17 | 1,000 | 1,014 | + 14 | 1.40 |
| Average | 25 | 1,736 | 1,743 | + 7 | . 36 |
| Average all industries. | 1,152 | 79,871 | 80,159 | + 288 | . 36 |

This table includes in detail all industries and show for each not only the average number employed, but these figures for the two years are compared and the increase or decrease, as the case may be, in 1900, as compared with the preceding year is given both in number and per cent.

The table is thus quite comprehensive. It shows what industries gave work to the most persons in 1900 and measures this excess. It also indicates what industries had a smaller number
in 1900 than the preceding and measures the difference. It shows the average for each industry if divided equally among all; and the average for all industries.

Comparing the figures for the two years we find that 22 industries employed more and that 26 industries employed fewer persons in the latter year. While the industries showing an excess in 1900 are less strong numerically, being 22 as against 26 , the excess in their case more than offset the decrease shown for the latter. The conseguence of this is that for all industries the average for 1900 is the highest. It is interesting to follow the course of the figures in the table. Those who are fully familiar with the conditions in the various industries during the period covered would undoubtedly be able to explain the changes which had taken place in the number employed.

## AVERAGE NUMBER OF DAYS IN OPERATION.

By this is meant the average number of days in operation each year by all the establishments which are included in each industry as well as by the total for all industries. Each establishment reported as to the number of days it had been in operation. These figures were used as a basis from which the averages were computed.

The next table in order shows for each of the 46 industries and for all industries the average number of days in operation in 1899 and 1900 respectively together with the increase and decrease in number and per cent. in 1900 as compared with the preceding year. These figures may not mean a great deal when standing alcne, but when considered in connection with the other figures in this part and with the situation in general they become more important.

AVERAGE NUMBER OF DAYS IN OPERATION IN 1899--900.


The preceding table relates to the time in operation. In considering the figures for all industries it is found that the average number of days in operation was 280 in 1899 and 278 in 1900. There was thus a decrease for the latter year of 2 days or .72 per cent. These figures represent the nearest whole number. There were fractions in each case but these have been eliminated.

The facts thus mentioned represents all industries. Going back through the tables it will be seen that the same facts, as ap-
plicable to each industry, are also given. To consider each industry separately, however, is hardly necessarly and mostly for the reason that the table itself is so plain as to convey the full meaning of the facts presented.

On the whole the differences as between the two years are not great. In two industries it reaches 19 days but these are the extremes. In most cases the variations amount to a few days only.

One week would probably be a fair average. In comparing the figures not only as between the industries but as between the two years many interesting facts may be developed.

Of the 46 industries included 33 show a decrease for 1900, 7 show an increase and 6 no change. These facts, especially in addition to the decrease of 2 days for all industries when taken together plainly indicate a tendency toward a shorter operating time for the latter year.

The reasons for this tendency are not easily discovered. In fact it is out of harmony with the remaining facts in this part. The situation in 1900 , as a whole, seems to show an improvement upon that of 1899. More persons were employed, the earnings were higher, the investment was greater and the increase in the value of the products was rather marked. Manufacturers who were asked regarding the decrease in the time in operation stated that it was due to the necessity of closing: down for repairs. This answer probably explains the situation. From the reports as a whole it is plain that few had to remain idle because of lack of business. In fact many were unable to fill all their orders, while practically none were without them.

## AVERAGE YEARLY EARNINGS.

The figures under this head shows the average yearly earnings to each person when the average number were employed.

This amount was obtained by adding together the amount paid as wages by the different establishments and dividing this amount by the average number of persons employed by the establishments thus included.

The next table in order thus shows for each industry separately and for all industries, the average yearly earnings in

1899 and 1900. It also shows the increase and decrease both in amount and per cent. in 1900 when compared with the year which preceded. The figures presented in this table are significant. They should be closely studied not only when standing alone but in connection with the weekly earnings, the number employed and the product. In fact they have some bearing upon all the other presentations in this part.

AVERAGE YEARLY EARN'INGS IN 1899-1900.

| Industities. | No. of estab-lishments | Average Yearly EARNINGS IN |  | Incrianse + Decrease in 1900. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1899. | 1900. | Amount. | Per cent. |
| Agricultural implements | 27 | \$475 00 | \$547 26 | +\$27 74 | 15.21 |
| Artisans' tools ............ | 9 | 37510 | 44787 | + 72.77 | 19.40 |
| Beef and pork packing | 9 | 40700 | 42964 | + 22.64 | 5.56 |
| boots and shoes | 28 | 30264 | 355 | +5264 | 17.39 |
| Boxes, paper | 6 | 25410 | 25520 | + 110 | . 43 |
| Boxes, packing and cigars | 29 | 28094 | 30017 | + 1923 | 6.84 |
| Brick, tile and sewer pipe | 32 | 31178 | 380 55 | $\begin{array}{r}\text { + } \\ +68.77 \\ \hline 1.68\end{array}$ | 22.06 |
| Brooms', etc. . | 18 | 30152 <br> 050 <br> 88 | 29984 <br> 34348 <br> 8 | - 168 | . 2.08 |
| Canning vegetables | 16 | 23288 | 24702 | + 1414 | 6.07 |
| Cement, lime and plaster | 12. | 36471 | 39133 | + 2656 | 7.28 |
| Cigars .......... | 48 | 36732 | 36907 | + 175 | . 48 |
| Chairs | 12 | 31060 | 32429 | + 1369 | 4.41 |
| Clothing | 29 | 34160 | 32740 | -1420 | 4.16 |
| Cooking and heating appar | 5 | 46858 | 47062 | + 204 | . 44 |
| Confectionery | 13 | 23283 | 24348 | + 1065 | 4.57 |
| Cooperage | 17 | 385 <br> 245 <br> 0 | 41260 <br> 2685 |  | 7.17 |
| Cotton and linen goods .. | 6 24 | 24589 482 48 | 26855 46266 | $\begin{array}{r}\text { a } \\ +2266 \\ \hline 1958\end{array}$ | 9.22 |
| Electric and gas apparatus | $\stackrel{24}{70}$ | 48224 6356 | 46266 62650 | - 1958 | 4.06 5.35 |
| Furs, gloves and mittens | 11 | 31268 | 33984 | + 2716 | 8.69 |
| Furniture | 44 | 32242 | 34323 | + 2081 | 6.45 |
| Iron, malleable | 23 | 49009 | 48183 | -826 | 168 |
| Knit goods | 18 | 21513 | 24175 | + 2682 | 12.37 |
| Lager beer | 72 | ${ }_{3} 46108$ | 51433 | +5325 +1627 | 11.55 |
| Leather | 18 | 39000 | 40627 | + 1627 | 4.18 |
| Lumber .. | 98 102 | 42977 54394 | 46108 <br> 545 | +3131 $+\quad 151$ | 7.29 |
| Machinery ... | 102 54 | 54394 <br> 424 <br> 14 | 54545 42484 | $+\quad 151$ $+\quad 70$ | . 16 |
| Office fixtures | 15 | 39893 | 42338 | + 2445 | 6.13 |
| Paint | 7 | 36201 | 37576 | + 1375 | 380 |
| Paper and pulp | 30 | 40169 | 39927 | - 242 | . 60 |
| Saddlery ....... | 7 | 38784 | 36606 | - 2178 | 5.95 |
| Sash, etc. | 66 | 35883 | 36597 | $\begin{array}{r}\text { + } \\ + \\ +368 \\ \hline\end{array}$ | 1.99 |
| Sheet metal coods | 21 |  |  |  |  |
| Ship building ....... | 7 | 454 378 90 | 45139 34999 | - ${ }^{2} \mathbf{6 6}$ | 7.6 |
| Soap, lye and potash | 15 | 311 317 | 33388 | - 2815 | 7.11 |
| Stone ................. | 15 | 539.57 | 57684 | $1+3777$ | 7.01 |
| Straw moods | 3 | 28569 | 29970 | $1+1341$ | 4.69 |
| Tovs and games | 6 | 25575 | 28745 | $1+3170$ | 12.99 |
| Trunks and valises | 9 | 30407 | 32128 | $1+3721$. | 5.66 |
| Veneer | 8 | 31121 | 35.015 | $1+3884$ | 17.48 |
| Wagons | 55 | 45066 | $440 \mathrm{f1}$ | -1005 | 223 |
| Wooden ware | 9 | 32090 | 32829 | $1+\quad 729$ | \% 30 |
| Woolen and worsted good | 17 | 30354 | 30980 | $1+626$ | 2.06 |
| Average | 1,152 | 39458 | 41148 | $1+1690$ | 428 |

The above table is made upon the same basis as the other tables in this part. It gives each industry included. Then for each of these industries it gives the number of establishments, the average yearly earnings to each person employed, the increase or decrease in 1900 and the per cent. of same.

Taking up first the figures for all industries as found at the foot of the table it is seen that the average earnings to each worker was $\$ 394.58$ and $\$ 411.48$ respectively for the two years. This indicates an increase for the latter year of $\$ 16.90$, or 4.28 per cent.

This was the average for all industries. For individual industries the earnings stand at some point either above or below these figures. In industries such as confectioneries, knit goods, toys, etc., the earnings are extremely low. In others again such as flour and feed, machinery of all kinds, etc., the earnings are much higher.

While on the whole there was an increase in earnings this increase was not shared by all of the 46 industries. This is evident even from a glance at the table. The majority, however, show an increase for 1900. Classified upon this basis it is found that 34 industries show a higher average earning in 1900 than for the preceding year and that 12 show a lower.

In considering the percentages of the changes which took place the same tendencies are found as in the amount. In one case the increase amounts to over 22 per cent., in another to over 19 per cent. and in a third to seventeen. These are the greatest changes. Eight industries show an increase of ten per cent. and over; fifteen show an increase of from five to ten per cent., and for eleven the increase is less than five per cent.; while the remaining twelve show a smaller decrease in earnings.

## PRIVATE FIRMS AND CORPORATIONS, PARTNERS AND STOCKHOLDERS.

Each establishment was requested to report as to whether it was a private firm or corporation. All the private firms, and all but 26 corporations complied with this request. Those who failed to comply attributed this failure to their inability to ascer-
tain the number of their stockholders. As most of the latter were corporations whose shares are traded from day to day it is likely that their position in this respect was justifiable.

The facts thus obtained have been compiled and are presented in the following table. As will be noticed this table is quite large covering two pages. It gives in detail each of the industries included. Then for each of these industries it shows for 1899 and 1900 the number of private firms together with the respective number of male, female, and total number of partners and stockholders, and the number of corporations together with the respective number of male, female, and total number of stockholders. It also gives the total number of identical establishments included each year. As thus completed the table shows the figures for $\epsilon a c h$ year, and, as the classifications are the same it admits of many interesting comparisons. For instance, by giving the private firms and corporations each year it throws much light upon the tendency in the mode of management, and by giving the partners and stockholders it reveals much that relates to whether there is a tendency towards concentration in the ownership of industrial enterprises. The facts shown are not conclusive on either point, but are certainly significant.

IRIVATE FIRMS AND CORPORATIONS, PARTNERS AND STOCKHOLDELS IN 1899.


PRIVATE FIRMS AND CORPORATIONS, PARTNERS AND STOCKHOLDERS IN 1900.

| Industries. |  | Number of Partners. |  |  |  | Number of Stockholders. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |
| Agricultural implements | 4 | ${ }^{6}$ |  | 6 | 23 | 176 | 47 | 223 | 229 | 27 |
| Artisans' tools' ............ |  | 12 |  | 12 | 1 |  |  | 5 | 17 | 9 |
| Beef and pork packing. | 3 | 10 |  | 11. | ${ }^{6}$ | 44 |  | 47 | 58 174 | 8 |
| Boots and shoes .... | 7 |  |  | 14. |  | 140 | 20 | 160 | 174 | 6 |
| Boxes, paper ................. | ${ }^{5} 16$ |  |  | 9 29 9 | 13 | 55 | 2 | 75 | 16 84 | 29 |
| Boxes, packing and cigars.. | 16 |  |  | 29 | 13 9 | 5 | 12 | 65 | 86 96 | 32 |
| Brick, tile and sewer pipe.. | 14 | 23. |  | ${ }_{23}^{32}$ | 4 | 24 | + 5 | $\begin{array}{r}64 \\ 29 \\ \hline\end{array}$ | 52 | 18 |
| Brooms, etc. <br> Burial cases | 14 | 23. |  | ${ }_{2}$ | 2 | 13 | 7 | 20 | 22 | 3 |
| Canning vegetables | 5 | 9. |  | 9 | 11 | 255 | 13 | 268 | ${ }_{298}^{277}$ | 16 |
| Cement, lime and plas | 3 | 41 |  | 5 |  | 320 | 73 | 398 6 | 398 69 | 48 |
| Cigars | 47 3 | 61 3 |  | 63 4 | 1 | 126 | 10 | 136 | 140 | 12 |
| Chairs | 9 | 22 | 1 | 22 | 20 | 137 | 67 | 204 | 226 | 29 |
| Cooking \& heating apparatus | , | , |  | 7 | 2 | 8 | 1 | 9 | 16 | 5 |
| Confectionery | ${ }_{2}^{2}$ | 14 |  | ${ }^{2}$ | 7 | 31 | ${ }^{6}$ | 37 35 | 39 49 | 17 |
| Cooperage ... | 13 | 14. |  | 14 26 | 4 | -34 | 54 | 35 167 | 49 193 | 6 |
| Cotton and linen goods.. | 3 |  |  | 26 | 3 | 113 | 64 | 167 | 193 | 6. |
| Electric \& gas apparatus | 9 |  |  |  | 15 | 133 | 12 | 145 | 160 | 24 |
| Flour and feed | 44 | 70 |  | 76 | 24 | 136 | 27 | 163 | 239 | 70 |
| Furs, gloves and mitt | 9 | 17. |  | 17 | 2 | 8 |  | 418 | 25 | 11 |
| Furniture. | 15 | 30 |  | 32 | 29 | 381 | 37 | 418 | 450 | 44 |
| Iron, malleable | 5 | 8 |  | 4 | 17 | 160 77 | 14 | 17 | - 122 | 18 |
| Knit goods |  | 40 |  |  |  | 414 | 82 | 496 | - 549 | 72 |
| Lager beer <br> Leather | $\stackrel{5}{5}$ | 10 | 3 | 11 | 12 | 5,510 | 1,530 | 7,040 | 7,051 | 18 |
| Lumber | 40 | 56 | 6 | 62 | 58 | 1,495 | 55 | 1,550 | 1,612 | 98 |
| Machinery | 491 | 85 | 51 | 90 | 49 | 1, 265 | 42 | 1,588 | 198 <br> 1 | 102 54 |
| Miscellaneous | 22 | 36 |  |  | $\stackrel{30}{9}$ | 1,559 | 22 |  | 1,619 | 15 |
| Office fixtures | 4 | 13 |  | 13 | - $\begin{array}{r}9 \\ 3\end{array}$ | 165 | 22 | 187 | [ 200 | 7 |
| Paper and pulp | 4 | 11 |  | 11. | 25 | 284 | 48 | 332 | - 343 | 70 |
| Saddlery :....... | 2 | 7 |  | ${ }_{8}^{6}$ | ${ }^{5}$ | ${ }^{21}$ | 13 | 24 159 | - 30 | 66 |
| Sash, etc. | 40 |  |  | 78 | 26 5 | 146 | $\begin{array}{r}13 \\ 3 \\ \hline\end{array}$ | 159 | - 487 | 21 |
| Sheet metal goods | 16 |  |  |  | - 2 | 11 | 1 |  | \| 17 | 7 |
| Ship huilding. | 6 | 9 |  | 10 | 3 | 42 | 4 | 46 | - 56 | 9 |
| Soap, lye and pota | 8 | 18 |  | 18 |  | 28 | 1 | 291 | - 47 | 15 |
| Stone ............. | 10 | 22 |  | 24 | 8 | 22 |  | 22 | \| 46 | 15 |
| Straw goods | 1 |  |  | $\frac{1}{5}$ | $\stackrel{2}{2}$ | 12 | $\stackrel{2}{3}$ | 14 | 4\| 15 |  |
| Toys and games | 3 |  |  | 3 |  | 52 | 18 |  | - 73 |  |
| Trunks and valises | 1 |  |  | 41 | - ${ }^{8}$ | 29 | 18 <br> 1 <br> 18 | 32 | $2{ }^{1}$ | - |
| Warer | 38 |  |  | 60 | 17 | 243 | 106 | 349 | 9401 | - |
| Wooden ware | 2 |  |  | 2 | 7 | 31 | 4 | 35 | $5{ }^{371}$ | \| |
| Woolen and worsted goods | 5 |  |  | 181 | 11 | 80 | 24 | 104 | 4112 | 17 |
| Total |  |  |  | 9771 |  | 12,882 | $2,440$ | $15,322$ | $\begin{array}{r} 216,299 \mid \\ \|\quad\| \\ \hline \end{array}$ | $1,1.52$ |

Considering the totals in the preceding table it is found that in 1899 of the 1,152 establishments included 571 were private firms with 1,029 male, 55 female, or a total of 1,084 partners; and there were 555 corporations with 9,488 male, 1,809 female, or a total of 11,297 stockholders. The partners or stockholders combined thus numbered 12,381 persons.

In 1900 there were 557 private firms with 934 male, 43 female, or a total of 977 partners; and 569 corporations with 12,882 male, 2,440 female, or a total of 15,322 stockholders. The total number of both partners and stockholders this year was thus 16,299 persons.

This represents the totals. In comparing the figures for the two years, the increase or decrease for the latter year may be seen.

During the period covered there was a decrease in the number of private firms and an increase in the number of corporations. This is seen from the fact that of the 1,152 establishments included, 571 , or 49.56 per cent. were private firms in 1899, while only 557 , or 48.35 per cent. were private firms in 1900 . There had thus been a decrease of 1.21 per cent. in the number of private firms and an increase of the same amount in the number of corporations. This change is not great. But if it should be found that it has been going on for some time it would be only natural to conclude that there is a tendency towards the corporate form of management in manufacturing enterprises.

The decrease in the private firms was also felt by a decrease in the number of partners. Thus it is seen that the total number of partners were reduced from 1,084 to 977 , a decline of 107 or practically 10 per cent.

The male partners declined from 1,029 to 934 , or 9.23 per cent.; and the female partners declined from 55 to 43 or nearly 22 per cent. Since there was a decline in the number of private firms it is only natural there should also be a decline in the number of partners.

In the case of corporations directly the opposite phenomena may be noticed. While the private firms together with those interested in them declined in number, the corporations and the stockholders increased. As seen above there were 14 more corporations in 1900 than in the preceding year. While this change is not very marked it is perhaps big enough to show the tendency in this respect.

The total number of stockholders changed from 11,297 to 15,322 , an increase of 2,951 , or 23.84 per cent. The male stockholders increased from 9,488 to 12,882 , or 35.77 per cent., and the female increased from 1,809 to 2,440 ; or nearly 30 per cent.

The increase in the number of the stockholders was thus much greater than the increase in the number of corporations. In 1899 there were about 22 stockholders to each corporation; while in 1900 there were about 27 to each.

The total number of both partners and stockholders was 12,381 in 1899, and 16,299 in 1900. There was thus an increase for the latter year of 3,918 , or 31.64 per cent. The average number of partners and stockholders, when combined, to each one of the 1,152 establishments was about 11 in the former and 14 in the latter year.

## CAPITAL INVESTED.

Each establishment included in its report a statement of the capital it had employed in obtaining the products for the years 1899 and 1900. From these figures were then computed first, the total amount of capital used by the establishments in each of the 46 industries, and second the amount for all the establishments and industries included.

To define capital, or in other words to explain what this word stands for when made to embrace everything that by a stretch of the terms might be included under it in a manufacturing enterprise is no easy matter and will not be attempted.

The only purpose here is to point out the amount invested in such tangible objects, or means of production as may be classifield under land, buildings, fixtures, machinery and tools of all kinds, material, cash, etc. Capital of this nature is well understood and comparatively easily ascertained. Practically every manufacturer can readily tell the amount invested under these heads.

In the following table is found the amount of the investment as capital for each year not only in the establishments in each industry but for all industries.

CAPITAL INVESTED OR USED IN 1899 AND 1900 BY THE ESTABLISH-
MENTS INCLUDED.

| Industries. |  | Amount of Capital Invested in |  | Increase + DeCREASE - IN 1900. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1899. | 1900. | Amount. | Pr ct. |
| Agricultural implements.. | 27 | \$12,471,417 51 | \$13,726,206 07 | + \$1,254,788 56 | 10.06 |
| Beef and pork | 9 | 886,957 56 | 917,897 68 | + 30,940 12 | 3.49 |
| Boots and shoes | 9 | 3,947,832 00 | 4,069,690 67 | 121,858 67 | 3.08 |
| Boxes, paper ... | 28 <br> 6 | 2,327,632 430 | 2,353,820 38 | 26,187 95 | 112 |
| Boxes, packing and cigars | 29 | 1,343,233 30 | - 478,998 81 | ¢,622 15 | 1.83 |
| Brick, tile and sewer pipe | 32 | $\begin{array}{r}1,343,283 \\ 573,895 \\ \hline 8\end{array}$ | 1,368,715 20 | + 25,48190 <br> $+\quad 64,00829$ | 11.90 |
| Brooms, etc. .... | 18 | 151,719 21 | 163,195 86 | + $\quad 11,47665$ | ${ }^{11.56}$ |
| Burial cases ..... <br> Canning vegetabi | 3 16 | 597,150 00 | 582,200 00 | + 114,95000 | 2.50 |
| Cement, lime and plaster | 12 | $\begin{array}{r}632,989 \\ 1,030,190 \\ \hline\end{array}$ | 666,47801 $1,110,69120$ | 33,488 28 | 5.29 |
| Cigars ....................... | 48 | 1,036,684 57 | 1,110,69120 | 80,501 10 | 7.81 |
| Chairs | 12 | 3,264,848 88 | 3,362,286 | 97,437 60 | 2.98 |
| Clothing .................... | 29 | 2,415,091 51 |  |  |  |
| Cooking and heating ap paratus | 5 | $2,410,091$ 980,043 71 | $2,463,03547$ 980,87453 | 49,74396 83082 | 1.99 .08 |
| Confectionery | 13 | 1,052,181 68 | 1,193,520 83 | 141,339 15 | ${ }^{\text {13. }} 08$ |
| Cooperage ... | 17 | 1,420,640 30 | 1,442,008 35 | 141,369 15 | 13.43 5.08 |
| Cotton and linen goods | 61 | 757,047 44 | 757,900 52 | 21,858 805 | ${ }^{5 .} 11$ |
| Electric \& gas apparatus |  | , ${ }^{\text {a }}$ | 157,00.52 |  | . 11 |
| Flour and feed | 24 | 2,602,954 09 | 2,620,464 10 | 17,510 01 | . 67 |
| Furs, gloves and | 11 | 6,441,675 274 | 5,705,074 49 | 736,601 34 | 11.43 |
| Furniture | 44 | 3,061,319 44 | 3,068,970 16 | 10,686 13 | 3.89 |
| Iron, malleable | 23 | 4,509,698 15 | 4, $4,825,27593$ | -715,577 78 | . 29 |
| Knit goods | 18 | 2,234,022 61 | 2,287,989 46 | 315,576 85 | ${ }_{2}^{6.98}$ |
| Lager beer | 72 | 35,097,827 40 | 39,119,956 50 | 4,022,129 10 | 11.46 |
| Leather | 18 | 11,236,466 73 | 11,012,268 36 | 224,198 37 | 2.00 |
| Mamber ${ }^{\text {Lu}}$ | 98 | 21,453, 13810 | 21,412,173 30 | - 40,96480 | . 19 |
| Miscellaneous | $\begin{array}{r}102 \\ 54 \\ \hline\end{array}$ | 12,043,735 00 | 13,073,725 96 | 1,029,990 96 | 8.55 |
| Office fixture | 15 | 6,769,142 812 | 6,784,800 19 | 15,658 17 | . 33 |
| Paint | 7 | 740,237 52 | 760,213 7818 | 51,497 51 | 6.31 |
| Paper and pulp | 30 | 10,295,994 07 | 10,905,416 60 | 609,422 53 | 5.82 |
| Saddlery | 7 | 182,665 44 | 191,394 66 | 8,729 22 | 4.78 |
| Sash, etc. | 66 | 4,828,360 94 | 4,945,150 59 | 116,789 65 | 2.42 |
| Sheet metal good | 21 | 2,463,317 89 | 2,517,191 65 | 53,873 76 | 2.19 |
| Ship building | 7 | 1,149,325 19 | 1,158,444 32 | -9,119 13 | 2.79 |
| Soap, lye and potash | 9 | 534,69375 | - 465,459 33 | 69,23442 | 12.94 |
| Stone .......... | 15 | 266,656 <br> 523 <br> 577 <br> 14 | 272,302 65 | 5,646 21 | 2.12 |
| Straw goods | 3 | 466,489 22 | - 450,20741 | 45,445 167 1681 | 8.68 |
| Toys and games | 6 | 569,101 17 | 573,561 78 | 16,281 4.461 | 3.49 |
| Trunks and valises | 9 | 1,087,341 27 | 1,092,864 57 | 5,523 30 | 51 |
| Veneer |  | 247,804 87 | 290,349 82 | 42,544 95 | 17.17 |
| Wagons | 55 | 5,850,957 62 | 5,901,092 86 | 50,135 24 |  |
| Wooden ware ............. | 17 | 847,073 13 | -870,368 91 | 23,295 78 | 2.75 |
| Woolen and worsted goods | 17 | 1,625,058 62 | 1,747,938 93 | 122,880 31 | 7.50 |
| Total | 1,152 | \$172,179,926 09 | \$179,415,435 38 | \$7,235,709 29 | 4.20 |

This table is concerned with the capital invested or used in 1899 and 1900. It describes in figures the amount for each industry as well as whether there was an increase or decrease for the latter year. It also gives these results for all industries when combined. The importance of these figures as of most of the presentations in this part is found in the changes which they point out from year to year.

The figures which rèlate to all industries, or the last in the table, are the most important. They indicate the situation during the period by showing whether capital had increased or been withdrawn. Considering all industries there had been an addition of new capital. This is plain from the fact that the amount for 1899 was $\$ 172,179,926.09$, as against 179,415 ,435.38, in 1900. This is an increase for the latter year of $\$ 7,235,709.29$, or of 4.20 per cent.

All the industries included, however, did not share in this increase. A glance at the table will show this. Even if times have been good it was not to be expected that, in a state with as many industries as Wisconsin, there should have been an increase in all. The real situation in this respect is perhaps best illustrated by the facts in the table which show that out of the 46 industries included, 37 show an increase in the capital used in the latter year, while only 9 show a decrease.

The changes which thus took place in the amount for the two jears were not very great. This is shown not only from the actual amount for each but from the proportion of the change. The greatest increase, relatively, is in trunks and valises and the greatest decrease is in soap, lye, etc. In the former case it amounted to 17.17 per cent., in the latter to 12.94 per cent. These are the two extremes, however. The average change either way amounts to only a few per cent.

The figures obtained as to capital were classified under land, buildings and fixtures, machinery, implements and tools, raw material on hand, date of reporting, and cash and other capital. The proportion under each of these heads when "all industries are included is as follows:

| Classification of Capital. | 1899. <br> Per cent. | 1900. <br> Per cent. |
| :---: | :---: | :---: |
| Land | 9.39 | ${ }^{9} 9.88$ |
| Buildings and fixtures ........... | 20.66 22.45 | 21.23 |
| Machinery, implements and tools | 20.70 | 20.59 |
| Raw material, date of reporting. | 26.80 | 25.40 |
|  | 100.00 | 100.00 |

The amount invested when classified for each year thus stands as follows: Land 9.39 and 9.88 per cent. respectively for 1899
and 1900 ; buildings and fixtures 20.66 and 21.23 per cent. respectively; machinery, implements and tools, $22.45^{\circ}$ and 22.90 per cent. ; raw material, 20.70 and 20.59 per cent.; and cash and other capital 26.80 and 25.40 per cent. respectively.

In looking over these figures one thing in particular will attract attention and that is the small variations as between the two years in the amount of capital in each class. Of the five classes into which capital was divided only four show a difference of more than a small fraction of one per cent., while for the fifth, that of cash, etc., capital, the difference is only 1.4 per cent. These facts are important from several points of view. Among other things they go far in showing that the relations between the various kinds of capital employed is much less affected by changes than might appear to be the case.

It is held by many that it is impossible to ascertain definitely all the capital invested in a manufacturing plant. Considering everything, however, this can hardly be regarded as a true description of the situation. It is undoubtedly a fact that a statement of everything that under one pretext or another may be regarded as capital is not easily obtained. On the other hand the greater part of it, that part which varies with the conditions, and which properly comes under one or the other of the above heads is within reach. This is a fact that is not easily refuted. Since the bulk of the capital can be gotten at, and, since the part that can thus be had, is the very one that is affected by industrial conditions it must also follow that the facts presented meets the purpose for which they were collected.

## VALUE OF GOODS MADE OR WORK DONE.

By this is meant the selling value of the goods made or work done during each of the two years included.

This value was obtained in the following way. Each establishment reported the market value of its products or of the work done for the year. These figures were then computed so as to give the total value first for each industry and then for ${ }^{\circ}$ all industries. As such reports are received annually the figures for the two years were easily obtained.

The main purpose of these presentations is to show the condition from time to time. If there is an increase from one year to another this of itself is evidence of the fact that our industries are growing. This is only a reasonable conclusion. Likewise it would be only fair to assume that a decrease as time goes on would undoubtedly mean that for some reason there is a backward movement. Such phenomena as these are of the greatest importance in the business world and should be accurately measured.

In the presentations actual facts only are given. No effort has been made to produce anything that cannot be described by figures. This, while the value of the output is shown no reasons are given why this value varied as between the two years. The forces which so operate as to cause a greater product to be turned out one year than in another are not often of such a nature that they can be measured by mere figures only.

The following table is interesting. It deals not only with the output each year but also with the changes that took place. A close atudy of this table will fully repay the trouble.

## SELLING VALUE OF THE GOODS MANUFACTURED OR WORK DONF IN 1899 AND 1900.

| Industries. |  | Amount of Goods Manufg and Work Done in |  | $\begin{aligned} & \text { INCREASE }+ \text { De- } \\ & \text { CREASE - IN } 1900 . \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1899. | 1900. | Amount. | Pret. |
| Agricultural implements | 271 |  |  |  |  |
| Artisans tools Beef and pork | 9 | 1,265,868 86 | 1,129,261 38 | - 10, 60748 | - 6.54 10.80 |
| Beots and shork pa | ) | 13,929,994 58 | 15,337,168 | 1,407,174 35 | 11.10 |
| Boxes, paper | 28 6 | 3,796,942 20 | 4,319,748 48 | + $+\quad 522,80628$ | 13.77 |
| Boxes, packing and cigars. | 29 | 2,074,337 10 . | 696,932 $2,134,307$ 88 | 34,00280 <br> 59 <br> 5970 <br> 188 | ${ }_{2}^{2.05}$ |
| Brick, tile and sewer pipe. | 32 | 2,074, 458,230 23 | 2,134,307 498 | 59,970 <br> 34,260 <br> 8 | 2.89 |
| Burial cases | 18 | 235,934 70 | 245,758 25 | 9,823 55 | 4.16 |
| Canning vegetables | 16 | 486,250 $1,173,672$ | 534,272 58 | 48,022 58 | 9.88 |
| Cement, lime and plaster.. | 12 | 1,198,834 21 | 1,184,210 94 | 10,538 50 | . 90 |
| Cigars | 48 | 1,070,025 05 | 1,317,276 41 | 118,442 20 | 9.88 |
| Chairs | 12 | 2,370,132 59 | 1,859,994 80 | + 1,489,862 21 | 4.23 62.86 |
| Cooking and heating apparatus | 29 | 5,609,780 36 | 5,416,803 | 192,976 57 | 3.44 |
| Confectionery . . . | 13 | 1,641,896 86 | 1,680,715 39 | 38,818 53 | 2.30 |
| Couperage | 17 | - 2880,87012 | 2,215,753 30 | 203,490 01 | 10.11 |
| Cotton and linen goods. | . | 667,928 34 | 682,495 77 | 14,518 31 |  |
| Electric and gas apparatus supplies |  | 607,028 | 682,495 |  | 18 |
| Flour and feed | 70 | $\begin{array}{r}3,407 ; 27635 \\ 15,470,799 \\ \hline\end{array}$ | 3,161,692 04 | - 245,584 311 | 7.21 |
| Furs, gloves and mittens... | 11 | 10,40, 492,13554 | 12,820,019 78 | - 2,600,780 071 | 17.13 |
| Furniture . .................. | 44 | 3,743,969 86 | 507,221 37 | + 15,08583 | 3.02 |
| Yron, malleab | 23 | 11,377,207 82 | $\begin{array}{r}3,804,12176 \\ 10,350,169 \\ \hline 08\end{array}$ | 60,151 90 | 1.61 |
| Knit goods. | 18 | 2,6ь3,028 78 | 10,350,159 $3,111,307$ | 1,627,048 74 | 9.03 |
| Lager beer | 72 | 19,728,386 43 | 22,165,940 04 | 2.458,278 21 | 17.27 |
| Leather | 18 | 13,057,737 42 | 14,937,946 52 | 1,880,209 10 | 12.40 |
| Lumber | 98 | 23,119,094 33 | 31,664,761 29 | 8,545,666 96 |  |
| Machinery | 102 | - 12,836,120 76 | 14,656,607 80 | 1, $1,820,48704$ | 14.19 |
| Miscellaneou | 54 | 4,450,050 00 | 4,795,250 00 | + 1,845,200 00 | - 7.75 |
| Office fil | 15 | 1,064,284 87 | 1,016,227 47 | - 48,057 40 | 4.51 |
| Paint | 71 | 1,225,002 771 | 1,306,492 70 | 81,489 981 | 6.65 |
| Saddlery . . | 7 | 8,783,114 60 | 9,066,774 95 | 283,660 35 | 3.23 |
| Sash, etc. | 66 | 6,326,134 75 | - $6,364,638860$ | 75,263 58 | 16.38 |
| Sheet metal | 21 | 3,619,991 98 | 2,897,199 66 | 724,792 32 | ${ }_{19} .97$ |
| Ship building. | 7 | 992,151 11 | 1,227,266 40 | + 235,115 29 | 33.09 |
| Soap, lye and potash | 9 | 856,347 85 | 1,846,750 52 | - 209,59733 | ${ }_{1}{ }^{3} 12$ |
| Staves and heading | 15 | 377,988 11 | 398,060 64 | + 20,072 53 | 5.31 |
| Strone | 15 | 527,131 25 | 600,981 25 | 73, 750000 | 14.01 |
| Straw goods' | 3 | 708,752 18 | 724,672 36 | 15,920 18 | 2.25 |
| Toys and games | 6 | 524,972 60 | 542,824 57 | 17,851 97 | 3.40 |
| trunks and valis | 9 | 1,289,185 47 | 1,385,905 38 | 96,719 91 | 7.50 |
| Veneer | 8 | 552,871 06 | 586,300 98 | 33,429 92 | 6.05 |
| Wagons | 55 | 5,419,507 66 | 5,713,099 57 | + 293,59191 | 5.39 |
| Woodenware | 9 | 1,872,025 58 | 1,799,378 04 | 72,647 54 | 3.93 |
| Woolen and worsted goods | 17. | 1,832,940 92 | 1,992,919 55 | + 159,978 63 | 8.73 |
| Totals' | 1,152. | \$193,555,784 97 | \$209,942,633 59 | +\$16,386,848 62 | 8.46 |

For each industry included and for all industries, when combined, the above table shows the actual or market value of the goods produced first for 1899 and then for 1900. It also points out in each case the changes which took place in the output as between the two years.

Turning to the totals at the foot of the table we find that the value of the product was $\$ 193,555,784.97$ and $\$ 209,942,633.55$
in 1899 and 1900 respectively. This is an increase for the latter year of $\$ 16.386,848.62$, or 8.46 per cent.

These figures are very satisfactory. They show a healthy condition of our manufacturing industries. When considered in connection with figures of the same kind for preceding years they also go a long ways in showing that Wisconsin is rapidly forging to the front as a manufacturing state.

As in the case of capital invested and other presentations there are of course changes both ways. Of the industries included 37 give an increase in the value of the product, while 9 give a decrease. In some cases the changes are also quite large, almost surprisingly so. This, however, is nothing new. Manufacturing is subject to so many influences that the returns can hardly be expected to be uniform either in one direction or the other.

## TOTAL AMOUNT PAID AS WAGES.

Each establishment reported the total amount paid as wages to mechanics, operatives and laborers. From these reports the total amount for each industry as well as for all industries in 1899 and 1900 have been compiled.

To these computations the following table has been devoted. This table therefore shows by industries and for all when combined, the total amount paid as wages each year together with computations giving the increase or decrease in 1900 as compared with the preceding year.

TOTAL AMOUNT PAID AS WAGES IN 1899 AND 1900.

| Industries. |  | Amount Paid asWages in |  | Increase + Decrease - in 1900. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1899. | 1900. | Amount. | Prect. |
| Agricultural implements | 27 | \$1,436,922 72 | \$1,404,829 54 | \$32,093 18 | . 23 |
| Artisan tools ............... | 9 | -363,474 43 | -317,989 87 | - $\quad 40,48456$ | 12.51 |
| Boots and shoes | , | 570,77980 | 601,930 59 | + 31,15079 | 5.46 |
| Boxes, paper | 28 | 732,694 <br> 103,670 <br> 8 | 857,644 76 | $+\quad 24,95014$ | 17.05 |
| Boxes, packing and ciolor. | 29 | 103,670 354,826 32 | 101,827 33 | - 1,843 45 | 1.81 |
| Brick, tile and sewer pipe. | 32 | $354,826 ~$ 137,496 07 | 374,614 99 | + 19,788 67 | 5.58 |
| Brooms, etc. ................ | 18 | 137,496 06 | 172,769 63,86650 | 35, 273806 | 25.66 |
| Burial cases | 3 | 123,824 00 | $\begin{array}{r}63,866 ~ \\ 122 \\ 120 \\ \text {, vo } \\ \hline\end{array}$ | 84895 857 90 | 1.35 .61 |
| Canning, vegetable ........ | 16 | 108,292 15 | 109,678 97 | + 1,38682 | 1.19 |
| Cement, lime and plaster.. | 12 | 161,594 60 | 169,836 73 | + 8,242 13 | 5.10 |
| Chairs | 48 | 270,348 21 | 291,198 97 | + 20,85076 | 7.71 |
| Clothing | 12 29 | ${ }_{966,893} 984$ | 1,144,425 30 | 157,623 21 | 15.93 |
| Cooking and heating appa- |  | 966,393 94 | 997,536 58 | 31,142 64 | 3.22 |
| Confectione | 5 | 489,668 73 | 497,444 94 | 7,776 21 | 1.58 |
| Cooperage | 13 | 250,528 79 | 317,791 04 | 67,262 25 | 26.08 |
| Cotion and linen goods | 16 | 159,778 00 | 162,967 67 | 3,189 67 | 1.37 |
| Electric and gas apparatus supplies | 24 | 8 |  | 1 3,645 57 | 3.16 |
| Flour and feed | 70 | 657,299 519,53152 | 608,394 | 48,905 12 | 7.44 |
| Furs, gloves and mittens.. | 11 | -80,359 81 | 435,588 91,757 91 | 83,942 68 | 16.15 |
| Furniture | 44 | 945,653 63 | 960,365 81 | + 14,71218 | 14.18 1.56 |
| Iron, malleable | 23 | 2,068,676 81 | 1,847,334 09 | + $\quad 14,71218$ | 10.70 |
| Knit goods | 18 | ,620,017 50 | 1,734,430 64 | + 114,41314 | 18.45 |
| Lager beer | 72 | 1,558,914 02 | 1,838,224 66 | + 279,310 64 | 17.98 |
| Leather | 18 98 | 1,593,137 67 | 1,653,112 51 | 59,974 84 | 3.76 |
| Machinery | 188 102 | $4,475,979$ <br> 3,620 | 4,938,133 52 | 462,15380 | 10.33 |
| Miscellaneous | 54 | 3,620,466 71 | 3,896,124 21 | 275,65750 | 7.61 |
| Office fixtures | 15 | ${ }^{317,951} 13$ | 307,797 92 | 64,299 10 154 4 | 7.44 3.19 |
| Paint | 7 | 48,509 15 | 52,982 15 | 4,473 00 | ${ }_{9.22}$ |
| Paper and pulp | 30 | 1,311,536 19 | 1,417,818 28 | 106,282 09 | 8.10 |
| Saddlery | 7 | 1,83.385 13 | 1,99,935 38 | 16,550 25 | 19.85 |
| Sash, etc. | 66 | 1,269,173 91 | 1,277,988 16 | + 8,81425 | . 69 |
| Sheet metal goo | 21 | 578,404 05 | - 565,84852 | - 12,555 53 | 2.17 |
| Ship building | 7 | 425,447 34 | 396,771 63 | 28,675 71 | 6.74 |
| Soap, lye and pot | ${ }^{9}$ | 64,265 16 | 62,998 33 | 1,266 83 | 1.97 |
| Stone. | 15 | 162,111 14 | 119,862 22 | $+\quad 11,08991$ | 10.20 |
| Straw goods | 15 | 179,127 42 | 171,085 46 | 11,316 8 8,041 96 | ${ }_{4} 1.15$ |
| Toys and games | 6 | 155,497 44 | 160,686 45 | + $\quad 5,18901$ | 4.49 3.34 |
| Trunks' and valises | 9 | 245,383 15 | 263,770 64 | 18,387 49 | 7.49 |
| Veneer | 5 | 139,776 65 | 146,715 81 | 6,939 16 | 4.96 |
| Wagons | 55 | 1,234,809 42 | 1,202,427 71 | 32.38171 | 26.22 |
| Woodenware | 9 | 487,170 86 | 478,644 48 | 8,526 38 | 1.75 |
| Woolen and worsted goods | 17 | 303,539 29 | 314,137 11 | 10,597 82 | 3.49 |
| Totals | 1,152 | \$31,515,149 38 | \$32,983,768 79 | + + $1,468,57441$ | 4.66 |

In this table we find the amount paid as wages not only in 1899 but in 1900. The two amounts are also compared and the differences pointed out.

For the 1,152 establishments included, or for all industries, the amount thus paid as wages was $\$ 31,515,149.38$, and $\$ 32,983,768.79$, respectively, for the two years. The amount paid in the latter year is therefore greater than that for the former, the difference being $\$ 1,468,574.41$, or an increase of 4.66 per cent.

This increase for the latter year is in full hars. ony with the increase which as already shown, was found for capital invested and value of the product. It indicates that wages kept an even pace in the general progress.

Of the 46 industries included 32 give an increase and 14 a decrease in the amount paid as wages. The increase for all industries is thus due to the fact that the increase in the 32 industries was greater than the opposite change in the 14 other industries:

In a general way it can be said that the various elements which together make up production are affected by the same tendencies. Thus when the volume of production is increased it is expected that the other factors in production must also increase. A greater product is usually the result of a greater investment and of a greater outlay for wages, etc. This is true in most cases. There are exceptions to the rule, however. At least, this is so when shorter periods only are considered. This is also borne out by the facts presented here. Going back through the tables it is easy to find instances where, for some one industry, some of the elements seem to have been affected by one tendency and others by another. At first sight such instances are apt to convey a wrong impression of the value of these presentations. They are apt to make one feel that there is an error somewhere. Either the original reports were wrong, or else there is an error in computation. Neither, however, is likely to be true. Causes which result in uneven or incongruous changes in the factors of production must be looked for elsewhere. They are apt to be found in fluctuation in prices, temporary withdrawals of capital, improved methods, etc. As a rule, however, the effects of such conditions are only temporary. They are only felt until a general readjustment has taken place. These are facts which should be borne in mind by all who mayl have occasion to examine these tables more closely.

## SUMMARIES OF CONCLUSIONS.

The facts as compiled from the returns of 1,152 manufacturing rstablishments for the years 1899 and 1900 have thus been rresented and analyzed in the preceding pages of this part. The presentations are made by industries and in the simplest manner possible. The analysis is mostly confined to comparisons of aggregates as ketween the two years. A few of the more important conclusions that have been pointed out may for the sake of convenience be summarized here.

While the greater proportion of the industries included in this investigation are important, no matter what standpoint they are viewed from, there are eighteen among them which are especially prominent in this respect, and these are:

Agricultural implements, beef and pork packing, boots and shoes, chairs, clothing, electric and gas apparatus and supplies, flour and feed, furniture, iron (malleable), knit goods, lager beer, leather, lumber, machinery, paper and pulp, sash, doors, etc., sheet metal goods, wagons, carriages, etc.

The eighteen industries thus enumerated occupy a prominent position in this state. They are the leading industries. Not only do they employ more capital and persons than any of the others but they together turn out considerably over fourfifths of the manufactures of the state. These so-called leading industries, however, are not of equal importance. This is easily seen when the tables are examined, Some among them are larger than others. In this respect lumber easily takes the first place. This industry, however, is on the wane. The main reason for this is that the lumber supply is rapidly being exhausted. Lager beer seems to be next in order, while leather, machinery, packing, paper and pulp, and flour and feed occupy conspicuous places. Wisconsin is rapidly becoming one of the leading manufacturing states in the union.

## CLASSIFIED WEEKLY EARNINGS.

The classified weekly earnings were considerably higher in 1900 than in the preceding year. This is plainly shown in the
table for all industries. To measure the exact change which took place is practically impossible, owing to the difficulities which are involved in ascertaining just what each person received. Some idea of the increase, however, may be had from the fact that in $1899,46.05$ per cent. of the total number of persons employed received $\$ 9.00$ per week and over; while in 1900, 47.64 per cent. of the total number received this amount. Those who received $\$ 1.50$ per day, or over, had thus increased about 1.6 per cent. in the course of one year.

## PERSONS EMPLOYED.

There was quite an improvement in the condition as to employment in 1900 as compared with 1899. In the first place the average number of persons employed throughout the year was greater. Then, again, the course of employment was more even. That is, the fluctuations in employment varied less from month to month. This has been illustrated in various ways. In the average number employed there was an increase of .36 per cent. In the smallest number employed, there was an increase of 6.27 per cent. In 1899, 15.21 per cent. of the workers were unemployed at least a part of the year, while in 1900 the unemployment for any one month never exceeded 8.48 per cent. of the total, the average unemployment being about 5 per cent. in the former year and 3 per cent. in the latter. It will be noticed that the increase in the average number of persons employed is somewhat smaller than the increase in most of the other factors. This is mostly due to the fact that there was a greater steadiness in operation in the latter year.

## DAYS IN QPERATION.

There was a decrease in the number of days in operation. The reasons for this are not apparent; in fact, this change was rather unexpected. Inquiries upon this point developed the fact that more extensive repairs were required in 1900 and that this caused the decrease. The change, however, was smaller, amounting to only 2 days for all industries, or .72 per cent. But while small on the whole it was quite general, af-
fecting 39 out of the 46 industries included. Of the eighteen leading industries all but two, lager beer and machinery, show a decrease.

## AVERAGE YEARLY EARNINGS.

There was an increase in the average yearly earnings to each worker during the period covered. That the earnings for the latter year should be greater was to be expected, because of the marked upward tendency of the rate of wages and of the greater stability in the course of employment. The actual increase in 1900 as compared with 1899 amounted to $\$ 16.90$, or 4.28 per cent. This is not a very great amount, still it is encouraging. The tendency which it denotes is in the right direction. Of the leading industries, eleven show an increase in earnings, and seven a decrease.

## CAPITAL INVESTED.

Owing to the general expansion in business, there was an increase in the amount of the capital employed in manufacturing in 1900 over that of the preceding year, of 4.20 per cent. This increase is in full harmony with the changes in the other factors of production, and is shared in by thirty-seven of the forty-six industries included. Of the eighteen leading industries, all but flour and feed, leather, and lumber, etc., show an increase. In these cases the decreases amounted to 11.43, 2, and . 19 per cent. respectively.

## VALUE OF GOODS PRODUCED.

That the manufacturing industries in this state are steadily growing in productive capacity and importance is further illustrated by the facts that relate to the value of the products. The value of the output for 1900 exceeded that for 1899 by an amount equal to an increase of 8.46 per cent. This change was not alone due to a general rise in prices, but also to a larger product, as was plainly apparent from the returns of the proportion of business done. All of the industries included, however, do not show a greater product for the latter year. As in the case of the other factors considered, some
show an increase while others give a decrease. Those in the former class, however, are much more important, numbering thirtytwo, as against fourteen in the latter class. Among the leading industries, the following show a decrease: Agricultural implements, 7.44 per cent.; electric and gas apparatus, 16.15 per cent.; flour and feed, 16.15 per cent.; irọiı (malleable), 10.70 per cent.; sheet metal goods, 2.17 per cent. ; and wagons, carriages, etc., 26.22 per cent. The remaining twelve industries in this class give increases which more than offset the declines just enumerated. On the whole, it can be said that Wisconsin, during the past two years, has not only fully maintained the industrial development for which it has become known during the past decade, but is rapidly forging to the front as a manufacturing state.

## TOTAL AMOUN'I PAID AS WAGES.

In conformity with the general increase in the amount paid as wages was also greater in 1900 than in 1899. The increase amounted to 4.66 per cent., which corresponds closely to the rate increase in the average yearly earnings and in the capital invested, but is considerably below the rate of increase in the value of the product. Of the eighteen leading industries, all but six show an increase, the decline in the six cases being: Electric and gas apparatus, 7.44 per cent.; flour and feed, 16.15 per cent. ; iron (malleable), 10.70 per cent.; sheet metal goods, 2.17 per cent.; and wagons, carriages, etc., 26.22 per cent. When all industries are included, thirty-two show an increase and fourteen a decline.

## PART II.

## Population in Wisconsin, 1890, $1895,1900$.

This part of the report is entirely devoted to showing the population of Wisconsin as given in the censuses in 1890, 1895, and 1900. It shows for the state and for each minor civil division of the state the total population which was enumerated, together with the increase or decrease in both the number and per cent. in 1900 as compared with 1890 . The basic figures for 1890 and 1900 were obtained from the reports of the Federal census for these years, while those for 1895 were taken from the state census of that year. Both the basic figures and the calculations made upon them are conveniently arranged and so stated that the facts for any given place can be had almost at a glance.

The main facts of these censuses, those which give the actual population and the changes which took place between each enumeration, are found in table IV. This table, as will be noticed, is ruite long, covering in all about 45 pages, and is so made up as to give the situation in detail. The counties have been made the basis of classification and appear in alphabetical order. Under each county, also in alphabetical order, comes each town, city, and village located within the county. Opposite each of these units appears the number of the inhabitants in it at the time the census was taken, along with the changes which took place in these numbers during the decade which passed between the two Federal censuses. There are also other presentations in this part, some of which appear ahead of the main table, or table IV, and some after.

These tables, however, are in full harmony with the subject in hand. Some enlarge upon it by giving facts which are closely connected with those in the main table. Others, again, embody more or less fully the conclusions arrived at. Thus will be found, by counties, the population of the state at each census period since 1840 ; the growth of population as a whole since that period; the area in square miles of each county; summaries of population by counties, cities, and villages; the population in 1900 by congressional, senatorial and assembly districts, etc. The purpose of these presentations is to furnish facts concerning the population in this state that may be of some value and convenience to those who, for one reason or another, may desire information along this line.

That facts of this kind bearing upon the population are of some value will hardly be denied. Population statistics are useful in so many ways that it would be almost impossible to enumerate them all: They are in constant demand in the business world, by teachers, students, public officials and others. They are closely connected with social, economic, and political investigations. They are referred to everywhere and on nearly all occasions. In fact, those are few who for one purpose or another do not find it necessary or convenient to frequently consuit reports giving the number of inhabitants in the various places.

It is of course true that the facts relating to population which are presented here have in some form already appeared not only in official but also in private publications. Even the newspapers have had more or less to say upon this subject. Many of them have given the facts in detail. While in these and other ways the census figures have attained a fairly wide circulation, they are not so generally accessible as to cover all demands that are made for them, and this is particularly true among the classes where the reports of this Bureau are distributed. That this should be the case is not surprising. Official reports are limited in number and go mostly to business houses and public institutions. Private publications are usually very expensive. For these and other reasons information along these lines seldom finds its way into the home of the wage earner. In view of all this as well as of the importance of the figures
in question, it is felt that the Bureau is warranted in devoting some space in this report to a few of the main facts of the last three censuses.

Wisconsin is not an old state, and still not so very young. It was organized as a territory July 3d, 1836, and admitted to statehood May 29th, 1848. Wisconsin also includes within its borders 54,450 square miles of land surface, and 1,590 square miles of water surface. The water surface is made up of numerous little lakes found in all parts of the state.

The state does not only cover a considerable area of both land and water, but is divided into many minor civil divisions. Thus it has 70 counties, 1,045 towns, and 260 incorporated places. Of the incorporated places, 115 are cities and 145 villages.

Before presenting the main table, table TV, or the one which gives the population at the last three censuses in detail, it was thought proper, by way of introduction, to give three other tables which are not only important and interesting, but closely related to the subject in hand. The first in order of these tables relates to the population in the state as a whole since 1840, and gives not only the actual population at each census period since, but the per cent. of increase between each period. The second table shows the population during the same period by counties and for the state as a whole. The third table gives, in square miles, the surface area of each county in the state at the last census. The figures presented in these tables are certainly not without value. Directly as well as indirectly they shed a great deal of light upon the growth and progress of the state during the latter half of the nineteenth century.

Table I.

|  | Census Years. | Population. | Tncrease. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Number. | Per cent. |
| 1840 |  | 30,945 |  |  |
| 1850 |  | 305,391 | 274,446 | 886.9 |
| 1860 |  | 775,881 | 470,490 | 154.1 |
| 1870 |  | 1,054,670 | 278,789 | 35.9 |
| 1890 |  | 1,686,880 | 271,383 | 24.7 |
| 1900 |  | 2,069,042 | 382,162 | 22.7 |

The preceding table gives a rather striking picture of the growth of this state since 1840, or four years after it was organized as a territory and eight years before being admitted as a state. In 1840 , while still a territory, the population was 30,945 . Ten years later, or in 1850, two years after statehood had been gained, the population had grown to 305,391 , an increase of 274,446 persons, or of 886.9 per cent. In point of percentage, this is the greatest increase the state has ever experienced between any of the census periods. In point of number, however, it is exceeded by all the periods since that date save one: that between 1870 and 1880. The increase between the first two censuses given was undoubtedly largely due to immigration, not only from other states in this country, but from other countries. From 1850 to 1860 the increase amounted to 470,490 persons, or 154.1 per cent.; during the next ten years to 278,789 persons, or 35.9 per cent. In 1880 the whole population numbered 1,315,497 persons, and the increase during the period was 260,827 persons, or 24.7 per cent. In 1890 another increase of 371,383 persons was shown, and in 1900 the population stood at $2,069,042$ persons. During the last ten years, there was thus an increase of 382,162 persons, or 22.7 per cent. In point of the percentage, the last decade thus shows the smallest increase in sixty years. When it comes to the actual increase, however, it is the largest, except that during the decade ending in 1860. These increases are largely due to foreign immigration, especially from the German states. The growth of the state has been constant, showing substantial and uniform gains for a series of decades.

The above table thus points out not only what the population was at each one of the censuses taken, but it gives the increase between each, both in number and per cent. In the next table in order, which covers about two pages, will be found the population of the state by counties. This table presents some interesting features. Besides the actual population for each county at each census, which will enable comparisons showing the growth of each county from its beginning, the table also indirectly shows during which period each county was created as such.

## POPULATION OF WISCONSIN BÝ COUNTIES.

From 1840 to 1900 , Inclusive.
Table II.

| Counties. | 1810. | $18: 0$. | 1860. | $18 \% 0$. | 1880. | 1890. | 1900. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Adams |  |  |  |  |  |  |  |
| Ashland ${ }^{\text {i }}$ |  | 187 | 6,492 | 6,601 | 6,741 | 6,889 | 9,141 |
| Barron² |  |  | ${ }_{13}^{15}$ | 221 | 1,559 | 20,063 | 20,176 |
| Bayfield ${ }^{3}$ |  | $\ddot{489}$ | 353 | 344 | 7,024 | 15,416 | 23,677 |
| Brown | 2,107 | 6,215 | 11,795 | 25,168 | 34,078 | 39,164 | $14, \stackrel{192}{469}$ |
| Buffalo |  |  |  |  |  |  |  |
| Burnett ${ }^{\text {a }}$ |  |  | 3,864 12 | 11,123 | 15,528 3 | 15,997 | 16,765 |
| Calumet | 275 | 1,743 | 7,895 | 12,335 | 3,140 16,632 | 4,393 16,639 | 7,478 |
| Chippewa ${ }^{5}$ |  | +615 | 1,895 | 12,335 8,311 | 16,632 15,491 | 16,639 25,143 | 17,078 |
| Clark |  |  | 1,789 | 3,450 | 10,715 | 17,708 | 25,848 |
| Columbia |  | 9,565 | 24,441 | 28,802 | 28,065 |  |  |
| Crawford | 1,502 | 2,498 | 8,068 | 13,075 | 15,644 | 15,987 | 31,121 |
| Dane. | 314 | 16,639 | 43,922 | 53,096 | 53,233 | 59,578 | 69,435 |
| Dodge | 67 | 19,138 | 42,818 | 47,035 | 45,931 | 44,984 | 46,631 |
| Door |  |  | 2,948 | 4,919 | 11,645 | 15,682 | 17,583 |
| Douglas |  |  | 812 | 1,122 | 655 | 13,468 | 36,335 |
| Dunn. |  |  | 2,704 | 9,488 | 16,817 | 22,664 | 25,643 |
| ${ }_{\text {Eau Clarence }}{ }^{\text {E }}$. |  |  | 3,162 | 10,769 | 19,993 | 30,673 | 31,692 |
| Fond du Lac | 139 | 14,510 | $3 \ddot{4}, 184$ | 46,273 | 46,859 | 2,604 | 3,197 |
|  |  |  |  |  | 46,85 | 44,088 | 47,589 |
| Forest ${ }^{7}$ |  |  |  |  |  | 1,012 |  |
| Grant | 3,926 | 16,169 | 31,189 | 37,979 | 37,852 | 36.651 | 38,881 |
| Green | 933 | 8,566 | 19,808 | 23,611 | 21,729 | 22,732 | 22,719 |
| Green |  |  | 12,663 | 13,195 | 14,483 | 15,163 | 15,797 |
| owa | 3,978 | 9,525 | 18,967 | 24,544 | 23,628 | 22,117 | 23,114 |
| ron ${ }^{8}$ |  |  |  |  |  |  |  |
| Jackson. |  |  | 4,170 | 7,687 | 13,285 | -15,797 | 17,466 |
| efferson | 914 | 15,317 | 30,438 | 34,040 | 32,156 | 33,530 | 34,789 |
| Juneau. |  |  | 8,770 | 12,372 | 15,582 | 17,121 | 20,629 |
| Kenosha |  | 10,734 | 13,900 | 13,147 | 13,550 | 15,581, | 21,707 |
| Kewaunee |  |  | 5,530 | 10,128 | 15,807 | 16,153 | 17,212 |
| a Crosse |  |  | 12,186 | 20,297 | 27,073 | 38,801 | 42,997 |
| Lafayette |  | 11,531 | 18,134 | 22,659 | 21,279 | 20,265 | 20,959 |
| anglade ${ }^{9}$ |  |  |  |  | 685 | 9,465 | 12,553 |
| incoln ${ }^{10}$ |  |  |  | ..... | 2,011\| | 12,008\| | 16,269 |

[^3]
## POPULATION OF WISCONSIN BY COUNTIES.

From 1840 to 1900, Inclusive.
Table II.-Continued.

${ }^{1}$ Part taken to form part of Florence in 1882.
${ }^{2}$ Parts taken to form part of Florencne in 1882 and parts of Forest in 1885 ${ }^{3}$ Organized from part of Lincoln in 1885; parts taken to form Vilas and part of Iron in 1893: part of Forest annexed since 1890.
${ }^{4}$ Organized from parts of Ashland and Chippewa in 1883.
${ }^{5}$ Name changed from Shawanaw in 1864.
${ }^{6}$ Name changed from Bad Ax in 1862.
TOrganized from part of Oneida in 1893.

As said already, the preceding table relates to the population by counties at each one of the seven censuses that have been taken in this state by the Federal government.

The first among the Federal censuses which affected Wisconsin was that of 1840, or the sixth in order, as the first was taken in 1790 . When the first census was taken, that part of the country which now constitutes Wisconsin had, in all probability, no white settlers; at any rate, none were included in that census. At the second census, that of 1800 , Wisconsin was a part of the territory of Indiana, and was credited with a population of only 115 persons. In the third census, that of 1810, there is nothing to show that Wisconsin was included. But in 1820, when it had become a part of the territory of Michigan, Wisconsin is shown to have had a population of 1,313 persons. In 1830, when the fifth census was taken, 3,635 persons are shown for Wisconsip. In 1836, Wisconsin was organized as a territory and in the sixth census, that of 1840, was included the same as the other states and territories in the Union.

The above table is interesting mainly because it gives the population of each county in the state at each census period since 1840, and thus furnishes the necessary material through which the growth since that period may be ascertained. In looking over this table, it will be noticed that the changes which took place between each census are quite marked. Population has steadily increased, as has already been pointed out. The counties have increased in number, until at the last census there were about three and one-half times as many as in 1840. In that year, for instance, the state was divided into 22 counties. Ten years later there were 31 counties. In 1860 the number stood at 68. During the next decade, however, no further subdivisions took place, which no doubt is accounted for by the civil war. This was a period of anxiety and strife, which while it lasted left little room for internal improvements. In 1880, the counties were 63 in number; in 1890, 68, and in 1900 the state had 70 counties.

Rapid as has been the subdivision into more and more counties, this increase in the number of counties has not kept pace with tho increase in population. The growth in the latter case,
however, is more difficult to follow, owing to the frequently recurring subdivision into new counties. At least is this found to be so when an effort is made to trace the growth by counties instead of for the state as a whole.

The following table shows, by counties, in square miles, the land area for the state as given in the last census:

Table III. - AREA IN SQUARE MILES OF EACH OF THE 70 COUNTIES IN THE STATE, ALSO TOTAL AREA OF THE SIATE. WISCONSIN, 54,450 SQUARE MILES.


The preceding table gives the number of square miles of land surface of each county in the state, together with the total area for the state, and the average to each county. The water area is not included in these figures, for the reason that in this state it is of less importance.

It is hardly necessary to say that the mere size of the state and of the various subdivisions in the state is an interesting feature. In connection with a description of the character of the soil and other sources, the number of the inhabitants and other facts, it supplies the chief material facts that are needed for a fairly accurate estimate of their economic importance, and also open up a fertile field for many other interesting comparisons and calculations.

Chippewa county is in point of area the largest in the state, covering about 1,938 square miles of land surface. The population in this county, of late, has also shown a marked increase. The result of these facts is that at the last session of the legislature of this state, which met about six months after the census was taken, subdivided Chippewa county by creating a. new county, named Gates.

Ozaukee is the smallest county in the state, having a land area of only 226 square miles. Other counties with a comparatively small area are Milwaukee, Pepin, Kenosha, Racine, Calumet, etc.

With reference to their area, the several counties in the state may be classified as follows:

$$
\begin{aligned}
& 1,938 \text { sq. mi. in area . . . . . . . . . . . . . . . } 1 \text { county } \\
& \text { Between } 1,000 \text { and } 1,532 \text { sq. mi. . ...... } 12 \text { counties } \\
& \text { Between } 500 \text { and } 1,000 \text { sq. mi. ....... . } 43 \text { counties } \\
& \text { Under } 500 \text { sq. mi. . . . . . . . . . . . . . . . . . . } 14 \text { counties }
\end{aligned}
$$

$$
\text { Total number of counties . . . . . } 70 \text { counties }
$$

From these classifications it is seen that one county alone approaches 2,000 square miles of land surface. This, as already explained, is the county of Chippewa and is now divided so as to constitute the counties of Chippewa and Gates. The next class in order includes all counties having an area of from 1,000 to 1,532 square miles, and in this are found 12 counties, or over 17 per cent. of the total. The third class embraces all counties of from 500 to 1,000 square miles in area, and of these there are 43 , or over 71 per cent. of the whole number. In the last class we find 14 counties, with less than 500 square miles of area each. These 14 counties, however, while comparatively small in point of area are important in other respects. Most of them are among those that were settled the earliest, and in wealth and population some among them take a high rank.

In summing up the area of each county it is found that Wisconsin embraces within its borders a total surface area of 56,040 square miles, of which 54,450 square miles, or 97.16 per cent. is land surface, and 1,590 square miles, or 2.84 per
cent., is water surface. As there are 70 counties in the state, this is equal to an average of about 778 square miles of land and 22.7 square miles of water surface to each county.

The following table, or table IV, often designated as the main table, gives the population in 1890, 1895, by counties, towns, cities and villages, together with comparisons of the figures for 1890 and 1900 , showing the increase and decrease as the case may be, in the latter year. For 1900 the population of cities is given by wards as well as the total for the city.

## POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV.

| Counties. Towns, Cities, Villages. | United States Census. |  | State Census. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1890. | 1900. | 1895. | No. | Pr.ct. |
| ADAMS COUNTY- |  |  |  |  |  |
| Adams town ... | 488 |  |  |  |  |
| Big irlats town | ${ }_{322}$ | 588 | - 516 | $\begin{array}{r}+\quad 100 \\ +\quad 228 \\ \hline\end{array}$ | + 20.49 |
| Colburn town ${ }^{1}$ | 32 | $\stackrel{3}{392}$ | - 267 | $\rightarrow \quad 228$ | + 70.80 |
| Dell Prairie town | 448 | 581 | 516 | $\ldots 13$ | + 29.68 |
| Laston town | 376 | 487 | $4 \stackrel{1}{4}$ | + 111 | + 29.52 |
| Jackson town | 504 | 589 | 556 | + 85 | + 16.86 |
| Leola town ${ }^{1}$. | 240 | 384 | 255 | + 144 | + 60.00 |
| Lincoln town | 440 | 479 | 472 | + 39 | + 8.86 |
| N'ew Chester town | 462 344 | ${ }_{397}$ | 452 | + 133 | +28.00 |
| New Haven town | 746 | 693 | 382 | + 53 | + 15.40 |
| Preston town | 209 | 377 | 217 |  | + 80.38 |
| Quincy town. | 393 | 432 | 384 | + $\quad 16$ | $+\quad 9.188$ $+\quad 9.92$ |
| Richfield town ${ }^{1}$ | 335 | 417 | 337 | - 82 | + 24.47 |
| Rome town | 238 | 654 | 351 | + 416 | +174.79 |
| Springville town | 474 | 568 | 500 | + 94 | +19.83 |
| Strongs Prairie town | 870 | 958 | 955 | 88 | +10.11 |
| Total .. . . . . . . . | 6,889 | 9,141 | 7,532 |  |  |
|  |  |  |  | $\underline{+2,252}$ | $\underline{+32.69}$ |
| ASHLAND COUN'TY²- |  |  |  |  |  |
| Ashland city ... | 9,956 | 13,074 | 12310 | + 1,318 | +31.31 |
| ward 1 | 1,445 | 1,262 | 2,588 |  | + 31.01 |
| ward 2 | 1,714 | 1,681 | 2,218 |  |  |
| ward 3 | 1,772 | 1,503 | 1,382 | ... |  |
| ward 4 | 2,301 | , 928 | 2,272 |  | .......... |
| ward 5 | 2,721 | 1,254 | 2,528 |  |  |
| ward 6 |  | 1,435 | 1,352 |  |  |
| ward 7 |  | 1,397 |  | ... | ...... |
| ward 8 |  | 1,559 | .... |  | . |
| ward 9 |  | 1,171 |  |  |  |
| ward 10 |  | 884 |  |  | ........ |
| Ashland town ${ }^{4}$ | 1,507 | 709 |  |  |  |
| Butternut town | 1,210 | 1,680 |  | + 470 | + 38.84 |
| Gordon town ${ }^{5}$ |  | 1,231 |  | + 470 |  |
| Jacobs town ${ }^{6}$ | 1,277 | 1,270 |  | - 7 | -.- .0 .0 |
| La Pointe town ${ }^{4}$ |  | 292 |  |  |  |
| Morse town ${ }^{7}$ |  | 1,023 |  |  |  |
| Sanborn town ${ }^{4}$ |  | 1,270). |  |  |  |
| La Pointe Indian Reservation.. |  | 627. |  |  |  |
| Total | ${ }^{3} 20,063 \mid$ | 20,176 | 17,241 | $+113$ | + . 56 |

[^4]
## POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV-Continued.

${ }^{1}$ Organized from part of Turtle Lake town since 1890.
${ }^{2}$ Organized from part of Stanley town since 1890.
${ }^{3}$ Formerly in Chetek town, incorporated since 1890.
${ }^{4}$ Included in Chetek village in 1890; part taken to form Dovre town since 1890.
${ }^{5}$ Exclusive of population of Chetek village.
${ }^{6}$ Organized from part of Chetek town since 1890. In 1900 Chetek city had 531, Chetek town 692. Dovre town 941, total 2,164: in 1890 Chetek village had 406, Chetek town 1,322, total 1,728; increase 436 or 25.2 per cent.
${ }^{7}$ Rice Lake town organized from part of Stanford town since 1890; in 1900 Rice Lake town had 685. Stanford town 659, total 1,344; in 1890 Stanford town had 589; increase 755 or 128.1 per cent.
${ }^{8}$ Part taken to form Cameron village since 1890 ; in 1900 Cameron village had 394, Stanley town 738, total 1,132; in 1890 Stanley town had 748; Increase 384 or 53.3 per cent.

Part taken to form Almena town since 1890. 1890. In 1900 Almena town, Turtle
${ }^{10}$ Organized from part of Almena town since 1890 . Ively $713,695,326$; total 1,734; in 1890 Turtle Lake town had 874 ; increase 858 or 98.3 per cent.
${ }^{12}$ Part taken to form Iron River town since 1890.
${ }^{12}$ Organized from parts of Bayfield, Drummond; Mason and Washburn towns since 1890 .
${ }^{13}$ Parts taken to form Pratt and Iron River towns since 1890 . 770. Drummonu town 790, Iron! River town 2.439, Mason 1.210. Pratt 482, Wash hurn 6.814, total 12.305 ; in 1890 Bavfield 527, Drummond 596, Mason 1,095, Washhurn 3,699 , total 6,017 ; increase 6,288 or 104.5 per cent.

POPULATION OF WISCONSIN, 1890, 1900, 1895.
Table IV-Continued.



[^5]PGPULATION OF WISCONSIN, 1890, 1900, 1895.
Table IV-Continued.

| Counties, Towns, Cities, Villages. | United States Census. |  | State Census. | Tncrease + Decrease in 1900, as compared with 1890 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1890. | 1900. | 1835. | No. | Pr.ct. |
| BUFFALO COUNTY-Continued. ${ }^{\text {a }}$ ( ${ }^{\text {a }}$ |  |  |  |  |  |
| Gilmanton town .................. | 599 | 829 | 723 | + 230 | +38.39 |
| Glencoe town ......... | 692 | 787 | 805 | ${ }_{33}^{95}$ | +13.72 |
| Lincoln town | 556 | 589 | 568 | + $\quad 34$ | +10.63 +182 |
| Maxville town | ${ }_{6}^{602}$ | 666 366 | ${ }^{653}$ | $\pm \quad 64$ | $\begin{array}{r}\text { + } \\ +\quad 5.91 \\ \hline\end{array}$ |
| Milton town . | 889 | 366 872 | 392 892 | - 44 |  |
| Modena town | 828 503 | - 872 | ${ }_{928}$ | + 705 | +140.15 |
| Mondovi city | 587 | 1,622 | 644 | 35 | + 5.96 |
| Montana town | 840 | 767 | 803 | - 73 | -8.69 |
| Naples town . | 727 | 886 | 806 | + 159 | + 21.87 |
| Nelson town | 1,919 | 1,505 | 1,582 | - 414 | $-21.57$ |
| Waumandee town | 853 | 813 | 912 |  |  |
| Total | 15,997 | 16,765 | 16,931 | + 768 | + 4.79 |
| BURNETT COUNTY- $1,447 \quad 1,688$ ( $1,713+241+16.65$ |  |  |  |  |  |
| Grantsburg town . | 1,447 | 1,688 | 1,518 | + 202 | + 49.26 |
| Grantsburg village | ${ }_{678}$ | 708 | 1,148 | $+\quad 30$ | + 4.42 |
| Meenon town ${ }^{1}$ |  | 1,252 |  |  |  |
| Rusk town ... | 232 | 630 | 437 | + 398 | +171.55 |
| Trade Lake town | 825 | 1,174 | 1,091 | + 349 | + 42.30 |
| Wood Lake town | 801 | 1,414 | 985 |  | + 76.52 |
| Total | 4,393 | 7,478 | 5,892 | + 3,085 | + 70.22 |
|  |  |  |  |  |  |
| Brillion town | 1,510 | 1,563 |  | $1+\quad 273$ | + 46.89 |
| Brillion village ... | 1,629 | 1,539 | 1,630 | - 90 | - 5.52 |
| Brothertown town | 1,362 | 1,343) | 1,326 | - 19 | - 1.39 |
| Chilton city ...... | 1,424 | 1,460 | 1,601 | + 36 | + 2.52 |
| Chilton town | 1,349 | 1,350 |  | $4+\quad 35$ | $\pm 1.076$ |
| Harrison town | 1,987 | 2,022 |  |  |  |
| Hew Holst village ${ }^{2}$..... | 1,735 | 1,893 | 1,846 | $\underline{+}+158$ | + 9.10 |
| New Holstein town | 1,686 | 1,2991 | 1.758 | 81- 387 | 1- 22.95 |
| Stockbridge town | 1,948 | 1,942 | 2,023 |  | 6- .31 |
| Woodville town . | 1,427 | 1,315 | 1,475 | - 112 | 7.84 |
| Total | 16,639 | 17,028 | 17,744 | $4+489$ | + 2.64 |
|  |  |  |  |  |  |
| Anson town | 533 | ${ }_{924}^{697}$ |  | $48+\quad 164$ | + +38.76 |
| Arthur town | 622 1,584 | 1,678 |  | $81+\quad 94$ | + 4 + 5.93 |
| Auburn town |  | 1,854 |  | $71+1,034$ | $4+126.09$ |
| Big Bend town Rloomer town | 1,720 | 1,470\| | 1,979 | $91-250$ | ) -14.53 |
| Bloomer village | 631 | 811 |  | $991+18$ | 1+28.52 |
| Bovd village ${ }^{\text {Cadott village }}$ | 545 889 | 674 840 |  | \|- 49 | 9\|- 5.51 |

[^6]
## PŪPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV-Continued.


[^7]Table IV-Continued.

| Counties, Towns, Cities, Villages. | United States Census. |  | State Census. | Increase +Decrease -in 1900, as com-pared with 1890 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1890. | 1900. | 1895. | No. | Pr.ct. |
| CLARK COUNTY-Continued |  |  |  |  |  |
| Colby town ${ }^{1}$................... | 1,106 | 754 | 748 | - 352 | $-31.82$ |
| Eaton town ${ }^{3}$ | 707 | 602 | 479 | - 105 | - 14.85 |
| Fremont town | 411 | 762 | ${ }^{49}$ | + 351 | + 85.40 +11.72 |
| Grant town | 1,143 | 1,277 | 1,212 | + 134 | + |
| Green Grove town | 242 | 708 | 319 559 |  |  |
| Greenwood city ${ }^{4}$. Hewett town |  | 708 292 | 223 | +...14i | $\underline{+93.37}$ |
| Hewett town | 151 5781 | 8311 | 223 874 | + $\quad 145$ | + 43.77 |
| Hoard town | 310 | 525 | 372 | + 215 | + 69.35 |
| Levis town. | 329 | 746 | 481 | + 417 | +126.75 |
| Longwood town ${ }^{\text {b }}$ |  | ${ }^{422} 5$. |  |  |  |
| Loyal town ${ }^{7}$.... | 979 | 995 | 937 | $+16$ | $+1.63$ |
| Loyal village ${ }^{7}$ | 453 | ${ }_{645}^{645}$ | 418 | + 258 | + 56.95 |
| Lynn town ... <br> Mayville town ${ }^{2}$ | 1,450 | 1,581 | 1,398 | + ${ }^{208}$ | + +9.03 |
| Mead town ${ }^{5}$... |  | 103. |  |  |  |
| Mentor town | 684 | 1,009 | 842 | + 325 | + $+\quad 47.51$ $+\quad .67$ |
| Neillsville city | 1,936 | $67{ }^{2,104}$ | $796^{2,206}$ |  |  |
| ward 1. | 607 | 671 | 796 | ........ |  |
| ward 2 | 735 | 642 | 679 |  |  |
| ward 3 | 594 | 791 | 731 |  |  |
| Pine Valley town | 886 | 1,130 | 1,032 | + 244 | $+27.54$ |
| Reseburg town ${ }^{6}$ |  | 615 | 485 |  |  |
| Sherman town .. | 470 | 615 | 533 | 145 | $+30.85$ |
| Sherwood Forest town | 155 | ${ }_{856}^{231}$ | 182 | 76 | + 49.03 |
| Thorp town ${ }^{\text {8 }}$ | ${ }^{9704}$ | 856 838 | 635 829 | 152 | + 21.58 |
| Thorp village ${ }^{10}$ | 723 | 838 | 729 | 133 | +18.90 |
| Unity town .. | 591 | 817 | 635 | 26 | + 4.39 |
| Warner to wown | $200 \mid$ | 522 | 315 | + 322 | +161.00 |
| Weston town . | 863 | 1,000 | 889 | + 137 | + 15.87 |
| Withee town ${ }^{11}$ | 724 | 1,004 | 628 |  | + 38.67 |
| Worden town ${ }^{12}$ |  | 645 | 415 |  |  |
| York town | 836 | 380 | 927 | + 144 | +17.22 |
| Total | 17,708 | 25,848 | 21,342 | $2+8,140$ | $1+45.96$ |

${ }^{1}$ Part taken to form Colby city and part of Abbotsford village since 1890.
${ }^{2}$ Part taken to form part of Abbotsford village since 1890. In 1890 Colby town had 1,106, Mayville town 1,450, total 2,556; in 1900 Abbotsford village had 443, Colby city "westward"' 454, Colby town 754, Mayville town 1,581, total 3,232; increase 676 or 26.4 per cent.
${ }^{3}$ Part taken to form Greenwood city since 1890
${ }^{4}$ Organized from narts of Eaton and Warner towns since 1890.
${ }^{5}$ Organized from part of Warner town since 1890. In 1890 畐aton town had 707, Warner town 691. total 1,298. in 1900 Eaton town had 602, Greenwood city 708, Mead town 103, Warner town 617, total 2.030; increase 732 or 56.4 per cent.
${ }^{6}$ Longwood and Reseburg towns organized from parts of Hixon town since 1890. In 1890 Hixon town had 578; in 1900 Hixon town had 831, Longwood town 422. Reseburg town 615, total 1,868; increase 1.290 or 223.1 per cent.
${ }^{7}$ Loyal village organized from part of Loyal town since 1890. In 1890 Loyal town had 9 iy; in 1900 including Loyal village 1,640 ; increase 661 or 67.5 per cent. sIncluded part of Thorp village in 1890. Part taken to form Worden town since 1890.
${ }^{9}$ Exclusive of nopulation of Thorp village.
${ }^{10}$ Formerly in Thorp and Withee towns; now independent.
${ }^{11}$ Jncluded part of Thorp village in 1890.
${ }^{12}$ Organized from part of Thorp town since 1890. In 1890 Thorp town had 704, Thorp village 723, and Withee town 724; in 1900 Thorp town had 856, Thorp village 838. Withee town 1,004, and Worden town 645; an increase of 1,192 or 55.4 per cent.

Table IV-Continued.

| Counties, Towns, Cities, Villages. | United States Census. |  | State Census Census | $\left\lvert\, \begin{gathered} \text { Increase }+ \\ \text { DDecrease } \\ \text { in 1900, ascom, } \\ \text { pared with } 1840 \end{gathered}\right.$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1890. | 1900. | 1895. | No | Pr.ct. |
| COLUMBIA COUNTY- |  |  |  |  |  |
| Arlington town ....... | 828 |  |  |  | - 4.10 |
| Cambria village ${ }^{1}$. | $\begin{aligned} & 8,38 \\ & 1,336 \\ & 1,974 \\ & 1,977 \end{aligned}$ | $\begin{aligned} & 1,94 \\ & 1,188 \\ & 561 \\ & 2.349 \end{aligned}$ | 1,318 | - 148 | 二 11.08 |
| Columbus city |  |  |  | + 37 | - 71.61 |
| ${ }_{\text {ward }}^{\text {ward }} 12 \ldots$ |  |  |  |  | + 18.8 |
| ward ${ }_{\text {ward }}{ }_{3}$..... |  |  |  |  |  |
| Columbus town | $80_{0}$ | 774 | 601 805 |  |  |
| Courtland town ${ }^{2}$ |  | - 74 | 798 | - 56 | 6 |
| Dekorra town ${ }^{\text {cort }}$ Fort | 7869 | ${ }_{908}^{808}$ | ${ }_{8}^{873}$ | 39 | + 4.48 |
| Fountain Prairie town | ${ }^{646}$ |  |  |  |  |
| Hampden town ....... | 1,315 | $\begin{array}{r}1,409 \\ \hline 188\end{array}$ | 1,366 | 942617 | $4{ }^{+}+{ }_{+}+1.14$ |
| Killbourn City village ${ }^{8}$ | ${ }_{961}$ | 1.134 | 1,207 |  | + 18. |
| Leedstown | 1,171 | 1,214 ${ }^{1}$ | 1, ${ }_{934} 17$ |  |  |
| Lodi town ${ }^{10}$ |  |  |  |  |  |
| Lodi village ${ }^{10}$ | 11639736723 | 750 1.068 | 743 <br> 975 <br> 87 |  | 17.37 |
| Lowville town |  | 1,7684 |  |  |  |
| Marcellon town | 845 |  | ${ }_{853}^{821}$ |  |  |
| Newport town ${ }^{\text {d }}$ |  | - $\begin{array}{r}585 \\ 1,2265\end{array}$ | $\begin{array}{r}\text { 1. } \\ 1.264 \\ \hline\end{array}$ |  |  |
| Pacific town | 1,127\| |  |  |  |  |
| Pardeeville village ${ }^{\text {i }}$ |  | 289 <br> 788 <br> 8 | 1.272 <br>  <br>  <br> 57 | + 34 | + 13.33 |
| Portage city | 5,143 | 5,459 | 5,419 | $+$ | + 7.14 |
|  |  |  |  |  |  |
| ward 3 . |  |  |  |  | .......... |
| ward 4 |  |  |  |  |  |
| ward 5 |  | ${ }^{9} 288$ |  |  |  |
| Poynette village |  |  |  | $\begin{array}{r} 116 \\ 716 \end{array}$ |  |
| Randolph town ${ }^{\text {R }}$ Randolinh | $\begin{gathered} 1880 \\ 88 \\ 79 \end{gathered}$ | $\begin{aligned} & 1951 \\ & 951 \\ & 190 \end{aligned}$ | ${ }^{7931} 9$ |  |  |
| Total for Randolph village in |  |  | 134 | + 111 | + ${ }^{8} 40.50$ |
| Columbia and Dodge counties |  | 190 | $4321+$ | 333 |  |
| Soott town | $\begin{aligned} & 3,99 \\ & 824 \\ & 8 \end{aligned}$ | $\begin{aligned} & 479 \\ & 811 \\ & 751 \end{aligned}$ |  |  | +82.22 |
| Springdale town |  |  |  | $\begin{array}{r} 13 \\ +\quad 48 \\ +\quad 42 \end{array}$ | +8. <br> +1. <br> 6. <br>  |
| West Point town |  | $\begin{array}{r} 751 \mid \\ 743 \\ 1,158! \end{array}$ |  |  |  |
| Wyocena town ${ }^{12}$ |  |  |  |  |  |
| Total | 28.350\| | 31,1211 | $308681+2.771$ |  | $+9.77$ |

${ }^{1}$ Formerly in Courtland and Randolph towns, now independent.
ince 1890. part of Cambria village in 1890; part annexed to Randolph village
${ }^{3}$ Exclusive of population of Cambria village.
${ }^{4}$ Included part of Cambria village in 1890.
${ }^{5} \mathrm{Part}$ of Courtland town annexed since 1890 . In 1890 Cambria village had 524, Courtland 815, Randolph 880 and Randolph village (westward" 79, total 2.298 ; in 1900 Cambria village had 561, Courtland 820, Randoph 951, Randolph viliage "westward" 190 , total 2,522 ; increase 224 or 9.7 per cent.
${ }^{6}$ Poynette village, formerly in Dekorra town, now independent.
${ }^{7}$ Exclusive of population of Poynette village. In 1890 Dekorra ad 869, Poynette village 517, total 1,386; in 1900 Dekorra 908 , Poynette 633, total 1,541 ; in crease 155 or 11.2 per cent.
${ }^{8}$ K illowurn City village, formerly in Newport town, now independent.
${ }^{9}$ Exclusive of population of Kilbourn City village. In 1890 Kilbourn City vil
lage had 961, Newport town 487, total 1,448; in 1900 Kilbourn City village had
$1+4$, Newport town 585, tota. 1,719 ; increase 271 or 18.7 per cent.
${ }^{11}$ Lodi village, formerly in Lodi town, now independent.
${ }^{11}$ Exclusive of population of Lodi village. In 1890 Lodi town had 639, Lodi vil
lage 736, total 1,375; in 1900 Lodi town 750 , Lodi village 1,068, total 1818; inçrease 443 or 32.2 per cent.
${ }^{12}$ Pardeeville vıage organized from part of Wyocena town since 1890. In 1900 Pardeeville village 788 , Wyocena town 1,158, total 1,946 ; in 1890 Wyocena 1,303 ;
increase 643 or 49.3 per cent.

POPULATION OF WISCONSIN, 1890, 1900, 1895.
Table IV-Continued.

| Counties, Towns, Cities, Villages. | United States Census. |  | State Census. | $\left\lvert\, \begin{gathered}\text { Increase }+ \\ \text { Decrease } \\ \text { in 1900, as com- } \\ \text { pared with } 1890\end{gathered}\right.$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1880. | 1900. | 1895. | No. | Pr.ct. |
| CRAWHORD COUNTY- |  |  |  |  |  |
| Bridgeport town ........ | 410 | 357 |  | - 531 | $-12.92$ |
| Clayton town ${ }^{1}$.. | 22,050 | 2,080 |  | $1+30$ | + 1.46 |
| De Soto vilage (part of ${ }^{3} \ldots \ldots \ldots$. | 79 | 87 | 111 |  | + 10.18 |
| Total for De Soto village in Crawford and Vernon counties | 355 | 387 |  | + ${ }^{2}$ | + 9.01 |
| Eastman town ${ }^{\text {Ean }}$ (............... | 1,436 | 1,471 | 1,483 | - 35 | + 2.43 |
| Freeman town ${ }^{3}$ | 41,417 | 1,533 | 1,647 | 116 | + 8.19 |
| Haney town | 738 | - 868 |  | - 130 | + 17.61 |
| Lynxville village | 243 | 322 |  |  | + 32.51 |
| Marietta town ........ | 1,300 | 1,262 |  | - 38 | - 2.92 |
| Prairie du Chien city | 3,131 | 3,232 | 3,286 | $+101$ | + 3.22 |
| ward 1 | 629 | 626 | 695 |  |  |
| ward 2 | 1,131 | 1,049 | 1,085 |  |  |
| ward 3 | 1,063 | 1,211 | 1,146 |  |  |
| ward 4 | 308 | 346 | 360 |  |  |
| Prairie du Chien town | 602 | 595 | 592 | - 7 | - 1.12 |
| Scott town | 1,079 | 1,004 | 1,077 |  | - 6.95 |
| Seneca town .......... | 1,197 | 1,200 | 1,158 | + |  |
| Soldiers Grove village ${ }^{1}$ |  | -680 | 1,450 |  |  |
| Utica town .... | 1,389 | 1,548 | 1,497 | + 159 | + 11.44 |
| Wauzeka town ${ }^{5}$ | , 916 | 576 |  |  | - 37.11 |
| Wauzeka village ${ }^{5}$ |  | 471 | 411 |  |  |
| Total | 15,987 | 17,286 | 17,203 | + 1,299 | + 8.12 |
| DANE COUNTY- |  |  |  |  |  |
| Albion đown .... | 1,516 | 1,590 | 1,588 | + 74 | + 4.88 |
| Belleville village ${ }^{\text {b }}$ | 319 | 385 | 409 | + 66 | + 20.68 |
| Berry town ........ | 1,003 | 934 | 1,012 |  | - 6.87 |
| Black Earth town | 742 | 796 | 1 809 | + 54 | + 7.27 |
| Blooming Grove town | 999 1.449 | 1,119 | 1,067 | $\begin{array}{ll} 7+ & 10 \\ 91- & 401 \end{array}$ | $\begin{array}{r}+12.01 \\ \hline 27.67\end{array}$ |
| Blue Mounds town ${ }^{\text {P }}$ Bristol town | 1,449 1,093 | 1,048 1,268 | 1,069 1,193 | $\left.\begin{array}{ll} 9 & 401 \\ 3 \end{array} \right\rvert\,$ | +27.67 +16.01 |
| Burke town | 1,129 | 1,230 | 1,247 | $7+\quad 101$ | +-8.94 |
| Christiana town | 2,379 | 2,401 | 2,380 | $0+\quad 22$ | - |
| Cottage Grove town | 1,305 | 1,307 | 1,319 | $9+\quad 2$ | + . 15 |
| Cross Plains town | 1,103 | 1,206 | 1,171 |  | + 9.33 |
| Dane town ${ }^{9}$ | 1,161 | 933 |  | 6- 228 | - 19.63 |
| Dane village ${ }^{\text {a }}$ |  | 280 | 274 |  |  |
| Deerfield town ${ }^{10}$ | ${ }^{11} 1,235$ | 1,104 | 1,200 | -- 131 | -10.60 |
| Deerfield village ${ }^{10}$ | 338 | 515 | 519 | $9 \mid+.177$ | + 52.36 |

[^8]POPULATION OF WISCONSIN, 1890, 1900, 189.5.

Table IV-Continued.

| Counties, Towns, Cities, Villages. | United States Census. |  | State Census. | $\left\lvert\, \begin{gathered}\text { Increase - } \\ \text { Decrease - } \\ \text { in } 1900 \text { as com- } \\ \text { pared with } 1890\end{gathered}\right.$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1890. | 1900. | 1895. | No. | Pr.ct. |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Dunn town | 1,113 | 1,155 |  | - 42 | + 3.77 |
|  |  |  |  | + +56 +538 |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
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|  |  |  |  |  |  |
| Middleton town | 1,433 | 1,550 | 1,508 |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Perry town |  | 1,050 |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Springdale town | 1,120 | 1,050 |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| ward 2 |  |  |  |  |  |
| Sun Prairie town |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Vienna town | 1,009 | 1,0488 | 1,1551 |  |  |
|  |  |  |  |  |  |
| Windsor town | 1,329 | 1,809 |  | 480 | + 36.11 |
|  |  |  |  |  |  |
| Total | 59,578 | 69,435 | 65,669 | + 9,857 | $+16$ |

${ }^{1}$ Mazomanie village, formerly in Mazomanie town, now independent.
${ }^{2}$ Exclusive of population of Mazomanip village. In 1890 Mazomanie town had 448, Mazomanie village 1,034, total 1,482; in 1900 Mazomanie town had 493, Mazomanie village 902, total 1,395; decrease 87 or 5.87 per cent.
${ }^{3}$ Oregon village, formerly in Oregon town, now independent.
${ }^{4}$ Exclusive of population of Oregon village. In 1890 Oregon town had 841, Oregon village 595, total 1,436 ; in 1900 Oregon town had 881, Oregon village 697, total 1,578: increase 142 or 9.88 per cent.
${ }^{5}$ Waunakee village, formerly in Westport town, now independent.
${ }^{9} \mathrm{Exclusive}$ of population of Waunakee village. In 1890 Waunakee village had 312, Westport town 1.581, total 1.893; in 1900 Waunakee village had 443, Westport town 1,472, total 1,915 ; increase 22 or 1.16 per cent.

POPULATION OF WISCONSIN, 1890, 1900, 1895.
Table IV-Continued.

| Counties, Towns, Cities, Villages. | United States Census. |  | State Census. | $\|$Increase + <br> Decrease - <br> in 1900, as com- <br> $\rho$ ared with 1890 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1890. | 1900. | 1895. | No. |  | Pr.ct. |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| ward ${ }^{\text {ward }}$ |  | 1,408 11, | 1,479 |  |  |  |
|  |  |  |  |  |  |  |
| Burnett town |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Chester town |  | 1,236 |  |  |  | - 4.40 |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Horicon city ${ }^{\text {s }}$ |  | 1,563 |  |  |  | - 7.51 |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Lebanon town ..................... |  | 1 1,344 |  |  |  | - 4.88 |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Mard 1 ...................................... 486 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Oak Grove tow |  | 1,129 |  |  |  | 2.92 |
| Randolph village (east ward) $\quad 326 \quad$ b48 $\quad 454 \mid+\quad 222+68.69$ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
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${ }^{1}$ Fox Lake village, formerly in Fox Lake town, now independent.
${ }^{2}$ Exclusive of population of Fox Lake village. In 1890 Fox Lake town had 802, Fox Lake village 814, total 1,616; in 1900 Fox Lake town had 741 , Fox Lake village 890 , total 1,631 ; increase 15 or .9 per cent.
${ }^{3}$ Incorporated as a city since 1890.
${ }^{4}$ Lomira village organized from part of Lomira town since 1890. In 1900 Lomira town had 1.560, Lomira village 492, total 2,052; in 1890 Lomira town had 1,816; increase 236 or 12.99 per cent.
${ }^{5}$ Lowell and Reeseville villages, formerly in Lowell town, now independent.
${ }^{6}$ Exclusive of population of Lowell and Reeseville villages. In 1890 Lowell town
dad 1859 Lowell village 304 , and Reeseville village 329 , total 2,492; in 1900
Lowell town had 1, 113 , Lowell village 333, and Reeseville village 393, total 2,439 ; decrease 53 or 2.1 per cent.
${ }^{7}$ Part of Williamstown town annexed to Mayville city since 1890. In 1890 Mayville city had 1,165. Williamstown town 1.031. total 2,196; in 1900 Mayville city had 1,815 , Williamstown town 1,015, total 2.830 ; increase 634 or 28.87 per cent.
${ }^{8}$ Theresa village organized from part of Theresa town since 1890. In 1900 Theresa town had 1,433, Theresa village 355, total 1,788; in 1890 Theresa town had 1,761; increase 27 or 1.53 per cent.

Table IV-Continued.

${ }^{1}$ Part of Sturgeon Bay town annexed to Sturgeon Bay city since 1890. In 1890 Sturgeon Bay city had 2,195, Sturgeon Bay town 1,135, total 3.330 ; in 1900 Sturgeon Bay city had 3,372, Sturgeon Bay town 585, total 3,957; increase 627 or 18.8 per cent.
${ }^{2}$ Part of Superior town annexed to Superior city since 1890. In $1890{ }^{\circ}$ Superior city had 11,983 , Superior town 361 , total 12.344 ; in 1900 Superior city had 31,091 , Superior town 1,445, total 32,536 ; increase 20,192 or 163.57 per cent.

POPULATION OF WISCONSIN, 1890, 1900, 1895.
Table IV-Continued.

| Counties, Towns, Cities, Villages. | United States Census. |  | State Census. | $\left\{\begin{array}{c} \text { lncrease }+ \\ \text { Decrease - } \\ \text { in 1900, as com- } \\ \text { pared with } 1840 \end{array}\right.$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1890. | 1900. | 1895. | No. | Pr.ct. |
| DOUGLAS COUNTY-Continued. |  |  |  |  |  |
| ward 6 | 993 | 2,488 | 1,670 |  |  |
| ward |  | 4,621 1,495 | 3,713 |  |  |
| ward 9 |  | 3,100 | 2,624 |  |  |
| ward 10 |  | 1,061 |  |  |  |
| Superior town ${ }^{2}$ | 361 | 1,445 | 1,169 | + 1,084 | +300.28 |
| Total $\ldots$ | 13,468 | 36,335 | 29,986 | $+22,866$ | +169.77 |
| DUNN COUNTY- |  |  |  |  |  |
| Colfax town .... | 672 | 1,083 | 861 | + 411 | +61.16 |
| Dunn town .. | 1,258 | 1,410 | 1,040 | + 152 | + 12.08 +10.59 |
| Eau Galle town | 1,218 | 1,3472 | 1,205 | + 129 | + 10.59 +16.83 |
| Elk Mound town | 695 | 812 | 684 | $+\quad 125$ | + 10.88 |
| Grant town ...................... | 542 486 |  | 499 | + 15 | + $\quad 3.09$ $+\quad 3.09$ |
| Hay River town ................ | 486 | $\stackrel{501}{ }$ | 488 |  | + 25.53 |
| Menomonie cety | ${ }_{\text {1,417 }}^{1,176} \mathbf{~ 5 , 4 9 1}$ | 5,655 | 6,198 | + 164 | + 2.98 |
|  |  | $\begin{array}{ll}1,314 & 5,605 \\ 1,148 \\ 1,187 & \\ 1,006 & \end{array}$ | 1,358 ${ }^{\text {6,198 }}$ |  |  |
| ward ${ }^{2}$ |  |  | 1,493 |  |  |
| ward 3 |  |  | 1,112 |  |  |
| ward 4 |  |  | 2,235 |  |  |
| Menomonie town | 1,633 | 1,849 | 1,859 | + 216 | + 13.22 |
| New Haven town | 521 | 620 | 493 | + 99 | + 19.00 |
| Otter Creek town | 342 | 337 375 | 300 |  | + 1.46 |
| Peru town ...... | $\stackrel{342}{ }$ | 1,484 | 348 1,093 | + 357 | + 31.67 |
| Red Cedar town | 1,127 | 1,484 | 1,536 | - 197 | - 23.36 |
| Rock Creek town | 620 | 609 | 544 | - 11 | - 1.77 |
| Sheridan town | 423 | 569 | 543 |  | +34.51 +2283 |
| Sherman town | ${ }^{635}$ | - 780 | 1, 736 |  |  |
| Springbrook town | 1,267 1,113 | 1,287 | 1,336 |  | $\begin{array}{r}+\quad .86 \\ \hline\end{array}$ |
| Stanton town | 1,113 | 1,479 | 432 | + $\quad 37$ | + 8.37 |
| Tiffany town | 1,118 | 1,219 | 705 | + 101 | +9.03 +9.05 |
| Weston town | 690 | 867 | 855 | + 177 | + 25.65 |
| Wilson town | 481 | 452 | 466 |  |  |
| Total | 22,664 | 25,043 | 25,006 | + 2,379 | $+10.49$ |
| EAU CLAIRE COUNTY- |  |  | 767 |  |  |
| Altoona city Augusta city | 1,187 | 1,256 | 1,356 | 6 + 69 | + 5.81 |
| Bridge Creek town |  | 1,280 | - 1,155 | + 158 | + 14.08 |
| Brunswick town |  |  | 1,595 | 5- 51 | - 2.88 |
|  | - 1,765 |  | 684 | $41+137$ | + 22.06 |
| Drammen town. |  | 6 - 721 | ${ }_{3.391} 18,637$ |  |  |
| Eau Claire city | $3.078{ }^{17,415}$ | 17,517 |  |  |  |
| ward ${ }_{\text {ward }}$ |  | $\begin{aligned} & 11,581 \\ & 11.595 \end{aligned}$ |  | .................... |  |
|  | $11,604$ | $\begin{aligned} & 11,597 \\ & 1,869 \end{aligned}$ | $\begin{aligned} & 3.2916 \\ & 11.776 \end{aligned}$ | $\|\ldots . . .$.$\| ..........$ |  |
| ward ${ }_{\text {ward }}$ | $1,975$ | $\begin{aligned} & 1,869 \\ & 1,988 \end{aligned}$ | 11,040 |  |  |
| ward ${ }^{\text {w }}$ | 11,035 | 11.422 | 11.627 | 1........\|....... |  |
| ward 6 | 11,588 18.893 | \|1.988 | 4.218 | $\|\ldots \ldots . .\|\ldots \ldots\|$. |  |
| warr 7 | $\begin{aligned} & 13.893 \\ & 12.128 \end{aligned}$ |  | $\begin{aligned} & 2.226 \\ & 12,224 \end{aligned}$ |  |  |
| ward 8 | \|2,164 | $\begin{aligned} & 12.019 \\ & 12.103 \end{aligned}$ |  |  |  |
| ward 9 |  | \|1,846 | 2,224 |  |  |
| ward 10 |  |  |  |  |  |

Table IV-Continued.

| Counties, Towns, Cities, Villages. | United States Census. |  | $\begin{gathered} \text { State } \\ \text { Census. } \end{gathered}$ | Increase + Decrease in lyUu, as com pared with 1890 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1890. | 1900. | 1895. | No. | Pr.ct. |
| EAU CLAIRE COUNTY-Con. |  |  |  |  |  |
|  |  |  |  |  |  |
| Fincoln town | 645 | 947 | 1781 | + | + 46.82 |
|  |  |  |  |  |  |
| Otter Creek town | 658 | - 874 |  | + 316 | + 56.63 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Total | 30,673 | 31,692 | 33,172 | +1,019 | + 3.32 |
| FLORENCE COUNTY |  |  |  |  |  |
| Commonwealth town ${ }^{3}$ |  |  |  |  |  |
| Florence town | 1,709 | 1,824 |  |  | - 7.48 |
| Homestead town ${ }^{3}$ |  | 1,824 | 1,551 | - 115 | + 6.72 |
| Total | 2,604 | 3,197 | 2,850 | 593 | $+22.77$ |
| FOND DU LAC COUNTY- |  |  |  |  |  |
|  |  |  |  |  |  |
| Alto town | 1,316 |  |  |  |  |
| Ashford town | 1,868 | 1,755 | 1,849 | - $\quad 113$ | - 6.05 |
| Auburn town ${ }^{\text {Brandon }}$ | 1,509 | 1,417 | 1,542 | - $\quad 92$ | - 6.09 |
| Byron town .... | 1, 660 | - 663 |  |  | + . 45 |
| Calumet town | 1,299 | 1,234 | 1,344 | 184 | + 1.48 |
| Eden town | 1,333 | 1,443 | 1,513 | 44 | + 3.14 |
| Cldorado town | 1,458 | 1,363 | 1,467 | $\begin{array}{r}+\quad 60 \\ +\quad 95 \\ \hline\end{array}$ | $\pm 4.50$ |
| Empire town | 1,873 | 1,865 |  |  |  |
| Fond duward 1 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
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|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| ward ${ }_{\text {ward }} 7$ c...................... | 1,084 | 1,252 1, | 1,111 |  |  |
| ward 8 ........................ 1,470 1, 1,853 1,750 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  | $\pm 105$ | +13.67 $+\quad 800$ |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Marshfield townMentomen town |  |  | 2,131 |  | 2.78 |
|  |  |  |  |  |  |
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${ }^{1}$ Fairchild village, formerly in Fafrchild town. made independent since 1890.
${ }^{2}$ Exclusive of population of Fairchild village. In 1890 Fairchild town had 570, Fairchild village 645, total 1.215; in 1900 Fairchild town had 658, Fairchild village 947, total 1,605; increase 390 or 32 per cent.
${ }^{3}$ Homestead town organized from part of Commonwealth town since 1890. In 1900 Commonwealth town had 828. Homestead town 545 ; in 1890 Commonwealth town had 895 ; increase 478 or 53.4 ner cent.
${ }^{4}$ Rrandon village, formerly in Metomen town, now independent.
${ }^{5}$ Exclusive of population of Brandon village. In 1890 Prandon village had 660. Metomen town 1.193, total 1853: in 1900 Brandon village had 663 , Metomen town
1,194 , total 1,857 ; increase 4 or .2 per cent.

POPULATION OF WISCONSIN, 1890, 1900, 1895.
Table IV-Continued.

| Counties, Towns, Cities, Villages. | United States Census. |  | State Census Census. | Increase +Decrease -in lyud, as com-pared with losu |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1890. | 1900. | 1893. | No. | Pr.ct. |
| FOND DU LAC COUNTY-Con. |  |  |  |  |  |
| Ripon town ....................... | 1,185 | 1,067 | 1,224 |  | - 9.65 |
| irosendale town ........... | 1,499 | 1,1061 | 1,164 |  | -8.80 |
| Springvare lown $\ldots$......... | 1, UY $^{2}$ | 1,189 |  |  |  |
| Taycheedah rown ${ }^{\text {Ta }}$ (............. | 1, 1,062 | 1,293 | 1, 1,202 | + +26 | + 1.89 |
| Waupun city (north ward) ( Hor total see Dodge county.) | 1,062 | 1,118 | 1,200 |  |  |
| Waupun town .................... | 1,115 | 1,170 | 1,200 |  |  |
| Total | 44,0881 | 47,589 | 47,436 | +3,501 | $\begin{array}{r}+\quad 7.94 \\ \hline\end{array}$ |
| FORLST COUNTY ${ }^{1}$ | 690 |  |  |  |  |
| Cavour town ${ }^{\text {Crandon town }}$ |  |  |  |  |  |
|  | 370 |  |  | + 306 | $\underline{+90.81}$ |
| Total | 21,012 1,596 |  | 1,288 | + 884 | + 37.94 |
| GRANT COUNTY- | 1,257 | 1,207 | 1,130 |  |  |
| Bectown town ${ }^{\text {Blo. }}$ |  |  |  |  | - 7.32 |
|  |  | 630 | 655 | + 42 | $24+4.09$ |
|  | 687 | 6111,775 | $\begin{array}{r} 5 b 2 \\ 1,608 \\ 1,479 \end{array}$ | + | + |
| Bloomington village ${ }^{5}$.............Boscobel town, incl. Boscobe city | 1,6921,570 |  |  | + 83 | + 4.90 |
|  |  | 1,637 |  | + 67 | + 4.27 |
| Boscobel city ............... | 1,.... $409{ }^{\text {l }}$ |  |  | ........\|........ |  |
| ward 1 ward 2 |  | 402 | .............. | \|....... ${ }^{\text {, }}$....... |  |
| wardward4 | 489337 |  |  |  |  |
|  |  |  |  |  | $4+13.00$ |
| Cassville village ${ }^{\text {² }}$ |  | $\begin{aligned} & 643 \\ & \mathbf{9 7 0} \end{aligned}$ |  | + 9 |  |
|  | $886$ |  | 704 | + 12 | $\begin{array}{r}\text { + } \\ +1.76 \\ \hline\end{array}$ |
| Clifton town .... | 1,074 |  | 1,044 | - 19 | - 1.76 |
| Cuba City village ${ }^{\text {a }}$ |  | $1,055$ | 823 | $+\quad 14$ | + 1.72 |
| Fennimore town ${ }^{1}$ | 814 | 636 828 |  |  |  |
|  | 11807 | 795 | 794 |  | - 1.48 |
| Fennimore village ${ }^{19}$ | 616 | 1,035 | 876 | + 419 | a$+\quad 68.01$$-\quad 7.24$ |
| Glen Haven town | 1,020 |  |  | - |  |
|  |  | - 992 | $\begin{aligned} & 1,010 \\ & 1,605 \end{aligned}$ |  | - 2.74 |
| Hazel Green town ${ }^{12}$ | 131,123 426 | 1,160 |  |  | 16+ 3.20 |
| Hazel Green village ${ }^{12}$ | 426798961 | 686 | $1,605$ | $\pm 11$ | +14.03+1.76 |
| Hickory Grove town Jamestown town ... |  |  | 1,002 | - 11 |  |

[^9] 1890.
${ }_{2}$ Includes population (642) of Gagen and Pelican Lake towns.
${ }^{3}$ Organized from parts of Crandon anđ Pelican Lake towns since 1890.
${ }^{4}$ Part taken to form part of Cavour town since 1890.
${ }^{5}$ Bloomington village, formerly in Bloomington town, now independent.
${ }^{6}$ Exclusive of population of Bloomington village. In 1890 Bloomington town had 587, Bloomington village 587, total 1,174; in 1900 Bloomington town had 630 , Bloomington village 611, total 1,241; increase 67 or 5.7 per cent.
${ }^{7}$ Cassville village, formerly in Cassville town, now independent.
${ }^{8}$ Exclusive of population of Cassville village. In 1890 Cassville town had 569, Cassville village 886, total 1,455 ; in 1900 Cassville town had 643, Cassville village 979 , total 1,622 ; increase 167 or 11.47 per cent.
${ }^{9}$ Cuba City village organized from part of Smelser town since 1890. In 1900 Cuba City village had 636. Smelser town 923, total 1,559; in 1890 Smelser town had 1,295 ; increase 264 or 20.38 per cent.
${ }^{10}$ Fennimore village, formerly in Fennimore town, now independent.
${ }^{11}$ Exclusive of population of Fennimore village. In 1890 Fennimore town had 807. Fennimore village 616, total 1,423; in 1900 Fennimore town had 795, Fennimore viliage 1, 035 , total 1,830 ; increase 407 or 28.6 per cent.
${ }^{12}$ Hazel Green village, formerly in Hazel Green town, now independent.
${ }^{13} \mathrm{Exclnsive}$ of population of Hazel Green village. In 1890 Hazel Green town had 1.123, Hazel Green village 426, total 1,549; in 1900 Hazel Green town had 1,160 , Hazel Green village 442, total 1,602 ; increase 53 or 3.4 per cent.

## POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV-Continued.

| Counties, Towns, Cities, Villages. | United States Census. |  | State Census. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1890. | 1900. | 1895. | No. | Pr.ct. |
| GRANT COUNTY-Continued. |  |  |  |  |  |
| Lancaster town, incl. Lancaster city |  |  |  |  |  |
| Lancaster city | 1,543 | 2,403 |  | $1+773$ | +23.50 +65.73 |
| Liberty town <br> Lima town | 1,881 | 2,870 | 2,902 | + 11 | $\begin{array}{r}+\quad 0.78 \\ \hline \quad 1.24\end{array}$ |
| Little Grant town | 1,040 | 1,051 | 1,082 | + 1 | + 1.05 |
| Marion town ...... | 668 <br> 573 | ${ }^{5666}$ | 629 | - 102 | - 14.96 |
| Millville town | 197 | 566 | 533 |  | - 1.22 |
| Montfort village ${ }^{1}$ | 467 | 627 | 606 | + 76 | + 36.04 |
| Mt. Hope town | 640 | 671 | 606 | $+\quad 160$ | +34.26 $+\quad 4.84$ |
| Mt. Ida town | 779 | 793 | 825 | $+\quad 14$ | + 1.79 |
| Muscoda town ${ }^{\text {M }}$ | ${ }^{4} 555$ | 454 | 540 | - 101 | - 18.19 |
| Paris town ..... | 605 | 743 | 733 | + 138 | + 22.81 |
| Patch Grove town | 7781 690 | 792 | 832 |  | + 1.80 |
| Platteville town, incl. Piatteville city |  | 660 4,219 | 4.253 |  | 4.31 |
| Platteville city | $\stackrel{3}{2,740}$ | 4,219 3,340 | 4,253 3,321 | $\begin{array}{r}532 \\ +\quad 600 \\ \hline\end{array}$ | + 14.42 |
| Potosi town ${ }^{5}$ | 62,110 | 1,568 | 1,607 | + 600 | + 21.90 -25.68 |
| Potosi village ${ }^{5}$ |  | +434 | 1,454 |  |  |
| Smelser town ${ }^{\text {a }}$ | 1,29b | 923 | 933 | - $\quad 372$ | - 28.72 |
| Waterstown.. | ${ }_{488}^{934}$ | 966 | 978 |  | + 3.42 |
| Wingville town ${ }^{1}$ | ${ }^{2} 9813$ | 474 | 493 |  | - 2.87 |
| Woodman town | 495 | 438 | 929 | 59 | - 6.46 |
| Wyalusing town | 786 | 918 | 903 |  | +16.78 |
| Total | 36,651 | 38,881 | 38,372 | + 2,230 | + 6.08 |
| GREEN' COUNTY- |  |  |  |  |  |
| Adams town | 851 | 854 | 871 |  |  |
| Albany town ${ }^{7}$ | ${ }_{8} 682$ | 699 | 719 | 17 | 2.49 |
| Albany village ${ }^{7}$ | 698 | 797 | 655 | 99 |  |
| Brodhead city ${ }^{10}$ | 1,461 | 1,584 | 1,717 | + 123 | + 8.41 |
| ward 1 |  | 736 | 762 |  |  |
| Brooklyn town | 1,205 | ${ }^{848} 1,188$ | 9551,218 | - $\quad 27$ | - 2.24 |
| Browntown village ${ }^{12}$. |  | 1,188 | 1,218 |  |  |
| Cadiz town ${ }^{12}$ | 1,507 | 1,240 | 1,316 |  | - -17.71 |
| Clarne town . | 1,319 | 1,226 | 1,351 | 93 | - 7.05 |
| Decatur town ${ }^{10}$ |  |  |  |  |  |
| Exeter town ....................... | ${ }^{615}$, | 650 917 | ${ }_{918}^{661}$ | 35 | 5.10 |

[^10]POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV-Continued.


[^11]
## POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV-Continued.


[^12]POPULATION OF WISCONSIN, 1890, 1900, 1895.
Table IV-Continued.


[^13]
## POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV-Continued.


${ }^{1}$ Waterloo village. formerly in Waterloo town. now independent.
${ }^{2}$ Exclusive of population of Waterloo village. In 1890, Waterloo town had 976 , Waterloo village 862. total 1,838; in 1900 Waterloo town had 965, Waterloo vilage had 1,137. total 2,102; increase 264 or 14.36 per cent.
${ }^{3}$ Finley town organized from parts of Arsnenia and Kingston towns since 1890 In 1900 Armenia town had 801, Finley town 201, Kingston town 296, total 1,298; in 1890 Armenia town had 354, Kingston town 211, total 565 ; increase 733 or 129.7 per cent.
${ }^{4}$ Camp Douglas village, formerly in Or:ange town, now independent.
${ }^{5}$ Exclusive of population of Camp Doviglas village. In 1890 Camp Douglas village had 225, Orange town 469, total $694_{i}^{\prime}$; in 1900 Camp Douglas village had 432, Orange town 561, total 993 ; increase 299 or 43.08 per cent.
${ }^{6}$ Cutler town organized from part of Necedah town since 1890. In 1900 Cutler town had 377, Necedah 1,821, Necedah village 1,209, total 3,407; in 1890 Necedab town had 2,242, Necedah village 1,708, total 3,950 ; decrease 543 or 13.74 per cent.

## POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV-Continued.


[^14]Table IV-Continued.

${ }^{5}$ Formerly in Hamilton town, now independent.
${ }^{1}$ Belmont village, formerly in Belmont town, now independent.
${ }^{2}$ Exclusive of population of Belmont village. In 1890 Belmont town had 807, Belmont village 378, total 1,185; in 1900 Belmont town had 762, Belmont village 509 , total 1,271 ; increase 86 or 7.25 per cent.
${ }^{3}$ Benton village, formerly in Benton town, now independent.
${ }^{0}$ Exclusive of population of Benton village. In 1890 Benton town had 831, Benton village 414, total 1.245 ; in 1900 Benton town had 848, Benton village 546, totál 1,394; increase 149 or 11.96 per cent.
TBlanchardville village organized from part of Blanchard town since 1890.
In 1900 Blanchard town had 489, Blanchardville village 573, total 1,062 ; in 1890 Blanchard town had 650 ; increase 412 or 63.38 per cent.
${ }^{8}$ Gratiot village organized from part of ${ }^{\text {Gratiot town since 1890. In } 1900 \text { Gra- }}$ tiot town had 1,217. Gratiot village 335, total 1,552; in 1890 Gratiot town had 1,511 ; increase 41 or 2.7 per cent.

POPULATION OF WISCONSIN, 1890, 1900, 1895.
Table IV-Continued.

| Counties, Towns, Cities, Villages. | United States Census. |  | State Census. | Increase + Decrease in 1900. as com. pared with 1890 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1890. | 1900. | 1895. | No. | Pr ct. |
|  |  |  |  |  |  |
| Lamont town ..................... | 516 | 567 | 566 | + 51 | 9.88 |
| Monticello town | 305 | 313 | 311 | + 8 | 2.62 |
| New Diggings town | 1,374 | 1,122 | 1,325i | - 252 | -18.34 |
| Seymour town ...... | 783 | 779 |  |  | . 51 |
| Shullsburg town, incl. Shulls burg city Shullsburg city | 2,270 | 2,036 | 2,085 | - 234 | $-10.30$ |
|  | 1,393 | 1,250 | 1,22b | - 143 | - 10.26 |
| Wayne town ............. | 1,170 | 1,200 | 1,227 |  | + 2.56 |
| White Oak Springs town Willow Springs town ... | ${ }_{9}^{384}$ | ${ }_{982}^{337}$ | 433 989 | $\left\lvert\, \begin{array}{ll} 1 & 47 \\ + \end{array}\right.$ | - 12.24 |
|  | 931 1,627 | 982 1,678 | 989 1,716 | $1+\quad 51$ | + 5.47 $+\quad 3.13$ |
| Wiota town ............... | 1,627 | 1,678 | 1,716 | $+\quad 51$ | + 3.13 |
| Total | 20,265 | 20,959 | 21,488 | $+\quad 694$ | + 3.42 |
| LAN'GLADE COUNTY- |  |  |  |  |  |
| Ackley town '.......... | $\begin{array}{r} 374 \\ 4,424 \end{array}$ | 582 | 518 | + 208 | +55.61 |
| Antigo city |  | $5^{5,145}$ | ${ }_{532}$ 5,002 | + 721 | +16.29 |
| - ward 1 |  | 532 | ${ }_{690} 5$ |  |  |
| ward 2 |  | 784 |  |  |  |
| ward 4 |  | 107 | 1,232 |  |  |
| ward 5 |  | 810 | 1,770 |  |  |
| ward 6 |  | 155 | 1,029 |  |  |
| Antigo town | 6431 | 1,120 | 893 | $+\quad 477$ | + 74.18 |
|  | 175 | 352 | 194 | + 177 | +101.14 -24.60 |
| Elcho townElt... <br> Elton <br> town | 191 | 144 | 183 |  |  |
| Langlade town | 153 | 173 | 169 | + $\quad 100$ | + 13.07 |
| Neva town ${ }^{2}$ | 502 | 788 | 668 | + 286 | + 56.97 |
| Norwood town | 663 | 793 | 765 | $+130$ | $+19.60$ |
| Peck town ${ }^{\text {P }}$... |  | 248 | 206 |  |  |
| Polar town | ${ }_{233}^{444}$ | 760 571 | ${ }_{203} 09$ | + 316 | + 71.17 |
| Price town Rolling town | ${ }^{233}$ | 571 1,040 | ${ }_{912} 20$ | + +385 | +145.06 +51.28 |
| Rolling town ${ }^{\text {Summit }}$ town ${ }^{4}$ | ${ }_{270}^{685}$ | 1,040 | 9156 | + $+\quad 315$ | + 51.28 |
| Upham town ${ }^{3}$ |  | 198 | 570 |  |  |
| Vilas town ${ }^{\text { }}$.. | 316 | 1.61 | 144 | - 155 | - 49.65 |
| Total .. | ${ }^{6} 9,465$ | 12,553 | 11,092 | + 3,088 | +32.62 |
| LINCOLN COUNTY--Corning town |  |  |  |  |  |
|  |  | $\begin{array}{r}567 \\ 339 \\ \hline\end{array}$ | 335 |  | $\begin{array}{r}\text { + } 63.40 \\ \hline 25.82\end{array}$ |
| Merrill city .. | 457 6,809 | 8,537 | 8,607 | - 1.728 | - 25.37 |
| ward 1 ... |  | 981 | 953 |  |  |
| ward ${ }^{\text {ward }}$ |  | 679 | 709 |  |  |
|  |  | ,038 | 1,085 |  |  |
| ward ${ }^{\text {ward }}$ |  | , 817 | 1,751 |  | . |
| wardwawardw |  | ${ }_{928} 92$ | 1,058 |  |  |
|  |  | , 538 | 1,461 |  |  |
| ward <br> ward |  | ,559 | 1,590 |  |  |

[^15]Table IV-Continued.


[^16]
## POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV-Continued.


[^17]Table IV-Continued.

| Counties, Towns, Cities, Villages. | United States Census. |  | State Census. | Increase + <br> Decrease in 1900 , as com pared with 1890 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1890. | 1900. | 1895. | No. | Pr.ct. |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| ward 4 |  | 1,045 |  |  |  |
| ward 5 |  | 1,527 |  |  |  |
| ward ${ }^{6}$ |  | 1,362 |  |  |  |
| ward 7 |  | 1,421 |  |  |  |
| ward 8 |  | 1,515 |  |  |  |
| ward 9 |  | 1,509 |  |  |  |
| Wausau town | 1,380 | 1,109 |  |  | - 19.63 |
| Wein town ${ }^{4}$ | 1,444 | 1,965 |  | $\begin{array}{r} \\ +\quad 521 \\ \hline\end{array}$ | +117.34 |
| Weston town | 1,776 | 2,137 | I,719 | + $\quad 361$ | + 20.32 |
| Total | 30,369 | 43,2ั6 | 36,598 | +'12,887 | $+42.43$ |
| MARINETTE COUNTY- |  |  |  |  |  |
| Amberg town ${ }^{1}$......: |  | 1,375 | 939 |  |  |
| Coleman town ${ }^{1}$ <br> Crivitz town ${ }^{1}$ |  | 2,545 | 2,135 |  |  |
| Crivitz town ${ }^{1}$ |  |  |  |  |  |
| Dunbar town ${ }^{1}$ |  | 1,136 |  |  |  |
| Grover town ${ }^{1}$ |  | 1,860 | 1,735 |  |  |
| $\underset{\text { mard }}{\text { Marinette city }}$ | ${ }^{1928} 11,523$ | $2^{16,195}$ | 15,286 | + 4,672 | + 40.54 |
| ward ${ }_{\text {ward }}$. | 1,928 | 2,934 | ,791 |  |  |
| ward ${ }^{\text {wa }}$ |  | 3,399 3,585 | ,205 |  |  |
| ward 4 | 2,961 | 3,585 3,576 |  | $\ldots$ |  |
| ward 5 | 1,814 | 2,701 | ,533 |  |  |
| Peshtigo town ${ }^{1}$ | 7,202 | 4,228 | 5,234 | - 2,974 | -41.29 |
| Porterfield town | 460 | 956 | 762 | +` 496 | + 10.78 |
| Wausaukee town | 1,119 | 1,685 | 1,180 | + 566 | +50.58 |
| Total | 20,304 | 30,822 | 27,271 | $+10,518$ | $+51.80$ |
| MARQUETTE COUNTY- |  |  |  |  |  |
| Buffalo town | 805 | 839 | 819 | + 34 | + 4.22 |
| Crystal Lake town | 667 | 577 |  |  | -13.49 |
| Douglas town | 628 | 684 | 645 | + $\quad 56$ | + 8.91 |
| Harris town | 576 | 556 | 589 | - 20 | - 3.47 |
| Mecan town | 724 | 628 |  |  | $-13.26$ |
| Montello town | 1,177 | 1,325 | 1,308 | + 148 | +12.57 |
| Moundville town ................ | ${ }_{561}$ | 562 |  | + 238 | + 73.45 |
|  | 561 | 638 |  | + 77 | + 13.72 |
|  | 711 | 647 659 | 542 | - $\quad 64$ | - $\begin{array}{r}9.00 \\ +16.22\end{array}$ |
| Packwaukee town ................ | 711 | 852 |  | - 141 | +19.83 |
| Shields town | 608 | 698 | 662 | + 90 | + 14.80 |
| Springfield town | 605 | 644 |  | 39 | + 6.44 |
| Westfield town | 1,012 | 1,200 | 1,169 | + 188 | + 18.57 |
| Total | 9,676 | 10,509 | 10,203 | + 833 | + 8.60 |

[^18]POPULATION OF WISCONSIN, 1890, 1900, 1895.
Table IV-Continued.

| Counties, Towns, Cities, Villages. | United States Census. |  | State Census. | $\left\lvert\, \begin{gathered} \text { Increase }+ \\ \text { Decrease }- \\ \text { in } 1900, \text { as com- } \\ \text { pared with } 1890 \end{gathered}\right.$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1890 | 1900. | 1895. | No. | Pr.ct. |
| MILWAUKEE COUNTY- 771 |  |  |  |  |  |
| Cudahy village ${ }^{1}$ |  | 1,366 1,738 | 1,824 | - $\quad 130$ | - 6.906 |
| Franklin town ${ }_{\text {Granville }}$ town |  | 2,267 | 2,674 | - 5 | $-\quad .22$ |
| Granville town ${ }^{2}$. <br> Greenfield town |  | 5,814 | 5,129 | + 2,624 | +82.25 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  | 9,489 | 9,504 |  |  |
| ward 2 |  | 9,909 | 9,853 |  |  |
| ward 3 |  | 5,418 10,679 | $\stackrel{4}{4,773}$ |  |  |
| ward ${ }_{\text {ward }}$ |  | 10,031 | 9,628 |  |  |
| ward 6 |  | 13,671 | 13,459 |  |  |
| ward 7 |  | 7,173 | 6,588 |  |  |
| waru ${ }_{\text {ward }}$ |  | 17,353 | 16,933 |  |  |
| ward ${ }^{9}$ |  | 17,024 | 16,052 |  |  |
| ward 11 |  | 21,903 | 18,643 |  |  |
| ward 12 |  | 13,216 | 11,524 | ..... |  |
| ward 13 |  | ${ }_{20,651}^{17,026}$ | 17,145 |  |  |
| ward 14 |  | 12,692 | 11,024 |  |  |
| ward 16 |  | 9,654 | 7,731 |  |  |
| ward 17 |  | ${ }^{10,226} 1807$ | - $\begin{array}{r}8,879 \\ 11,122\end{array}$ |  |  |
| ward 18 ward 19 |  | 18,627 | 13,434 |  |  |
| ward 20 |  | 16,863 | 12,998 |  |  |
| ward 21 |  | 12,175 | 9,305 |  |  |
|  |  |  |  |  |  |
| Milwaukee town ${ }^{7}$ |  | 1,010 | 3,7.6 | - 1,72 |  |
| North Milwaukee village ${ }^{3}$ |  |  | 1,786 | 6- 137 | - -6.36 |
|  |  | 3,392 | 2,662 | 2 ........ |  |
| South 1 |  | 788 |  |  |  |
| ward 2 |  | ${ }_{1} 811$ | ............... |  |  |
| ward 3 |  | 1,071 |  |  |  |
| ward $4 .$. |  | ${ }^{722}$ 2,842 | 2,755 |  |  |
| Wauwatosa city ${ }^{5}$ |  | $841^{2,842}$ |  |  |  |
| ward 1 |  | 621 |  |  |  |
| ward ${ }^{\text {ward }}$ |  | 643 |  |  |  |
| ward 4 |  | 737 |  |  |  |

${ }^{1}$ Cudahy village organized from part of Lake town since 1890 . In 1900 Cudahy village had 1,366, Lake town 5,302 ; in 1890 Lake town had 4,899; increase 1,769 or . 36.1 per cent.
${ }^{2}$ Part taken to form part of North Milwaukee village since 1890.
${ }^{3}$ Organized from part's of Granville and Wauwatosa towns since 1890.
${ }^{4}$ Parts taken to form Wauwatosa city and part of North Milwaukee village since 1890. An act by which part of this town was annexed to Milwaukee city, took effect Sept. 4, 1900; the population of this area is 3,608 .
${ }^{5}$ Organized from part of Wauwatosa town since 1890 . In 1900 Granville town had 2,267, North Milwaukee village 1,049, Wauwatosa town 13,860, Wauwatosa city 2,842 , total 20,018 ; in 1890 Granville town had 2,272 , Wauwatosa town 10,914 , total 13,186 ; increase 6,832 ort 51.81 per cent.
${ }^{6}$ Part of Milwaukee town annexed since 1890 . An act by which part of Wauwatosa town was annexed took effect Sept. 4, 1900; the populat.on of this area is 3,608 .
Part annexed to Milwaukee city and part taken to form Whitefish Bay village since 1890 .
${ }^{8}$ Organized from part of Milwaukee town since 1890 . In 1900 Milwaukee city had 285,135, Milwaukee town 4,610, Whitefish Bay village 512, iotai 290,437; in 1890 Milwaukee city had 204,468, Milwauke town 6,403, total 210,871 ; increase 79,566 or 37.73 per cent.
${ }^{9}$ South Milwaukee city organized from part of Oak Creek town since 1890.
In 1900 Oak Creek town had 1,950, South Milwaukee city 3,392, total 5,342 ; in 1890. Oak Creek town had 2,087 ; increase 3,255 or 155.96 per cent.

## POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV--Continued.

| Counties. Towns, Cities, Villages. | United States Census. |  | State Census. | Increase + Decrease in 1900, as com.pared with 1840 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1890. | 1900. | 1895. | No. | Pr. ct. |
| MILWAUKEE COUNTY-Con. Wauwatosa town ${ }^{4}$ Whitefish Bay village ${ }^{8}$......... | 10,914 | 13,860 512 | 12,173 | + 2,946 | + 26.99 |
| Total | 236,101 | 330,017 | 287,92z | +93,916 | + 39.78 |
| MONROE COUNTY- |  |  |  |  |  |
| Adrian town ${ }^{\text {Angelo }}$ town | 615 | 631 | 657 |  | + 2.60 |
| Byron town ${ }^{1}$ | 477 458 | 710 |  | + 233 | + 48.84 |
| Cashton village ${ }^{2}$ | 458 | 825 510 | 680 | + 367 | + 80.13 |
| Clifton town | $9 \dot{5} \dot{5}$ | 993 | 358\| | 38 |  |
| Glendale town ${ }^{3}$ | ${ }^{5} 1,020$ | 1,051 | 1,106 | + 31 | + 3.97 |
| Grant town ${ }^{6}$ <br> Greenfield town |  | 499 |  |  |  |
| Jefferson town ${ }^{\text {a }}$ | 592 1,315 | +712 | 638 | +. 120 | +20.27 |
| Kendall village ${ }^{3}$. | 1,315 | 1,223 | 1,175 | 92 | - 6.99 |
| Lafayette town | ${ }^{1}$ ) | 438 | ${ }_{337} 3$ |  | + 51.31 |
| La Grange town | 730 | 1,141 | 1,004 |  |  |
| Leon town ... |  | 1,787 | 1,004 | 411 $+\quad 99$ | + +14.30 +14.38 |
| Lincoln town ${ }^{\text {d }}$ | 1,065 | 863 | 1,152 | $\pm \quad 202$ | + 1.4 .38 |
| Little Falls town | ${ }_{(1)} 993$ | 1,222 | 1,300 | + 229 | + 23.06 |
| Norwalk village ${ }^{7}$ |  | ${ }_{357} 206$ | 170 |  |  |
| Oakdale trym. | 680 | 382 | 318 | 2 | - 29 |
| Ontario rillage (part of ${ }^{9}$. Total for Ontario village in Monroe and Vernon counties |  | 682 91 889 | 323 | + 2 | + . 29 |
| Portland town ................. |  | 389 1.194 |  |  |  |
| Ridgeville town ${ }^{\text {² }}$ | 1,292 | 1,194 924 | 1,204 979 | 28 368 | 2.40 +28.48 |
| Scott town ${ }^{1}$..... |  | 258 | 979 |  | - 28.48 |
| Sheldon town ${ }^{\text {a }}$ | 813 | 821 |  |  |  |
| Sparta city | ${ }_{928}$ 2,795 | ${ }^{3} 3$ 3,555 | 3,511 | 760 | + 27.198 |
| ward 1 |  | 975 | ,060 |  |  |
| ward ${ }^{\text {ward }}$ | 663 | 817 | 850 |  |  |
| ward 4 | 511 | ${ }_{793}$ | $\begin{gathered} 905 \\ 606 \end{gathered}$ |  |  |
| Sparta town |  |  |  |  |  |
| Tomah city | 2,199 | 1,263 | 1,235 | ${ }_{641} 26$ | + 26.80 |
| ward $1 .$. |  | $871^{2,840}$ | $650{ }^{2,458}$ | 641 | + 29.14 |
| ward 2 |  | 1,063 | 845 |  |  |
| ward 3 |  | 906 | 963 |  |  |

[^19]POPULATION OF WISCONSIN, 1890, 1900, 1895.
Table IV-Continued.

(1) Lafayette and New Lyme towns (population 512) not separately returned in 1890.
${ }^{2}$ Wilton village organized from parts of Wilton town since 1890 . In 1900 Wilton town had 895 , Wilton village 400, total 1,295 ; in 1890 Wilton town had 1,086; increase 209 or 19.24 per cent.
${ }^{3}$ Organized from.parts of How and Maple Valley towns since 1890.
${ }^{4}$ Organized from part of Maple Valley town since 1890 .
${ }^{5}$ Part taken to form part of Underhill town since $18 \% 0$.
${ }^{6}$ Part taken to form parts of Armstrong and Underhill towns since 1890.
${ }^{7}$ Parts taken to form Brazeau and Spruce towns and part of Armstrong town since 1890 .
${ }^{8}$ Organ zed from parts of Gillet and How towns since 1890. In 1900 Armstrong town had 482, Brazeau town 437, Gillet town 1,249, How town 1,083, Maple Valley town 870 , spruce town 1.029, Underhill town 631, total 5.781; in 1.890 Gillet town had 938, How town 770, Maple Valley town 1,336, total 3,044 ; increase 2,737 or $\varepsilon 9.9$ per cent.
${ }^{9}$ Lena town organized from part of Little River town since 1890. In 1900 Lena town had 894, Little River town 1,042, total 1,936; in 1890 Little River town had 1,194 ; increase 742 or 62.14 per cent.

- Parts taken to form Vilas and part of Iron counties in 1893, and part of Forest county annexed since 1890 . Comparison with population for 1890 can not be made; information as to changes in minor civil divisions incomplete.


## POPULATION OF' WISCONSIN, 1890, 1900, 1895.

Table IV-Continued.


[^20]POPULATION OF WISCONSIN, 1890, 1900, 1895.
Table IV-Continued.


[^21]POPULATION OF WISCONSIN, 18900, 1900, 1895.
Table IV-Continued.


[^22]POPULATION OF WISCONSIN, 1890, 1900, 1895.
Table IV-Continued.

| Counties, Towns, Cities, Villages. | United States Census. |  | State Census. | Increase + in 1900 , as compared with 1840 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1890. | 1900. | 1895. | No. | Pr. ct. |
| POLK COUNTY-Continued. |  |  |  |  |  |
| Loraine town ${ }^{1}$................ | 210 | 267 | 258 | + 57 | + 27.14 |
| Luck town $\ldots$..... | 393 | $\stackrel{526}{110}$ | 440 | + 133 |  |
| McKinley town ${ }^{1}$ <br> Milltown town | 459 | 671 | 582 | … 212 | + 76.20 |
| Osceola town ${ }^{2}$ | ${ }^{3} 683$ | 847 | 806 | + $\quad 164$ | + 24.01 |
| Osceola village ${ }^{2}$ | 384 | 466 | 478 | + 821 | +21.35 |
| St. Croix Falls town ${ }^{4}$ | 553 | 534 | 375 | + 481 | +907.55 |
| St. Croix Falls village ${ }^{4}$ | 745 | 622 | 608 | - 123 | $-16.51$ |
| Sterling town ............ | 667 | 735 | 779 | + 68 | + 10.19 |
| West Sweden town | 270 | 282 | 314 | $+\quad 12$ |  |
| Total | 12,968 | 17,801 | 16,117 | $+4,833$ | + 37.26 |
| PORTAGE COUNTY- |  |  |  | - " |  |
| Alban town | 563 | 878 | 792 | + 315 | + 55.95 |
| Almond town | 1,035 | 1,080 | 1,147 | $+\quad 45$ | + 4.34 |
| Amherst town ${ }^{\text {a }}$ | ${ }^{8} 1,324$ | 1,425 | 2,030 | $+\quad 101$ | + 7.62 |
| Amherst village ${ }^{7}$ | 438 | 558 |  | + 120 | +27.39 |
| Belmont town . | 622 | 781 | 829 | + 159 | + 25.56 |
| Buena Vista town | 1,061 | 1,102 | 1,159 | + 41 |  |
| Carson town ${ }^{\text {² }}$ | 961 | 1,505 | 1,060 | + 544 | + 56.60 |
| Dewey town ${ }^{10}$....ii |  | 754 1,086 |  |  |  |
| Eau Pleine town ${ }^{11}$ | 748 | 1,086 | 780 | $\begin{array}{r}+\quad 338 \\ +\quad 140 \\ \hline\end{array}$ | +45.18 +33.57 |
| Hull town ${ }^{11}$ | 1,477 | 1,469 | 1,434 | - 81 | - .54 |
| Lanark town | 797 | 825 | 907 | + 28 | + 3.51 |
| Linwood town ${ }^{9}$ | 368 | 677 | 446 | + 309 | +83.96 |
| New Hope town | 885 | 962 | 1,002 | + 77 | + 8.70 |
| Pine Grove town | -399 | ${ }_{1} 5651$ | 1,701 |  | + 4.16 |
| Plover town | 1,274 | 1,611 | 2,793 | $\begin{array}{r}\text { + } \\ + \\ +\quad 235 \\ \hline\end{array}$ | + 26.45 +14.69 |
| Stevens Point city | 7,896 | 9,524 | 8,995 | + 1,628 | + 20.61 |
| ward 1 |  | 1,448 | 1,362 |  |  |
| ward 2 |  | 1,699 | 1,544 |  |  |
| ward 3 |  | 1,600 | 1,482 | ..... |  |
| ward 4 |  | 2,313 | 2,258 | ........ |  |
| ward 5 |  | 1,623 | 1,467 | ....... |  |
| $\underset{\text { ward }}{ } \mathbf{6}$...... | 1,698 | 841 1,899 | 882 1,944 | $4 \dddot{+} \quad 201$ | + 11.83 |
| Stockton town |  |  |  |  | + 11.8 |
| Total | ${ }^{6} 24,798$ | 29,483 | 28,531 | $1+4,685$ | + 18.8 |

[^23]
## POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV-Continued.

| Counties, Towns, Cities, Villages. | United States Census. |  | State Census. | Increase + Decrease in 1900 , as compared with 1890 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1890. | 1900. | 1895. | No. | Pr. ct. |
| PRICE COUNTY- |  |  |  |  |  |
| Brannan town ${ }^{1}$. | 516 | 523 | 37 |  | + 1.35 |
| Emery town ${ }^{\text {Fifield }}$ town | 105 | 371 | 119 | + 266 | + 253.33 |
| Gifield town ..... | 857 157 1 | 373 249 | 494 | $+\quad 484$ $+\quad 92$ | + 56.47 |
| Hackett town ... | 191 | 249 249 | 146 | $+\quad 92$ $+\quad 28$ | +58.59 +14.66 |
| Hill town ${ }^{1}$. |  | 242 | 234 | + 28 | + 14.60 |
| Kennan town | 96 | 520 | 215 | + $\quad 420$ | + 7411.66 |
| Lake town ${ }^{\text {K }}$.. | 409 | 411 769 | 657 | + 360 | +88.01 |
| Ogema town | 775 | 972 | 1,017 | $+\quad 360$ $+\quad 197$ | + 88.28 |
| Philips city ${ }^{2}$ | \% | 1,820 | 1,652 | + 197 | + 25.28 |
| ward ${ }_{\text {ward }} 1$. |  | 740 | 1,652 |  |  |
| ward ${ }^{\text {w }}$ |  | 547 533 |  |  |  |
| Prentice town | 570 | 530 | 979 | - 51 | - 8.94 |
| Prentice village |  | 939 | 9 | - 01 | - 8.94 |
| Worcester town ${ }^{2}$ | 1,582 | 1,179 | 707 | - 403 | - 25.47 |
| Total | 5,258 | 9,106 | 7,257 | + 3,848 | + 73.18 |
| RACINE COUNTY- |  |  |  |  |  |
| Burlington city ${ }^{3}$.. | 2,043 | 2,526 | 2,428 |  |  |
| Burlington town ${ }^{3}$ | ${ }^{4} 1,097$ | 1,052 | 1,069 | - 45 | + 4.10 |
| Caledonia town | 2,732 | 2,805 | 2,853 | + 73 | + 2.67 |
| Dover town $\mathrm{Mt}$. Pleasant town | , 924 | 853 | ,922 | - 71 | - 7.68 |
| Mt. Pleasant town | 2,192 | 2,911 | 2,277 | + 719 | + 32.80 |
| Norway town | 841 | 913 |  | + 72 | -8.56 |
| Racine city | 21,014 | $15^{29,102}$ | 24,889 | + 8,088 | + 38.48 |
|  |  | 1,155 | ,103 |  |  |
| ward ${ }^{\text {ward }}$ |  | 3,786 |  | ....... |  |
| ward 4 |  | 3,809 |  |  |  |
|  |  | 6,704 |  |  |  |
| ward ${ }_{\text {ward }} 6$ |  | 6,691 |  |  |  |
| ward 7 |  | 4,295 | ,426 |  |  |
| Raymond town | 1,784 | 1,601 | 1,723 |  |  |
| Rochester town .... | 1,699 | 1,750 | 1,760 | + $\quad 51$ | - $\quad 1.29$ |
| Union Grove village ${ }^{\text {b }}$ | 432 | 520 | 472 | + 88 |  |
| Waterford town ょorkville town ${ }^{5}$ | 1,551 | 1,564 | 1,637 | $\begin{array}{r}+\quad 13 \\ +\quad 1 \\ \hline\end{array}$ | + $\quad .83$ |
|  | ${ }^{6} 959$ | 1,047 | 1,112 |  | + 9.17 |
| Total | 36,268 | 45,644 | 41, | $+9,376$ | $+25.90$ |
| RICHLAND COUNTY- |  |  |  |  |  |
| Akan town | 982 | 916 |  |  |  |
|  | 1,361 | 1,261 |  |  |  |
| Buena Vista town | 797 | 1,104 |  | + $\quad 307$ | + 38.37 |
| Dayton town .... | 1,119 | 1,006 |  | - 113 | +10.09 -18.00 |
|  | 1,153 | 1,003 | 1,109 | - 150 | - 13.00 |

[^24]POPULATION OF WISCONSIN, 1890, 1900, 1895.
Table IV-Continued.

${ }^{1}$ Viola village organized from part of Forest town since 1890. In 1900 Forest town had 833, Viola village 237, total 1,070 ; in 1890 Forest town had 1,151; decrease 81 or 7 per cent.
${ }^{2}$ Incorporated as' a city since 1890.

## POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV-Continued.

${ }^{1}$ Glenwood city organized from part of Glenwood town since 1890. In 1900 Glenwood city had 1.789, Glenwood town 758, total 2,547; in 1890 Glenwood town had 1,656; increase 891 or 53.8 per cent.

POPULATION OF WISCONSIN, 1890, 1900, 1895.
Table IV-Continued.

| Counties, Towns, Cities, Villages. | United States Census. |  | States, Census. | Increase + <br> Decrease in 190 , as compared with 1890 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1890. | 1900. | 1895. | No. | Pr.ct. |
| AUK COUNTY- ${ }_{\text {a }}$ |  |  |  |  |  |
|  |  |  |  |  |  |
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|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Ironton town | 1,034 | 1,063 | 1,054 | - $\quad 29$ |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
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|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Reedsburg town ................... | 1,112 | 1,204 | 1,110 | $+\quad 92$ | 8.27 |
|  |  |  |  |  |  |
| Spring Green town |  | 656 <br> 621 | - 777 |  | . 64 |
| Spring Green villageSumpter town |  |  |  |  |  |
|  |  |  |  |  |  |
| Westfield town | 1,357 | 1,285 | 1,449 |  | - 5.30 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Total | 30,575 | 33,006 | 32,919 | + 2,431 | + 7.95 |
| SAWYER COUNTY ${ }_{\text {Hay }}$ - |  |  |  |  |  |
| Lac Court d'O $\dddot{\text { Reilles }}$ Indian Reservation |  |  |  |  |  |
|  |  |  |  |  |  |
| Total $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$ |  | 3,593 | 3,741 | + 1,616 | + 81.74 |

[^25]Table IV--Continued.


[^26]
## POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV-Continued.

| Counties, Towns, Cities, Villages. | United States Census. |  | $\begin{array}{\|c} \begin{array}{c} \text { State } \\ \text { Census. } \\ 1895 . \end{array} \\ \hline \end{array}$ | Increase + Decrease in 1900, as compared with 1890 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1890 | 1900. |  | No. | Pr. ct. |
| SHEBOYGAN COUNTY-Con. |  |  |  |  |  |
| Plymouth city ................. | 1,503 | 2,257 | 2,213 | + 754- | +50.16 |
| Plymouth town | 1,356 | 1,398 | 1,386 | + 42 | + +7.09 |
| Rhine town ${ }^{\text {b }}$ | 1,612 | 1,285 | 1,494 | - 327 | - 74.48 |
| Russell town | 439 | ${ }_{1}^{437}$ | 1.443 | - $\quad 41$ | - 2.78 |
| Scott town ... <br> Sheboygan city | 16,437 | 22,962 | 21,452 | - 6,6031 | - 2.78 |
| Sheboygan city ward 1 ....... | $2,295{ }^{16,359}$ | 3,124 ${ }^{22,962}$ | $3,013{ }^{21,130}$ | + 6,603 | + 40.36 |
| ward 2 . | 2,323 | 2,170 | 2,184 |  |  |
| ward 3 | 1,474 | 1,404 | 1,324 | ....... |  |
| ward 4 |  | 3,328 | 2,918 |  |  |
| ward 5 | 3,739 | 3,184 | 2,801 |  |  |
| ward 6 |  | 1,877 | 1,802 |  |  |
| ward 7 | 3,064 | 3,178 | 2,681 |  |  |
| ward 8 | 3,464 | 4,697 | 4,407 |  |  |
| Sheboygan town | 2,117 | 2,181 | 1,915 | $+\quad 64$ | + 3.02 |
| Sheboygan Falls town | 1,677 | 1,690 | 1,664 | + 13 | + ${ }^{\text {. }} 78$ |
| Sheboygan Falls rillage | 1,118 | 1,301 | 1,220 | + 183 | + 16.36 |
| Sherman town .......... | 1,736 | 1,813 | 1,807 | + 77 | + 4.43 |
| Wilson town . | 1,044 | 1,078 | 1,133 | + 34 | + 3.25 |
| Total | 42,489 | 50,345 | 48,396 | + 7,856 | +18.48 |
| TAYLOR COUNTY- |  |  |  |  |  |
| A.urora town ${ }^{2}$. |  | 106 |  |  |  |
| Browning town | 230 | 586 | 273 | + 356 | +154.78 |
| Chelsea town | 613 | 787 | 584 | + 174 | + 28.38 |
|  |  |  |  |  |  |
| Deer Creek town | 233 | 394 | 302 | $+\quad 161$ | + 69.09 |
|  |  |  |  |  |  |
| Hammel town ${ }^{4}$ |  | 389 |  |  |  |
|  |  |  |  |  |  |
| Little Black town | 1,131 | 1,331 | 1,268 | + 200 | + 17.68 |
|  |  |  |  |  |  |
| ward 1 |  | 710 | 611 | \|......... |  |
|  |  |  |  |  |  |
| ward 3 |  | 642 | 494 |  |  |
| Medford town | 1,094 | 1,394 | 1,205 | + 300 | + 27.42 |
| Moliter town ${ }^{7}$ | 117 | 112 | 303 | - 5 | - 4.27 |
|  |  |  |  |  |  |
| Westboro town | 541 | 1,060 | 592 | + $+\quad 519$ | + 95.93 |
| Total | 16,731 | 11,262 | 8,498 | \| $+4,531$ | + 67.31 |
| TREMPEALEAU COUNTY- |  |  |  |  |  |
| Albion town ... |  | 1,126 |  | $27+\quad 279$ | $+32.93$ |
|  | 92,488 659 | \|$1,1,641$ | - $\quad 1,012$ | 71+ $1+614$ | + +93.17 |

[^27]POPULATIUN OF WISCONSIN, 1890, 1900, 1895.
Table IV-Continued.

| Counties, Towns, Cities, Villages. | United States Census. |  | State Census. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1890. | 1900. | 1895. | No. | Pr. et. |
| TREMPEALEAU COUNTY-Con. |  |  |  |  |  |
|  |  | 438 | 420 |  |  |
| Burnside town ${ }^{\text {a }}$ | ${ }^{3} 825$ | 938 | 922 | + 113 | + 13.69 |
| Caledonia town | 379 | 345 |  | - 34 | - 8.97 |
| Chimney Rock town | 682 | 963 | 879 | + 281 | + 41.20 |
| Dodge town | 448 | 495 | 535 |  | + 10.49 |
| Ettrick town | 1,841 | 1,969 |  |  | + 6.95 |
| Gale town ${ }^{4}$, | ${ }^{5} 1.279$ | 1,384 | 1,387 | + 105 | + 8.20 |
| Galesville village ${ }^{4}$ Hale town | 537 1,566 | 862 1,773 |  | + 325 <br> $+\quad 207$ | + 60.51 +13.21 |
| Independence village ${ }^{2}$ | 1,382 | 1,630 | 1,534 | 248 | + 64.92 |
| Lincoln town ${ }^{6}$ | ${ }^{7} 633$ | 786 | 725 | + 153 | + 24.10 |
| Osseo village ${ }^{\text {8 }}$ |  | 472 | 275 |  |  |
| Pigeon town | 1,038 | 1,209 | 1,167 | $+\quad 171$ | +16.47 |
| Preston town ${ }^{1}$ | 1,811 | 1,693 | 1,692 | - 118 | - 6.51 |
| Summer town ${ }^{\text {s }}$ |  | 767 |  | - 87 | - 10.18 |
| Trempealeau town ${ }^{\text {a }}$ | ${ }^{10} 1,584$ | 1,152 | 1,086 | - 432 | - 27.27 |
| Trempealeau village |  | 609 | 682 |  |  |
| Unity town | 763 | 989 | 930 | + 226 | + 29.61 |
| Whitehall village ${ }^{6}$ | 304 | 600 | 402 | 296 | $+97.36$ |
| Total | 18,920 | 23,114 | 21,963 | + 4,194 | $+22.16$ |
| VERNON COUNTY- |  |  |  |  |  |
| Birgen town | 1,011 | 1,184 | 1,109 | + 173 | $+17.11$ |
| Christiana town ${ }^{11}$ | 1,521 | 1,264 | 1,236 | - 257 | -16.89 |
| Clinton town | 1,045 | 1,214 | 1,127 | +. 169 | + 16.17 |
| Conn town .................... | 1,188 | 1,324 | 1,238 | + 136 | + 11.44 |
| De Soto village (part of) ${ }^{13} \ldots \ldots$. (For total see Crawford Co.) | 276 | 300 |  |  | - 8.69 |
| Forest town ....................... | 1,055 | 1,250 | 1,189 | + 195 | + 18.48 |
| Franklin town | 1,289 | 1,237 | 1,276 |  | - 4.03 |
| Genoa town | 1,026 | 1,077 | 1,076 | + 51 | + 4.97 |
| Greenwood town | 1,120 | 1,027 | 1,108 | - 93 | - 8.30 |
| Hamburg town | 1,081 | 1,070 |  | - 11 | - 1.01 |
| Harmony town ${ }^{\text {Hillsbors }}$ (tow......... | ${ }^{2}$ 1, 1,178 | 1,108 | 1,170 | + 81 | + $\quad .72$ |
| Hillsboro town ${ }^{(1)}$ Hillsboro village ${ }^{1}$ ) $\ldots$.................. | ${ }^{(-1,161}$ | 1,785 | 1,195 | + 224 | + 70.28 |

[^28]POPULATION OF WISCONSIN, 1890, 1900, 1895.
Table IV-Continued.

| Counties, Towns, Cities, Villages. | United States Oensus. |  | State Censùs. | Increase + <br> Decrease in 1900, as compared with 1890 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1890. | 1900. | 1895. | No. | Pr.ct. |
| VERNON COUNTY-Continued. |  |  |  |  |  |
| Jefferson town .................. | 1,400 | 1,548 | 1,529 | + 148 | $+10.57$ |
| Kickapoo town ${ }^{3}$. | 1,185 | 874 | 1,000 | 311 | $-26.24$ |
| La Farge village ${ }^{5}$ |  | 488 |  |  |  |
| Liberty town' ${ }^{\text {a }}$ | 663 | 539 | 740 | - 124 | - 18.70 |
| Ontario village (part of $)^{9}$. <br> (For total see Monroe Co.) |  | 298 | 352 |  |  |
| Readstown village ${ }^{4}$....... |  | 403 | 175 |  |  |
| Stark town ${ }^{6}$....... | 1,033 | 907 | 1,117 | - 126 | $-12.19$ |
| Sterling town | 1,152 | 1,187 | 1,186 |  | + 3.03 |
| Union town | 819 | 849 | 826 | $+\quad 30$ | + 3.66 |
| Viola village (part of ${ }^{\text {(For total }}$ see Richland Co.... |  | 195 | 130 |  |  |
| (For total see Richland Co.) <br> Virogua city | 1,270 | 1,950 | 1,630 | + 680 | + 53.54 |
| ward 1 .... |  |  | 495 |  |  |
| ward 2 |  | 557 | 458 |  |  |
| ward 3 |  | 806 | 677 |  |  |
| Viroqua town | 1,680 | 1,862 | 1,638 | + 182 | +10.83 |
| Webster town | 1,092 | 1,123 | 1,117 | + 31 | + 2.83 |
| Westby village ${ }^{12}$ |  | 524 | 447 |  |  |
| Wheatland town ${ }^{14}$ | ${ }^{15} 603$ | 668 | 554 | + 65 | +10.77 |
| Whitestown town ${ }^{10}$ | 863 | 914 | 791 |  | + 5.90 |
| Total | 25,111 | 28,351 | 27,035 | $+3,240$ | $+12.90$ |
| VILAS COUNTY ${ }^{11}$ |  |  |  |  |  |
| Arbor Vitae town |  | 1,618 | 879 |  |  |
| Eagle River town |  | 1,356 | 1,870 |  |  |
| Minocqua town, incl. Lac du Flambean Indian Res....... |  | 1,955 | 1,052 |  |  |
| Lac du Flambeau Indian Res.. |  | 661 |  |  |  |
| Total |  | 4,929 | 3,801 |  |  |
| WALWORTH COUNTY- |  |  |  |  |  |
| Bloomfield town ........ | 1,197 | 1,314 | 1,281 | $1+117$ | + 9.77 |
| Darien town | 1,218 | 1.371 | 1,296 | I+ 153 | $+12.56$ |
| Delavan city ${ }^{18}$ | 2,038 | 2,244 | 2,238 | + 206 | + 10.10 |
| ward 1 |  | 719 |  |  |  |
| ward 2 |  | 772 |  |  |  |
| ward 3 |  | 753 |  |  |  |
| Delavan town ${ }^{16}$ | ${ }^{17} 677$ \| | 9931 |  | + 316 | + 46.67 |

[^29]POPULATION OF WISCONSIN, 1890, 1900, 1895.
Table IV-Contińued.


[^30]POPULATION OF WISCONSIN, 1890, 1900, 1895.
Table IV-Continued.


[^31]${ }^{2}$ Exclusive of population of Schleisingerille village. In 1890 Polk town had 1,639 , Schleisingerville. village 432, total 2,071; in 1900 Polk town had 1,554, Schleisingerville village 549 , total 2,103 ; increase 32 or 1.54 per cent.
${ }^{3}$ Hartland village, formerly in Delafield and Merton towns, now independent.
${ }^{4}$ Exclusive' of population of Hartland village. In 1890 Delafield town had 1,303. Hartland village 486, Merton town 1,499, total 3,288; in 1900 Delafield town had 1,250 , Hartland village 629, Merton town 1,530, total 3,409; increase 121 or 3.68 per cent.
${ }^{5}$ Cagle village organized from part of Eagle town since 1890. In 1900 Eagle town had 744. Nagle village 324 , total 1,068; in 1890 Eagle town had 1,020; increase 48 or 4.7 per cent.
${ }^{6}$ Menomonie Falls village, formerly in Menomonie town, now independent. suxclusive of population of Menomonie Falls village. In 1890 Menomonie town had 2,058, Menomonie Falls village 422, total 2,480 ; in 1900 Menomonie town had 2,178, Menomonie Falls village 687, total 2,865; increase 385 or 15.52 per cent. sPewauke village, formerly in Pewaukee town, now independent.
${ }^{9}$ Exclusive of population of Pewaukee village. In 1890 Pewaukee town had 2,077 , Pewaukee village 680, total 2,757 ; in 1900 Pewaukee town had 1,708 , Pewaukee village 714 , total 2,422 ; decrease 335 or 12.15 per cent.
${ }^{10}$ Waukesha village, formerly in Waukesha town, incorporated as a city and made independent since 1890.
${ }^{11}$ Exclusive of population of Waukesha yillage. In 1890 Waukesha city had 6,321 , Waukesha town 1,159 , total 7,$480 ; 1900$ Waukesha city had 7,419, Waukesha town 1,015 , total 8,434 ; increase 954 or 12.75 per cent.

POPULATION OF WISCONSIN, 1890, 1900, 1895.
Table IV-Continued.

| Counties, Towns, Cities, Villages. | United States Census. |  | State Census. | Increase + in 1900 , as compared with 1890 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1890. | 1900. | 1895. | No. | Pr.ct. |
| VAUPACA COUNTY- |  |  |  |  |  |
| Bear Creek town ... Caledonia town |  |  | $1{ }^{\text {l }}$ |  |  |
| Clintonville city | 1,136 1,943 1,466 | 1,257 | $1,194 \pm \begin{array}{r}121 \\ 991\end{array}+\begin{array}{r}10.65 \\ 4.13\end{array}$ | + 187 | $\begin{array}{r}\text { + } \\ +12.75 \\ + \\ \hline\end{array}$ |
| Dayton ${ }_{\text {Dupont }}^{\text {town }}$ town ${ }^{\text {d }}$ | $\begin{array}{r}1,466 \\ \hline 85 \\ \hline 9616\end{array}$ | 1,653] |  |  |  |
| Embarrass vulage ${ }^{3}$ | 2916 | 1, ${ }_{213} 13$ | 1,602 | $\begin{array}{r}199 \\ +\quad 97 \\ \hline\end{array}$ |  |
| Farmington town |  | $\begin{array}{r}1,242 \\ \hline 1,522 \\ 425 \\ \hline\end{array}$ | 1,391 | $\begin{array}{r}435 \\ +\quad 105 \\ \hline 12\end{array}$ | + |
| Fremont village ${ }^{\text {a }}$ |  |  | ${ }_{283}^{488}$ |  |  |
| Harrison town ${ }^{\text {a }}$ |  | 263 453 |  | - 12 | -4.34 |
| Helvetia town ${ }^{7}$ | ${ }_{1,315}^{\text {5i1 }}$ | 518 | 343 |  |  |
| Iola village ${ }^{\text {a }}$ |  | $\begin{array}{r}804 \\ 558 \\ \hline 1\end{array}$ | ${ }_{780} 08$ | - $511^{7}$ | $7{ }^{7}+1.36$ |
| Larrabee town | 1.436 | 1,398 <br> 939 | 1,476 | ….... ${ }^{\text {d }}$ | $\ddot{38}$ ……64 |
| Lind town |  |  |  | 88 |  |
| Little Wolf town ${ }^{\text {a }}$ | ${ }^{101} 13137$ | 1,096 1,421 |  |  | $\begin{array}{r}\text { + } \\ + \\ +24.87 \\ \hline\end{array}$ |
| Marion village ${ }^{1}$ | $\begin{array}{r}1350 \\ \\ \hline 10\end{array}$ | 1,744 | 1,8310103 |  | $+112.57$ |
| Matteson town ${ }^{3}$ | 8601,040 | 867 <br> 966 |  |  | + 28.68 |
| Mulswa town ..... |  |  | 1,031 |  |  |
| New London city (wards 1, 2,4, | 1;682 | 2,202 | 1,394 | 520 |  |
| , (For total see Outagamie Co..) |  |  |  |  | + 30.91 |
| Royaton town . Lawrence town ............. |  | 1,272 |  | 74 | + 6.18 |
| Scandinavia town ${ }^{11}$ | 1,004 | $\begin{array}{r} 1,178 \\ 921 \\ 320 \end{array}$ | $\begin{aligned} & 1,146 \\ & 929 \end{aligned}$ | $\begin{array}{ll} + & 174 \\ \hline & 221 \end{array}$ | $\begin{array}{r} 6.18 \\ +17.33 \\ \hline 19.34 \end{array}$ |
| Scandinavia village ${ }^{12}$ |  |  |  |  |  |
| Waupaca cit | $\begin{gathered} 7, i 5 i \\ 2,127 \end{gathered}$ | 1,309 | 1,345 | + 156 | $\begin{aligned} & \dddot{ } 13 . \ddot{5} \dot{3} \\ & +36.90 \end{aligned}$ |
| ward 1 |  | ${ }^{785} \begin{aligned} & \text { 785 } \\ & 742 \\ & 742\end{aligned}$ |  |  |  |
| ward |  |  |  | …….. | $\ldots$ |
| ward ${ }_{\text {ward }}{ }_{4}^{3}$ |  |  |  |  |  |
| Waupaca town |  | 742 610 | $\begin{aligned} & 731 \\ & 621 \\ & 621 \end{aligned}$ | ...... |  |
| Weyauwega town ${ }^{13}$ | $\begin{array}{r} 964 \\ 19446 \\ 706 \end{array}$ | $\begin{aligned} & 960 \mid \\ & 579 \\ & 911 \end{aligned}$ | 1.003 |  | $\begin{aligned} & \cdots .41 \\ & +\quad . \quad .04 \\ & +29.03 \end{aligned}$ |
| Weyauwega village ${ }^{18}$ Wyoming town |  |  |  |  |  |
| Wyoming town ${ }^{\text {s }}$. |  |  |  | 205 |  |
| Total | 26,794 | 31,615 | $30,215+4,821$ |  | +17.99 |

${ }^{1}$ Marion village, formerly in Dupont town. now independent.
Marion village 470. total 1.386; in 1900 Dillage. In 1890 Dupont town had 916 , 602 . total 1,615 ; increase 229 or 16.52 per cent. town had 1,013, Marion village
${ }^{3}$ Embarrass village organized from part of Matteson town since 1890. In 1900 Embarrass village had 270, Matteson town 867, total 1,137; in 1890 Matteson town $h_{4}$ ad 860 ; increase 277 , or 32.2 per cent.
${ }_{5}^{4}$ Fremont village, formerly in Fremont town, now independent.
${ }^{5}$ Exclusive of population of Fremont village. In 1890 Fremont town had 530 263. total 688 ; decrease 117 or ; in 14.53 per cent.
${ }_{6}$ Harrison , decrease 117 or 14.53 per cent.
In 1900 Harrison to form parts of Iola town since 1890 1890 Iola town had 1,315 ; increase 500 or 38 per 558 , Iola town 804, total 1,815 ; in
${ }^{7}$ Part taken to form Wyoming town since 1890
${ }^{8}$ Organized from part of Helvetia town since 1890. In 1900 Helvetia town had 518, Wyoming town 497, total 1,015; in 1890 Helvetia town had 511 ; increase
${ }^{9}$ Manawa village, formerly in Little Wolf town, now independent.
${ }^{10}$ Exclusive of population of Manawa village. In 1890 Little Wolf. town had 1,137, Manawa village 350, total 1,487; in 1900 Little Wolf town had 1,421, Manawa village 744, total 2,165; increase 678 or 45.59 per cent.
${ }_{12}^{11} \mathrm{Part}$ taken to form Scandinavia village since 1890
${ }^{12}$ Organized from part of Scandinavia town since 1890 . In 1900 Scandinavia town had 921, Scandinavia village 320, total 1,241; in 1890 . Sicandinavia town had 1,142 ; increase 99 or 8.66 per cent.
${ }_{14}^{13}$ Weyauwega village, formerly in Weyauwega town, now independent. had 546, Weyauwga village of Weyauwega village. In 1890 Weyauwega town auwega village 911, total 1,490 ; increase 238 ; in 1900 Weyauwega town 579 , Weyauwega village 911, total 1,490 ; increase 238 or 19 per cent.

Table IV-Continued.

${ }^{1}$ Omro village, formerly in Omro town, now independent.
${ }^{2}$ Exclusive of population of Omro village. In 1890 Omro town had 1.038 . Omro village 1,232 , total 2,270 ; in 1900 Omro town had 1,163 , Omro village 1,358 , total 2,521 ; increase 251 or 11 per cent.

## POPULATION OF WISCONSIN, 1890, 1900. 1895.

Table IV-Continued.


[^32]SUMMARIES OF POPULATION BY COUNTIES, ${ }^{1890,1900 .}$
Showing by counties the population of Wisconsin in 1890 and 1900 , together with the increase and decrease in 1900 as compared with 1890.

Table V.


## SUMMARIES SHOWING THE POPULATION IN THE CITIES IN WISCONSIN IN 1890 AND 1900.

Together with the increase or decrease in 1900 as compared with 1890.
Table VI.


Table VI-Continued.

| Cities. | Counties. | Population. |  | Increase + Decrease in 1900 , as compared with 1890. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1890. | 1900. | Number. | Per cent. |  |
| Milwauke | Milwaukee | 204,468 | 285, 315 | + 80,847 |  | 39.54 |
| Mrueral Poi | Iowa | , 2694 | ${ }_{1}^{2,991}$ |  |  |  |
| Mondov |  | 3,768 | 3,927 | + ${ }^{+159}$ |  | 4.22 |
| Nieenar | Winnebago. | 5,083 | 5,954 | + 871 |  | 17.13 |
| Nensvile | Clark | 1,936 | ${ }^{2} 10104$ | $\pm \quad 168$ |  | ${ }_{2.4}$ |
| New Lonqua | Outagamie | 2,050 | 2,742 | + 692 | $F$ | 33.75 |
| New kichmon | St. Croix | 1,408 | 1,631 | + 223 |  | 15.83 |
| uconomowoc | Waukesha | 2,729 | 2,880 | + ${ }^{151}$ | $\pm$ | ${ }_{8}^{5.53}$ |
| Uconto Unalaska a | Oconto | 1,587 | 1, ${ }^{\text {1, }, 368}$ | I $\quad 219$ |  | 13.79 |
| Ushkosn | Winnebago | 22,836 | 28,284 | + 5,448 | + | 23.85 |
| Phillips | Price . |  | 1,820 |  |  |  |
| Pittsville | Wood | ${ }_{6}^{653}$ | - 634 | - $\begin{array}{r}\text { - } \\ \hline\end{array}$ |  | 21.90 |
| Plattevile | Grant. | 2,740 1,503 | 3,340 2,257 | $+\quad 600$ <br> $+\quad 754$ |  | 50.16 |
| Plymouth | Columbia | 5,143 | 5,459 | $+\quad 316$ | - | 6.14 |
| Port Washingto | Ozaukee | 1,659 | 3,010 | + 1,351 | $+$ | 81.43 |
| Prairie du cinien | Crawfor | 3,131 | - | $\begin{array}{r}+\quad 101 \\ +\quad 91 \\ \hline\end{array}$ | $+$ | ${ }_{9.98}^{3.22}$ |
| Racine | Racine | 21,014 | <2,102 | + 8,088 | $+$ |  |
| Reedsburg | Sauk | 1,737 | 2,225 |  |  | 28.09 |
| Rhinelanaer | Oneida | 2,658 | 4,998 | + 340 +872 |  | 88.93 |
| Rice Lake | Barron | 2,130 | 3,002 | + $\quad 872$ |  | ${ }_{27}{ }^{40.59}$ |
| Richland Center | Richland Fä | 1, ${ }^{1,358}$ | ${ }_{3,818}^{2,321}$ | 460 | $+$ | 13.69 |
| River falis | Pierce | 1,783 | 2,008 |  | $+$ |  |
| Seymour | Outagamie | $\begin{array}{r}733 \\ 1.505 \\ \hline\end{array}$ | 1, 1,863 | $+\quad 395$ <br> $+\quad 358$ | $+$ | ${ }_{23.78}^{28.55}$ |
| Shawaygan | Sheboygan | 16,359 | 22,962 | + 6,603 |  | 40.36 |
| Shullssurg | Lafayette | 1,393 | 1,250 |  |  | 10.26 |
| Sparta. | Monroe | $\dddot{2,795}$ | 3 3,555 | +....790 |  | 27.19 |
| Stanley | Chippewa |  | 2,387 |  |  |  |
| Stevens Point | rtage | 7,896 | 9,524 |  |  | ${ }^{20.61}$ |
| $\xrightarrow{\text { Stoughton }}$ Sturgeon Bay | Dane | 2,470 <br> 2,195 | 3,431 | $\begin{array}{r}\text { + } \\ +\quad 1,167 \\ + \\ \hline\end{array}$ |  | ${ }^{38.90}$ |
| Superior | Doüglas | 11,983 | 31,091 | + 19,108 |  | 159.45 |
| Tomah | Monroe | ${ }_{1}^{2,199}$ | $\stackrel{2}{2,840}$ | $\begin{array}{r}+\quad 641 \\ \hline\end{array}$ | + | 26.15 |
| Two River | Lincoln ${ }_{\text {Lanitowoc }}$ | $\stackrel{\text { 2,870 }}{ }$ | ${ }_{3,784}^{2,89}$ | $\pm+\quad 914$ | $+$ | 31.8 |
| Viroqua | Verno | , 1,270 | 1,950 | + 6880 | + | ${ }_{3}{ }^{3} .5$ |
| Watertown | Dodge Waukesha | ${ }_{6}^{8}, 321$ | 8,419 7 | - 1,098 | + | 17.3 |
| Waupaca | Waupa | 2,127 | ${ }^{2,912}$ | 785 <br> $+\quad 428$ |  | 36.90 |
| Waupun | Dodge ${ }_{\text {Marathon }}$ | - ${ }^{2,757}$ | 3,185 12,354 | $+\quad 328$ $+\quad 3101$ |  | ${ }_{33.51}^{15.16}$ |
| Wawato | Milwauke |  | 2,842 |  |  |  |
| West Bend | Washingt | 1,296 | 2,119 3 | $\begin{array}{r}+\quad 823 \\ +\quad 954 \\ \hline\end{array}$ |  | ${ }^{63.50}$ |
| Whitewater | W.olwor | 4,359 | 3,405 |  |  |  |
| Tot |  | b+7,713 | 875,868 | + 228,355 | + | 35.25 |

## SUMMARIES SHOWING THE POPULATION IN THE VILLAGES IN WISCONSIN IN 1890 AND 1900.

Togetner with the increase and decrease in same in 1930 as compared with 1890.
Table VII.

| Villages. | Counties. | Population. |  | Increase + Decrease in 1900, as compared with 1890. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1890. | 1900. | Number. | Per cent. |
| Abbotsford | Clark |  | 443 |  |  |
| Ableman | Sauk | 332 | 430 | 98 | 29.51 |
| Albany | Green | 698 | 797 | + 99 | + 14.18 |
| Amery | Pork ${ }^{\text {Portage }}$ | 451 | 905 | + 454 | + 100.60 |
| Arcadia | Trempealeau | 4389 | - ${ }_{\text {1,273 }}$ | + 120 | ${ }_{93} 27.17$ |
| Auburndale | Wood . ..... | 253 | - 241 | 12 | 93.174 |
| Avoca | lowa | 278 | 406 | 128 | 46.04 |
| Baldwin | St. Croix | 482 | 631 | - 149 | + 30.91 |
| Bangor | La Crosse | 499 | 633 | 134 | + $\quad 26.85$ |
| Bayfield. | Bayfield : | 1,373 | 1,689 | $+\quad 316$ | + 23.01 |
| Belleville | Dane . ... | 319 378 | 1,385 509 | + 66 | +. 20.68 |
| Belmont <br> Benton | Lafayette | 378 414 | 509 546 | ${ }_{131}^{131}$ | $+\quad 34.65$ $+\quad 3188$ |
| Birnamw. | Shawano. | 414 | 4460 | 132 | 31.88 |
| Blair | 'Irempealeau |  | 438 |  |  |
| Blanchardville | Latayette . |  | 573 |  |  |
| Eloomer | Chippewa | 631 | 811 | 180 | 28.52 |
| Bloomington | Grant . | 587 | 611 | + 24 | + 4.09 |
| Brand ${ }_{\text {Bon }}$ | Chippewa | 545 | 674 | + 129 | + 23.67 |
| Brillion | Calumet Lac | 660 582 | 663 855 |  |  |
| Browntown | Green. | 582 | 846 | 273 | 46.89 |
| Cadott. | Chippewa | 889 | 840 | 49 | 5. ${ }^{\text {a }}$ |
| Cambria | Columbia | 524 | 561 | 37 | + 7.61 |
| Cameron ${ }_{\text {Camp }}$ Dougias | Barron |  | 394 |  |  |
| Casto ${ }^{\text {Couglas }}$ | Muneau | 225 | 432 510 | 207 | 92.00 |
| Cassville . . | Grant | 886 | 979 | $\cdots \cdots$ | $\ldots$ - ${ }_{10.0}$ |
| Cedar Grove | Sheboygan |  | 327 | 93 | $+10.50$ |
| Clear Lake Clinton | Polk. |  | 527 |  |  |
| Cuba City | Rock | 856 | 871 636 | 15 | 1.75 |
| Cudahy. | Milwaukee |  | 1,366 |  |  |
| Dane. ${ }_{\text {Dar }}$ | Dane |  | +280 |  |  |
| Dartford | Green Lake | 204 | 450 | 246 |  |
| Deerfield <br> De Soto | Dane . ${ }^{\text {Cr }}$ | 338 | 515 | 177 | 52.36 |
| Eagle. | Crawford | 355 | 387 324 | 32 | 9.01 |
| Edgar | Marathon |  | 324 478 |  |  |
| Elkhart Lake | Sheboygan |  | 464 |  |  |
| Ellsworth | Pierce . . | 670 | 1,052 | 382 | 57.61 |
| Embarrass <br> Fairchild | Waupaca. |  | ${ }_{9} 270$ |  |  |
| Fennimore | Eau Claire | 645 616 | 947 1,035 | 302 419 | 46.82 |
| Fox Lake | Dodge . | $\stackrel{614}{814}$ | 1,035 | - 419 |  |
| Fremont | Waupaca | 275 | 263 | 12 | 4.34 |
| Galesville | Trempealeau | 537 | 862 | 325 | 60.51 |
| Grafton | Ozaukee | 434 | 478 | 44 | + $+\quad 10.13$ |
| Gratiot | Burnett <br> Lafayet | 41.0 | 612 335 | 202 | 49.26 |
| lammond | St. Croix | 388 | 404 | 16 |  |
| Hartland | Waukesha | 486 | 6zy | 143 | 29.42 |
| Hazel Green Highland | Grant . | 426 | 442 | 16 | 3.75 |
| Hilbert. | Iowa | 751 | 913 | 162 | 21.57 |
| Millsboro | Vernon | 461 | 785 | ……ㄹ.. | $70 . \ddot{2}$ |

Table VII-Continued.


Table VII-Continued.

| Villages. | Counties. | Population. |  | Increase + Decrease in 1900, as compared with 1890. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1890. | 1900. | Number. | Per cent. |
| Theresa . .............\| Dodge . .........|..........| 355 |..........|............ |  |  |  |  |  |
| Tigerton | Shark | 723 | 8388 | + 115 | 15.90 |
| Trempealeau | Trempealeau |  | 609 |  |  |
| Turtle Lake | Barron . ... |  | $\stackrel{609}{326}$ |  |  |
| Union Grove | Racine | 432 | 520 | $\overbrace{}^{\cdots \cdots \cdots 8}$ | $+\quad 20.37$ |
| Waterioo | Jefferson |  | - 432 |  |  |
| Waunakee | Dane. | ${ }_{312}^{862}$ | 1,137 | $+\quad 275$ $+\quad 131$ | 31.90 |
| Wauzeka | Crawford | 312 | 447 | $+\quad 131$ | 41.98 |
| Westly . ... | Vernon |  | 524 |  |  |
| West Salem | La Crosse | 542 | 725 | $\because \quad 183$ |  |
| Weyauwega . <br> Whitefish Bay | Waupaca | 706 | 911 | + 205 | ${ }_{29.03}^{39}$ |
| Whitehall . . | Trempealeau | 304 | 600 |  |  |
| Wilton | Monroe . .... | 304 | 400 | 296 | 97.36 |
| Winneconne | Winnebago | 1,086 | 1,042 |  |  |
| Wittenberg | Shawano. |  | -798 | + 78 | 9.90 |
| Wr:ghtstown | Juneau | 619 | 811 | + 192 | 31.01 |
| Wreghtstown | Brown | 476 | 420 | 56 | 11.76 |
| To | , | 55,274 | 94,466 | + 39,287 | 74.73 |

The preceding pages of this part, as pointed out already, are devoted to the population of this state. The facts presented in this connection are included in seven tables; and in order to convey a better idea of what these tables really contain, it will be necessary to repeat in part what has already been said regarding them.

Table I.-This table shows the total population of the state at the different censuses since 1840 , together with the increase that took place as between each census.

Table II.-In this table is found the population, by counties, at each census since 1840 .

Table III.-Shows the area, in square miles, of the land surface in each county in the state.

Table IV.-This table gives the population for 1890, 1895, and 1900 , by counties and other minor civil divisions. The table is so arranged that the counties appear in alphabetical order. Under each county is then given the figures for each town, city, and village which is located in the same. This table also shows in each case the increase or decrease, as the case may be, in the population in 1900 as compared with 1890. The table is quite lengthy, covering 45 pages.

The four tables thus described have been compiled from the reports of the different censuses, and thus constitute the basic data. Table IV is of course the most important in the series, giving and comparing, as it does, the population of the state, by each of the minor civil divisions, at the three last censuses. The three tables which immediately follow table IV are merely summaries of that table and may be described as follows:

Table $V$ is a summary, by counties, of the population of the state in 1890 and 1900, giving also, in each instance, the increase or decrease in the latter year. Tables VI and VII, respectively are summaries, by cities and villages of the population for the two years in question and the changes which took place during the period. These three tables will be the subject of further analyis.

In table V is seen that there were 68 counties in the state in 1890, and 70 counties in 1900 , and that the population in these counties or in the state numbered $1,686,880$ in the former year and $2,069,042$ in the latter. During the decade, or between the two censuses, there was thus an increase of 382,162 persons, or 22.66 per cent. in the population in Wisconsin. Practically every county has contributed to this increase, as is seen from the fact that all but one show a growth during the last decade.

In the following table the counties have been classified according to the percentage of increase in population during the last decade, or from 1890 to 1900 :

| Classification of Increases. | Number of counties. | Per cent. |
| :---: | :---: | :---: |
| Over 100 per cent. | 1 | 1.50 |
| 75 per cent. but less than 100 per cent. | 4 | ${ }^{6} .00$ |
| 50 per cent. but less than 75 per cent. | ${ }^{5}$ | 22.00 * |
| 25 per cent. but less than 50 per cent. | ${ }_{23}^{15}$ | 22.00 |
| 10 per cent. but less than 25 per cent. | 15 9 | 33.80 13.20 |
| Less than 5 per cent. ...... | 11 | 16.15 |
| Total countlies included | 68 | 100.00 |

The above table shows that there was only one county in the state in which the number of inhabitants more than doubled during the last census period. The county in question is that
of Douglas, where the increase amounted to 169.77 per cent. The increase in this case is due almost entirely to rapid growth of the city of Superior, which is located in that county.

While Douglas is the only county in which the population more than doubled, there are several in which the increases were quite large. Thus there are four counties with an increase of over 75 per cent., and five with increase of over 50 per cent. In fifteen counties the increase varied between 25 and 50 per cent., while in twenty-three others it ranged from 10 to 25 per cent., and twenty had less than 10 per cent. As pointed out already the average increase for the state was 22.66 per cent. Counting the counties which exceeded and fell short of the average, it is found that the former includes 26 and the latter 52 counties.

CLASSIFICATION BY COUNTIES, 1890.

| Counties. | Number of counties. | Population. |
| :---: | :---: | :---: |
| Under 5,000 | 5 | 12,912 |
| 5,000 but under 10,000 | 8 | 57,351 |
| 10,000 but under 20,000 | 21 | 334,551 |
| 20,000 but under 30,000 | 16 | 375,687 |
| 30,000 40,000 but under under 40,000 00,000 | 11 | 385,822 |
| Over 50,000 ............ | 4 3 | 174,781 345,776 |
| Total | 68. | 1,686,880 |

CLASSIFICATION BY COUNTIES, 1900.

| Counties. | Number of counties. | Population. |
| :---: | :---: | :---: |
| Under 5,000 ...... | 4 | 13,115 |
| 5,000 but under 10,000 | 7 | 54,642 |
| 10,000 but under 20,000 | 16 | 253,791 |
| 20,000 but under 30,000 | 20 | 490,758 |
| 30,000 but under 40,000 | 10 | 336,527 |
| 40,000 but under 50,000 | 8 | 360,984 |
| Over 50,000 | 5 | 559,225 |
| Total | 70 | 2,069,042 |

In the preceding two tables, the counties have been classified according to their population at each of the two census years. Thus we find here the number of counties each year which had a population of less than 5,000 each, the number of counties
that had 5,000 but less than 10,000 , and so on. These tables are interesting because they show the relative importance of the various counties.

The tables also confirm what has already been shown, namely, that there was a steady increase in population between the two censuses. The increase is shown in this, that there was a reduction in number of counties in the lower classes and an increase in the number in the higher classes. As an example of this it may be pointed out that the counties with less than 5,000 decreased from 5 to 4 , and that those with over 50,000 increased from 3 to 5 in number.

It is clearly apparent from table IV that the more marked increases in population took place in the newer counties, or in the northern parts of the state. There are, of course, a few exceptions to this, as may be seen from the figures for such counties in the southern or eastern parts where our manufacturing centers are found. That the northern counties, however, should show greater increases is only natural. Most of these counties are comparatively new, with plenty of low-priced and tillable land, and with their other resources in a comparatively undeveloped state. These counties without question offered favorable opportunities for enterprise and capital. Conditions for development were ripe, and those who were looking for a chance to clear up a new farm or build up a new business have taken advantage of this, with the result that the northern parts of the state are growing at a rapid rate both in population and wealth.

Table VI, as explained, deals with the cities in this state. It contains the figures giving the population in the cities at the last two federal censuses. It also shows the increases and decreases at the last census both in actual figures and in percentages. In going over this table it will among other things be noticed that there were 109 cities in 1890 as against 115 in 1900 , or an increase of 6 , and that the cities in existence in 1890 , 100 had an increase in population, while 9 give a decrease.

The population of the 109 cities incorporated in 1890 was 647,713 in that year, and 862,971 in 1900 , an increase of

215,258 persons, or of 33.23 per cent. Adding the population of the six cities which have been incorporated as such during the last decade which foot up to about 12,897 , and we find a city population in 1900 of 875,868 . The population of all places incorporated as cities was thus 647,713 in 1890 and 875,868 in 1900, an increase of 228,355 persons, or of 35.25 per cent. When the six cities which have been created since 1890 are included, there is thus an increase in the city population of 35.25 per cent.; when these cities are excluded, the increase is two per cent. less.

In classifying the cities according to their ratio of increase on the same basis as in the classification already given for the counties, the following results are obtained:

| Classification. | Number. | Per cent. |
| :---: | :---: | :---: |
| Over 100 per cent. | 4 | 4.00 |
| 75 per cent. but less than 100 per cent. | ${ }_{10}^{4}$ | 4.00 |
| ${ }^{25}$ per cent. but less than 50 per cent. | 30 | 30.00 |
| 10 per cent. hut Jess than 25 per cent. | 32 | 32.00 |
| S per cent. but less than 10 per cent. | ${ }_{8}^{12}$ | 12.00 8.00 |
| Total cities given, increase | 100 | 100.00 |

According to this table, 100 of the cities which had been organized as such in 1890 show a growth in population during the last decade. About 8 per cent. of these cities show an increase of over 75 per cent., and 40 per cent. show an increase of from 25 to 75 per cent. The remaining cities, which number about 52 per cent. of the total, give an increase of less than 25 per cent. As has been seen, the average increase for the cities was 35.25 per cent., as against 22.66 per cent. for the whole state.

As pointed out above, nine cities had a decrease in population during the last period. These cities are: Alma, Altoona, Black River Falls, Chippewa Falls, Onalaska, Pittsville, Shullsburg, Watertown, and Whitewater. The decreases for these cities were not large. For six of them it ranged from 10 to 25 per cent. ; for one city, from 5 to 10 per cent., and for the remaining two cities it was less than five per cent.

The following cities were created during the last decade: Colby, Glenwood, Philips, South Milwaukee, Stanley, and Wau-
watosa. These places are of course small as yet, having a combined population of only 12,89 T. Some of them, however, are so located that they may show considerable growth in the future.

CLASSIFICATION OF CITュLS ACCORDING TO POPULATION IN' 1890.

| Classification. | Number of cities. | Total population. |
| :---: | :---: | :---: |
| Under 500 population | 2 | 629 |
| 500 but under 1,000 | 9 | 7,097 |
| 1,000 but under 5,000 | 70 | 152,922 |
| 5,000 but under 10,000 | 15 | 108,222 |
| 10,000 but under 25,000 | 10 | 149,285 |
| 25,000 but under 35,000 | 1 | 25,090 |
| ıilwaukee | 1 | 204,468 |
| Total | 108 | 647,713 |

CLASSIFICATION OF CITIES ACCORDING TO POPULATION IN 1900.

| Classification. | Number of cities. | Total population. |
| :---: | :---: | :---: |
| Under 500 population | 1 | 254 |
| 500 but under 1,000 | 6 | 4,152 |
| 1,000 but under 5,000 | 75 | 174,924 |
| 5,000 but under 10,000 | 15 | 96,693 |
| 10,000 but under 25,000 | 13 | 191,158 |
| 25,000 but under 35,000 | 4 | 117,372 |
| Milwaukee | 1 | 285,315 |
| Total | 115 | 875,868 |

In the above tables the cities are classified according to their population. Here we see that in 1890 two cities had a population of less than 500 , while in 1900 only one city had less than this number. In the former year, 9 cities had a population of from 500 to 1,000 ; in the latter year, only 6 cities come in this class. In the third class in order, there were 70 cities in 1890 , and 75 in 1900 . The class, 5,000 but less than 10,000 , had 15 cities for both years. While in this case there was no change in the number of the cities, there was a decrease of the total population from 108,222 to 96,693 . In all the other classes, however, there was an increase for the latter year. The cities themselves increased in n*mber from 108 to 115.

POPULATION OF EACH OF THE FIVE LEADING CITIES IN THE STATE AT EACH FEDERAL CENSUS SINCE ORGANIZED OR SINCE 1840.


In the preceding tables is found the population of each one of the five leading cities in the state at each census since 1840, or since the cities were organized as such. The cities included are: Milwaukee, La Crosse, Oshkosh, Racine and Superior. All of these are manufacturing or commercial centers, and show a rapid growth.

Milwaukee was first enumerated separately in 1840, and at that time had a population of 1,712 . Its growth since that time has. been great. Up to 1850 it amounted to 1071.8 per cent., and in the succeeding decades it has only fallen below 50 per cent. in one case, namely, in the last decade, when it stood at
39.5 per cent. The actual increase, however, in the last ten years was greater than during any preceding period save one, that between 1880 and 1890.

La Crosse and Oshkosh appeared as cities for the first time in the census of 1860. At that census the former had a population of 3,860 , and the latter of 6,086 . During the next decade ending in 1870, the population in both of these places more than doubled. Since that time, the growth has continued at a fair rate. La Crosse is located on the Mississippi River on the western boundary of the state. Oshkosh is located on Lake Winnebago on the eastern boundary line.

Racine and Superior made their appearance in the census 40 years apart. Racine is given in 1850 , when it had a population of 5,107 , and is one of the oldest places in the state. Superior did not appear until in 1890, but at this time had a population of 11,983 , and shows a remarkable growth during the last decade. Both of these cities are manufacturing and commercial centers, and the chances are that their growth will continue at a high rate for many years to come. Racine is located on Lake Michigan in the southeastern part of the state. Superior, on the other hand, occupies the northwest corner of the state on Lake Superior. It has a magnificent harbor, and large shipping and other interests.

Table VII is a summary of the population in all places in the state that were organized under a village government. These places numbered 98 in 1890, and 145 in 1900, an increase of 47 places. The 98 villages in 1890 had a population of 55,274 , as against 94,466 persons for the 145 villages in 1900. This makes an ine zase in population for these places of 39,287 persons, or 74.73 per cent. According to these figures the population in the villages increased at a greater ratio than that for the towns and cities.

Of the 98 villages which were in existence as such in 1890 , 85 show an increase in population during the last decade, and 13 show a decrease. These changes are classified as follows:


In the above table, the villages are classified according to their ratio of increase. It shows that for 5 villages the population increased over 100 per cent., and that in 5 others it ranged from 75 to 100 per cent. The class, 50 but less than 75 per cent., contains 12 villages, and the two next classes in order include 30 and 24 villages respectively. The latter two classes are thus the heaviest in the table. The last two classes, those giving increases of 5 to 10 per cent., and less than 5 per cent., include only 4 and 5 villages respectively. In considering these facts in connection with table VII, it will appear that the rillages in this state fully held their own in the general progress.

Only 13 of the 98 villages showed a decrease in 1900. This is a very small proportion, and serves to emphasize the growth already pointed out. This is also further strengthened by the fact that the decreases were comparatively small. Practically all were below 25 per cent., while in more than one-half of the cases they were below 10 per cent.

From the foregoing facts, the following summaries of the population in villages, cities, and towns have been made:

VILLAGES.


From these figures it appears that the increase in the number of the villages and of the population of the same, was 46.46 and 70.88 per cent. respectively; that the increase in the cities and their population was 6.48 and 35.22 per cent. respectively; and that the towns increased 7.30 per cent. in number and 11.67 per cent. in population. The number of inhabitants in the towns, cities, and villages, respectively, with their proportion of the total for all will be found in the following presentation :


The foregoing figures clearly show that the village and particularly the city population of this state is increasing at a greater ratio than the rural population. In 1890, those living in villages constituted 3.27 per cent. of the total, while in 1900 they constituted 4.63 per cent., an increase for the latter year of about one and one-third per cent. In the cities the increase during this period was even more pronounced, being nearly four per cent., or from 38.40 to 42.30 per cent. As against these increases, there was a decrease of about five and one-fourth of one per cent. in those who live in towns or who live outside of the cities and villages.

These facts, however, only indicate the general tendency. In no sense do they show the actual and relative urban and rural population. For it is plain that those who live in the villages and in the smaller cities cannot be properly classed with the former. Just where to draw the line between the urban and the rural population, however, is not easily determined. So much depends on location, the nature of the industries, kind of population, etc. Some regard 4,000 as the limit, holding that those who live in places with this number of inhabitants or more should be classed with the urban population. Others, again, think that this class should not include places with less than 8,000 inhabitants. As to which side is in the
right seems to be an open question. It is probable, however, that both are right. The basis of the classfication will necessarily have to depend to a great extent upon the purposes for which it is made. In order to show the urban and rural population in either case, the following presentations are included.

In the following table is found the population in places having 4,000 inhabitants or more, and the population in places having less than 4,000 inhabitants:


In 1890, 35 places or cities had a population of 4,000 or more, and the total number of inhabitants in these places was 522,826 , or 31 per cent. of the total for the whole state. In 1900, 37 places had 4,000 inhabitants or more, while the total for these places was 714,566 , or 34.5 per cent. of the total for the state. On this basis of figuring there was thus an increase in the relation of the urban population of 3.5 per cent. The actual increase was 191,730 persons, or 36.67 per cent.

The table which follows gives the population in places having 8,000 inhabitants or more, and of those having less than this number.


In 1890 there were 17 cities in this state which had a population of 8,000 or more, or a total of 424,526 inhabitants. In 1900, 22 cities came in this class and their combined population was 634,437 . If the inhabitants of these cities are classed as
urban, it necessarily follows that between the two censuses there was an increase in the urban population of this state of 209,911 persons, or of 49.5 per cent.

The proportion of the urban of the total population was 25.2 per cent. in 1890, and 30.6 per cent. in 1900. There was thus an increase in the relative proportion of this class of the population of 5.4 per cent. during the last decade. From these figures it is plain that the urban population in this state is increasing much more rapidly than the rural.

Some of the leading facts that were obtained at the two last. federal censuses of this state have thus been more or less fully analyzed. In this connection the population of the state was classified by counties, towns, cities, and villages. The figures for the two census years were placed in comparison, and the changes which took place during the period, together with a great many other facts, have been pointed out.

Having thus considered a great many facts that may be said to have a more direct bearing upon population, it may be in place to take up some that, while less directly related to them, have a close connection with the census figures. The facts which will be given in this connection relate to the population per square mile, the population in each assembly, senatorial, and congressional district, and the population and area of each state and territory in the United States. These presentations include seven tables, or tables VIII to XV inclusive, and may be explained as follows:

Table VIII shows the population per square mile in each county in the state. For the state as a whole the inhabitants per square mile numbered 31.1 in 1890 , and 38 in 1900 .

Table IX gives the population in each of the one hundred assembly districts in the state. The largest assembly district in the state in point of population is that of Portage county, which embraces 29,483 inhabitants; the smallest is the second district in Marinette county, with only 14,627 inhabitants. A little over one-half, or about 56, of the districts have a population of over 20,000 .

Table X shows the counties and population that are included in each of the 33 senatorial districts in the state.

Table XI gives the population and counties included in each of the eleven congressional districts. In this case as in the case of the assembly and senatorial districts, it will be noticed that the different districts vary considerably as to the number of inhabitants included.

Table XII shows by states and territories, etc., the population in 1890 and 1900, together with the increase or decrease, as the case may be, in the latter year as compared with 1890 . The changes are given both in actual number and percentage. It will be noticed in looking over this table that all states or places except Nevada show an increase in population at the last census.

Table XIII shows the gross area in square miles of the United States at each one of the twelve censuses which have been taken since they became a nation. When the first census, that of 1790 , was taken, the area of the land and water surface included in the union constituted 827,844 square miles. When the last census, that of 1900 , was taken, the area had increased to $3,025,600$ square miles. The periods during which there was a change are those ending in 1810, 1820, 1850 and 1860.

Table XIV gives the area in square miles of the land and water surface of each state and territory, including Hawaii, Alaska and Raritan, and New York Bay. In this table the land surface is seen to be $2,970,038$ square miles, while the water surface was 55,562 square miles, and the total of both $3,622,933$ square miles.

## POPULATION' PER SQUARE MILE-BY COUNTIEG.

(The average number of persons per square mile for the state as a whole was * 31.1 in 1890 and 38 in 1900.)

Table VIII.

| Counties. | Population per square mile. |  | Counties. | Population per square mile. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1890. | 1900. |  | 1890. | 1800. |
| Adams . | 10.10 | 13.40 | Manitowoc | - 64.12 | 71.63 |
| Ashland | 21.57 | 21.69 | Marathon . | 19.82 | 28.23 |
| Barron. | 17.56 | 26.97 | Marinette. | 14.55 | 22.08 |
| Bayfield. | 4.94 | 9.61 | Marquette . | 21.45 | 23.30 |
| Brown . | 75.60 | 89.50 | Milwaukee . | 1,035.53 | 1,447.44 |
| Buftalo | 24.16 | 25.32 | Monroe . | 25.37 | 30.71 |
| Burnett | 4.99 | 8.49 | Oconto . .. | 13.90 | 19.33 |
| Calumet | 52.49 | 53.87 | Oneida . . | 5.57 | 9.86 |
| Chippewa | 12.97 | 17.05 | Outagamie . | 61.03 | 72.94 |
| Clark . . | 14.76 | 21.54 | Ozaukee . .. | 66.12 | 72.40 |
| Columbia | 36.53 | 40.10 | Pepin . .... | 29.13 | 33.21 |
| Crawford | 28.70 | 31.03 | Pierce. | 37.54 | 44.09 |
| Dane. | 41.73 | 58.45 | Polk . | 13.89 | 19.08 |
| Dodge | 50.89 | 52.75 | Portage | 31.00 | 36.85 |
| Door. | 34.54 | 38.73 | Price. | 4.24 | 7.34 |
| Douglas | 10.21 | 27.55 | Racine. | 112.25 | 141.31 |
| Dunn | 26.85 | 29.67 | Richland | 33.20 | 33.82 |
| Eau Claire | 49.47 | 51.12 | Rock | 61.08 | 72.53 |
| Florence. | 5.23 | 6.42 | St. Croix | 32.54 | 37.73 |
| Fond du Lac | 61.23 | 66.10 | Sauk | 37.29 | 40.25 |
| Forest . ..... | . 71 | . 98 | Sawyer | 1.47 | 2.68 |
| Grant | 31.68 | 33.61 | Shawano | 16.95 | 24.21 |
| Green | 39.47 | 39.44 | Sheboygan . | 83.31 | 98.72 |
| Green Lake | 41.66 | 43.40 | Taylor . . . | 6.98 | 11.67 |
| Iowa. | 28.99 | 30.29 | Trempealeau | 25.78 | 31.49 35 |
| Iron . . . |  | 8.42 | Vernon . | 31.71 | 35.80 |
| Jackson | 16.15 | 17.86 | Vilas . ... |  | 5.43 52.06 |
| Jefferson | 61.19 | 63.48 | Walworth . | 49.57 | 52.06 |
| Juneau . | 21.67 | 26.11 | Washburn . | 3.51 | 6.62 55.76 |
| Kenosha | 56.86 | 79.22 | Washington | 53.78 | 55.76 62.69 |
| Kewaunee | 49.40 | 52.64 | Waukesha | 59.20 | 62.69 |
| La Crosse | 81.69 | 90.52 | Waupaca. | 35.77 21.14 | 42.21 25.00 |
| Lafayette | 31.96 | 33.06 | Waushara. | $\xrightarrow{21.14}$ | 25.00 123.36 |
| Langlade | 11.17 | 14.68 | Winnebago | 106.14 | 123.36 32.95 |
| Lineoln . | 13.57 | 18.38 | Wood | 23.09 | 32.95 |

## ASSEMBLY DISTRICTS AS PER THE APPORTIQNMENT OF 1901.

Table IX.

| Districts | Populati’n <br> 1900. | Districts. | $\begin{array}{\|l} \text { Populati'n } \\ 1: 00 . \end{array}$ |
| :---: | :---: | :---: | :---: |
| Adams and Marquette Co's ${ }^{1}$ | 19,650 | Marinette Co., 2 d | 14,627 |
| Ashland Co. | ${ }_{23}^{20,176}$ | Milwaukee Co., 1 st Dist. | 23,396 |
| Bayfield, Sowyer and Wash- | ,677 | Milwaukee Co., 2d Dist. |  |
| burn Co's. ${ }^{2}$................. | 23,506 | Milwaukee Co., 4 th Dist | 22,346 |
| Brown Co., 1st Dist........... | 23,372 | Milwaukee Co., 5 th Di | 23,24 |
| ${ }^{\text {Brown Co., }}$ Buffalo and Pepint...0, | 22,987 24,670 | Milwaukee Co., 6th Dist. |  |
| Burnett and Poll Co's | 24,670 |  |  |
| Calumet | 17,078 | Milwaukee Co., 9 th Dist | 17,633 |
| Chippewa Co., 1 1st | 15,676 | Milwaukee Co., 10th Dis | 17,024 |
| clark Co. ... | 17,361 | Milwaukee Co., 11th Dis | 21, |
| Columbia Co., 1st Dist | 15,117 | Milwaukee Co., 13 th Dis | 17,020 |
| Columbia Co., 2d Dist. | 16,004 | Milwaukee Co., 14th Di |  |
| Crawford Co. | 17,286 | Milwaukee Co., 15th |  |
| Dane Co., 2d Dist. | 22,510 | Milwaukee Co., 16th Dist. |  |
| Dane Co., 3d Dist | 22,467 | Oconto | 20,874 |
| Dodge Co., 1st Dist | 23,636 | Outagamie Co., 1st Dis | 23,102 |
| Door Co., 2d Dis | 22,995 | Outagamie Co., 2d Dis | ${ }^{23,145}$ |
| Douglas Co., ist Dist | 18,040 | Pzaukee Co. | ${ }_{23,943}^{16,363}$ |
| Douglas Co., 2d Dist | 18,295 | Portage Co. |  |
| ${ }_{\text {Eau }} \mathrm{Cl}$ | - 5 | Price and Taylor |  |
| Eau Claire Co., 2d Dist. | 15,902 | Racine Co., ${ }^{\text {Rast }}$ ( ${ }^{\text {st }}$ Dis | 24,807 |
| Florence, Forest and Lang- |  | Richland Co. | 19, ${ }^{248}$ |
| Fond du Lac Co...ist ${ }^{\text {cist.... }}$ | 17,146 | Rock Co., 1st Dist |  |
| Fond du. Lac Co, 2 l Dis | 23,848 | Rock Co., 2 d Dis | 17,091 |
| Grant Co., 1st Dist............ | 19,694 | St. Cro x' Co | 26,830 |
| Grant Co., 2d Dist | 19,187 | Sauk Co., 1st Di | 16,905 |
| Green | $\stackrel{22,719}{ }$ | Sauk Co., 2d Dist. | 16,101 |
| Iowa Co. ${ }^{\text {a }}$ | $\xrightarrow{15} \times 114$ | Shawano co........ |  |
| Iron, Oneida and Vilas Co's. ${ }^{\text {b }}$ | 20,420 | Sheboygan Co., 2d Dist | ${ }_{25}^{25,202}$ |
| Jefferson Co., iot inio......... | 17,466 | Trempealeau Co. | 23,114 |
| Jefferson Co., 2d Dist | 17,412 | Walworth C | ${ }_{29}^{29} 259$ |
| Juneau | ${ }^{20,629}$ | Washington Co |  |
| Kewasha | 21,707 | Waukesha Co., 1st Dist |  |
| La Crosse Co., ist Dis | 21, 840 | Waukesha Co., 2 ld Dist |  |
| La Crosse Co., 2 d Dis | 21,157 | Waushara Co | 15,972 |
| Lincolin Co. | 20,959 | Waupaca Co.. 2 d Dist | 15,278 |
| Manitowoc Co., ist D | 20,343 | W nnebago Co., ${ }^{\text {d }}$ d Dist. | 20,317 18,670 |
| Manitowoc Co., 2 d Dis | ${ }_{21,918}^{21,95}$ | Winnebago Co., 3d Di |  |
| Marathon Co., 2 d Dist | 21,659 | Wood | 25,865 |
| Marinette Co., 1st Dist | 16,195 | Total | 2,069,042 |

[^33]
## SENATORIAL DISTRICTS AS APPORTIONED BY THE LEGISLATURE OF 1901.

Table X.

| Districts. |  | $\begin{aligned} & \text { Population } \\ & 1900 . \end{aligned}$ |
| :---: | :---: | :---: |
| First D | Door, Kewaunee and Marinette counties | $\begin{aligned} & 65,617 \\ & 67 \end{aligned}$ |
| Second District | Brown and oconto counties............. | 67, 651 |
| Fourth District ............. | Milwaukee 1st-The 1st, 13th, 18th and 21st wards, city of Milwaukee; , villages of East Milwaukee, North Milwaukee and Whitefish Bay | 61,035 |
| Fifth District ...... ...... | Milwaukee 2 d -The 2d, 3d, 4th, 6th, 7th, 15th and 16.th wards, city of Milwaukee | 69,196 |
| Sixth District | Milwaukee 3d-The 9th. 10th, i9th, 20 th | 71,771 |
| Seventh District | Milwaukee 4th- The 14th and 17 th wards, city of Milwaukee, towns of Franklin, Greenfield, Lake, or Cudahy, cities of South Milwaukee and Wauwatosa | 63,533 |
| Eighth District | Milwankee 5th-The 5th, 8th, 11th, 12 th and 23d wards, city of Milwaukee.. | 64,482 |
| Ninth District | Adams, Marquette, Waushara and |  |
|  | Pierce and St. Croix counties....... | 50,773 61,614 |
| Fleventh District | Burnett, Douglas and Polk counties....̈. |  |
| Twelfth District | and Washburn counties | 64,050 |
| Thirteenth District |  |  |
| Fourteenth District | Calumet and Mañitowoc counties. | 59,339 |
| Sixteenth Distri | Crawford and Grant counties. |  |
| Seventeenth District | Fond du Lac and Green Lake counties. | 63,88 66,792 |
| Eiphteenth District | Wreen, | 58,225 |
| Nineteenth District | Ozauke and Sheboygan counties. | ${ }^{66,708}$ |
| Twenty-first District | Portage and Waupaca counti | ${ }_{51} 1,203$ |
| Twenty-second Distric | Rock county Jofferson and wailorth count | 64,048 |
| Twenty-third District | Chippewa and Eau Claire counties. | 64,729 |
| Twenty-fifth District | Clark and Marathon counties .... | 69,104 |
| TWintr-sixth inistrict | Dane county ${ }^{\text {co............ }}$ | 64,127 |
| Twenty-serenth District | Richland and Vernon counties | 47,834 |
| Twenty-ninth District ..... | Barron, Buffalo, Dunn and Pepin coun- | 73,390 |
| Thirtieth District | Florence, Forest, lron, Langlade, Lin- |  |
|  | Washington and Waukesha counties | 58, 18 |
| Thirty-second District | Jackson. Juneau and Monroe counties.. Crosse and Trempealeau counties.... |  |
|  |  | 2,069,042 |

## CONGRESSIONAL DISTRICTS AS APPORTIONED BY THE LEGISLATURE OF 1901.

Table XI.


## POPULATION OF STATES AND TERRITORIES IN 1900 AND 1890.

Including in 1890 population specially enumerated.
Table XII.


[^34]: GROSS AREA OF THE UNITED STATES AT THE DIFFERENT CENSUS
Table XIII.

| Census years. | Square miles gross area. |  | Census years. | Square miles, gross area. |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| 1810 | 1,999,775$2,059,043$ | 1870 | ................ | 2,980,959 |
| 1820 |  |  |  | 3,025,600 |
| 1830 | 2,059,043 | 18901900 |  | 3,025,600 |
| 1840 |  |  |  | $3,025,600$ |

## AREA OF THE UNITED STATES IN SQUARE MILES IN 1900. <br> Table XIV.



[^35]
## PART III.

## Sweating in the Garment-Making Tradis.

## MEANING OF THE TERM SWEATING SYSTEM.

The conditions described by the term "sweating," in the sense in which it is used today, have probably always existed. The term itself, however, is not so very old. It probably originated in England, a country the industrial development of which is almost identical with that of our own. In Mr. Hicwell's "Conflicts cf Capital and Labor" there is a reference on page 114 which indicates that the term was known in 1814. Mr. Charles Kingsley in his "Cheap Clothes and Nasty," published in 1849, describes the sweating system as follows:-"Part of the work, if not the whole, is let out to contractors or middlemen-"sweaters," as their victims significantly call them-who, in their turn, let it out again, sometimes to the workmen, sometimes to fresh middlemen, so that of the price paid for labor on each article, not only the workmen, but the sweater, and perhaps the civeater's sweater, and a third, and a fourth, and a fifth, have to draw their profit." This definition connects sweating with the subcontract system. which then prevailed and still is coumon in the clethes making industries. In fact, it is obviously the trend of this book, as a whole, not only to describe the conditions of labor in the sub-contract trades by the term "sweating," but even to attribute these conditions to the system of contracting and subcontracting.

This definition, however, does not agree with the conclusicns arrived at by a special committee of the House of Lords, ap-
pointed in 1888 to investigate sweating. This committee defines it as "the taking advantage of the poorer and more helpless classes of workers.",Its evils, the committee says, are known (1) by an unduly low rate of wages; (2) by excessive hours of labor; (3) by the unsanitary state of the houses in which the work is carried on. The committee further says: "These evils can hardly be exaggerated. The earnings of the lowest class of workers are barely sufficient to sustain existence. The hours of labor are such as to make the lives of the workers' periods of almost ceaseless toil, hard and unlovely to the last degree. The sanitary conditions under which the work is conducted are not only injurious to the health of the persons employed, but are dangerous to the public, especially in the case of the trades concerned in making clothes, as infectious diseases are spread by the sale of the garments made in rooms inhabited by persons suffering from smallpox and other diseases." This committee also assigns much less importance to the contractor or middleman than did Kingsley. It says that the contractor is the consequence, not the cause, of the evil; the instrument, not the hand which gives motion to the instrument, and that he is absent in many cases in which the evils complained of abound. The sweating system may exist under any method of employment when the conditions of the labor market afford abundant materials to supply an unscrupulous employer with workers helplessly dependent on him. In some cases the man known as a sweater is merely an agent, knowing nothing of the business. Sometimes he acts the part of a foreman, and directs the work of every branch, understanding the whole business thoroughly. Often he works as hard as any of his employes.

These two lines of definition fairly represent the views of English investigators of the subject. As a whole, they do not differ materially from those held in this country. Thus we find that the definition given by Mr. Kingsley in England more than fifty years ago substantially agrees with that given in 1892 by the Bureau of Lábor of Illinois in an extensive report upon sweating in Chicago. This report, in a general way, holds that the sweating system is of old standing; that it is, in fact, a surviving remnant of the system which immediately preceded the
factory system, a relic of the days when all industry was chiefly conducted upon the piece-price plan in small shops and in the homes of the workers. The actual practice of the sweating system is thus described: It consists of farming out, by competing manufacturers to competing contractors, material for garments, which in turn is distributed among competing men and women to be made up. The middleman, or contractor, is the sweater (though he may also be himself subjected to pressure from above), and his employes are the sweated or oppressed. He contracts to make up a certain garment at a given price per piece, and then hires other people to do the work at a less price, his profit being the difference between the two prices.

This, undoubtedly, correctly describes much of the sweating done in the garment-making industries of this country. It will be noticed, however, that the description implies that all the work is done through the contract system, while in actual practice this is not the case as many of those making wearing apparel in their homes obtain the material from or are employed directly by the wholesale houses. Considerable importance is also attached to the sub-contract system. Here, as has been done by Mr. Kingsley and many other writers, the contractor is made the essential element in the condition of sweating. Col. Carroll D. Wright, United States Commissioner of Labor, in "Practical Sociology" defines sweating as "a condition under which a maximum amount of work in a given time is performed for a minimum wage, and in which the ordinary rules of health and comfort are disregarded." This definition is much broader than those just discussed, corresponding more closely to the conclusions of the committee of the House of Lords.

Four definitions, differing considerably as to their scope and general idea, have thus been given. Those of Mr. Kingsley and that of the Illinois Bureau of Labor convey the impression that sweating is a more or less distinct system of employment or labor, inseparably connected with the sub-contract system in the garment-making industries. That of the committee of the House of Lords and that of Col. Wright,imply rather that it is the condition under which the poorer, unskilled, less efficient or more helpless workers in almost any occupation are employed.

While both ideas may be correct, the latter is broader and comes nearer to covering the sense in which the term sweating is mostly used today.

Taken both together, these definitions both define and describe the sweating system. Sweating in its broad sense is not of recent development. In this country the conditions peculiar to it can be traced back almost to the end of the civil war. It is not, however, an American institution, nor is it an outgrowth of the factory system. The conditions described existed in Europe before the United States had become a manufacturing nation, and before machinery and steam were applied to production. That is, there was sweating before the factory system was ushered in. In fact, sweating is a remnant of the eighteenth century, and of the system of production which preceded the factory system. Before the use of steam and machinery, most articles were made by hand in the small shop or home. The small master and journeymen workers were then the producers. Machinery and steam power coming into vogue in the latter part of the last century, changed all this. Man, with the assistance of these forces, could turn out more goods at the same or even at a lower price than the home worker could when aided only by his tools. The result was speedy and definite. The making of goods of almost every sort was taken into the factories which shortly began to spring up on every hand. The master and journeyman, thus deprived of their former mode of livelihood, became factory operatives. This change occurred in every industry in which machinery cheapened the cost of production. Generally speaking, man alone can not successfully compete with man when aided by a machine, and so the small shops went out of existence and work was taken away from the homes. There were exceptions, however, to even this phase of industrial evolution, for in a few industries work is still largely done under the methods of a hundred years ago and it is in these that sweating is oftenest found.

While the sweating system is a relic of the eighteenth century master and journeymen plan, it differs from it in many ways. It is true that in both cases the work is largely performed by hand and usually in small shops or in homes. It is also true
the piece-price method is common to both, but here the resemblance ends. The master and journeyman method was general while the sweating system is confined largely to a few trades and its workers are drawn from the crowded population of large cities. In the former system competition was limited sometimes through the guilds, sometimes by common consent; in ths latter, competition is absolutely unrestricted, and its fearful results are therefore more felt. The small master was also a dealer as well as a worker, and the journeymen labored more leisurely than the sweat-shop worker does today, while on the whole he enjoyed a much higher social standing. These are only a few of the points in which the two differ.

As intimated, sweating is neither an American institution nor an outgrowth of the factory system, though it is nevertheless true that it exists, to a considerable extent, in many of the larger cities of the United States. The question then arises as to how an evil not peculiar to our institutions has come to be a part of our industrial and social life. It is not difficult to find the cause. The sweating system is an importation from Eastern 'and Southern Europe where the old hand-labor, home-shop method of production is still in vogue. Immigrants from those lands know of no other method, and arriving in this country are ready to continue their former mode of living and working and find nothing strange in doing so. Other forces have aggregated the sweating evil, to be sure, but it was immigration of this sort which furnished the first and the real conditions for its growth.

## A FEW FACTS IN THE HISTORY OF SWEATING.

The term "sweating" is quite old and has been used in different ways. The records are not quite clear on this point, but it would appear that the term was first used in the tailoring trades, the very industry in which the evil is most common today. At some time in the past it was evidently the customi of tailoring firms to have all their work done in their own shops. Not only was the stock kept and the cutting done there, but the sewers worked under the same roof. This condition of things did not continue however. The masters soon discovered they could save rent and profit in other ways by having part of their work "let
out" to tailors who were willing to work in their homes, and gradually this became the general practice. These homemakers were paid by the piece and in order to earn more they often worked inordinately long hours. Tailors who still worked regular hours in the larger shops took the matter up, and, in the discussions that followed, termed the homemakers "sweaters" -that is, persons who sweated themselves for the sake of the extra earning. Before long the term was applied in still another sense. Tailors who took work home soon found that they could obtain more work than they themselves were able to do. This brought about a new order of things. At first the tailors pressed their families into service, then they hired other tailors to assist them. From workmen they were now advanced to and became small masters and began to "sweat" others as well as themselves. They became in short middlemen, or contractors, who took work from the wholesalers, saw to it that it was made up, acted as overseers as well, and were held responsible for it all until the garments were returned. To these contractors the term "sweaters" was then applied, and they are still known by the name.

Aside from these special applications the term "sweater" also gained a wider and more general meaning. The long hours in the tailors' garret were attended by other evils such as low wages, unsanitary surroundings and irregular employment and with these the term became and still continues to be associated. There are many examples of this. Trade unions, for instance, often apply the term to employers who pay less than the ruling wage. Social workers apply it to the unhealthy conditions which surround the workers in many of the sweated occupations. Others again apply it to cases where the hours of work are longer than usual, and where other bad conditions exist. In fact, the word is made to describe the condition of all overworked, underpaid, ill-housed and generally oppressed workers no matter where they are found., Though it is oftenest used in reference to the class in the congested portions of the larger cities.

It is the bad effect of such conditions on the workers that makes them so great a social evil. Long hours, low wages, and unsanitary conditions of employment result not only in poor workers
but, in the end, in poorly made goods. Long hours are bad because they reduce the physical and mental energy of the worker, leaving no time for rest or recreation or the self improvement that might otherwise be possible. No person or race can be taxed constantly to the limit of strength without serious results both to themselves and their descendants. When long hours are associated with low wages, as is generally the case, the situation is made worse. The standard of life is lowered and the efficiency of the workers is seriously impaired. Development and progress of the individual and consequently of society are retarded, and a class of poor and even dangerous citizens is formed. In a republic where all men have a right to vote, this last is not the least of the dangers enumerated.

Unsanitary conditions in workshops or homes where sweating is carried on are dangerous not only to those directly involved but to the community at large. Such places are not infrequently the breeders of disease, the starting point of many a seemingly mysterious epidemic. Diseases of an infectious nature, breaking out in such a place, may spread either through direct contact with the workers or through garments or other articles sent out from it. The workers coming from a home where there is a case of infectious disease may bring the germs to their fellows in the shop. The little child too young to be placed at work may carry the disease to school with him exposing other children and threatening the health of many families. Goods sent out from an infected shop may be exposed for sale with an utter regardlessness of the conditions under which they were manufactured. Instances of all these things are numerous in any community where sweating exists, though the public is not usually cognizant of them. They should demonstrate conclusively to every one the necessity of a wise regulation of those industries that foster them.

As has been said, sweating is often associated with contract work and the small master. This master usually contracts with a wholesaler or other dealer to perform a certain amount of work for a certain price. He then brings this work to his own shop or to his home where it is made up through the help of workers employed by him. The difference between the price he receives and
the amount he pays out to his workers is the compersation he receives for his time and efforts. In some cases, this difference is considerable and leaves him' a fair profit. In other cases, and these seem to be the most numerous, his profit is less than the earnings of his best workers. In many instances, this small contractor has no shop, but simply sublets the work to others who take it to their home where it is made up by their families or pcrhaps by still other hired persons. Here the contractor is not the real employer. He simply takes the work at one price and lets it out at another and then sees to it that the goods are properly returned when made up. In all cases he is responsible for the work from the time the material leaves the wholesaler until the articles made from: it are returned to the latter.

But why does the dealer have his work done through a middleman instead of employing the workers directly? The answer to this is not always easily found. In most cases, however, it is a question of economy and convenience. In the first place, such a method relieves the dealer from furnishing and maintaining a shop. Since the work is done in the homes or cheap shops and the contractor, and consequently the workers, are ground down to the lowest possible figure, this may be a matter of some economy to the dealer. Then again to find workers and manage a shop is a task that many like to leave to others. To engage workers who will take the material home and also see to its distribution and the collection of the completed work entails less trouble and effort. Figuring up everything, it is quite Iikely that it would cost the dealer a great deal more to have the work done in his shop or to personally distribute it among the workers than to leave all this to the contractor.

The contract system thus seems to favor both cheapness and convenience. In point of cheapness the margin may be even greater than would at first appear. It is not at all likely that publi: opinion would permit a well known house to hire workers in a big shop on the same terms as those at which the home workers, who are out of the public eye, may be employed by a contractor. If the dealer established a shop in connection with his business this shop would have to be conducted on the same advanced plan as that followed in other large factories. If he
hired the home and small shop workers directly and it became known that he sweated them to the same extent that he is often able to do through his contractors he might soon feel the effect upon his business. The contractor is, therefore, a sort of a gobetween, a medium through which, if skillfully managed, the cost of production may be kept down. He is thus an exceedingly useful person. There are many dealers in clothing, however, who let their work directly to the home worker. In such cases the workers fetch the goods directly from the dealer's warehouse and return the garments after they have been made up in their homes. It has been observed, however, that this method results in no better terms to the workers, than when a contractor is employed.

In its worst forms sweating is usually found in the congested districts of the larger cities. Here the poorer people live, sleep, eat and work in the same room. In the worst tenement districts the shop cannct be distinguished from the home. In other occupations and in other localities sweated individuals may be found but in the tenements there exists the sweated class. Here it is that the real sweatshep is located, and here it is that the sweater finds his recruits. In other places, one or another symptom of sweating may ke discovered, but here all phases of the evil are present. Not cnly are the earnings at the lowest point possible for the work to go on, but the hours are extremely long and the sanitary conditions often beyond belief. It is the squalor in these places that has attracted so much attention to them and that makes them so important a problem. People cannot live under such conditions and be temperate and moral. Such qualities wants more space, better food, longer rest and more sunshine, and greater cleanliness. It is a crime on the part of society to do nothing toward wiping out this evil, especially in those places where it has appeared in its worst form.

Sweating is also associated with the small work shop and home labor. This is owing to lack of machinery on any large scale in these places and to the nature of the work itself which is such that it can be easily subdivided and distributed. Cloth, for instance, which is cut for garments, can be taken almost anywhere to be madeup. The workers can obtain it either from the contractor, or from the dealer, take it home, make it up, and return the gar-
ment either partly or wholly finished. There are of course only a few industries in which this can be done. Where machinery is used the material must be brought to the machine and when it is heavy it can neither be carried about nor readily subdivided. In such cases the work is done in special places and under the public eye. In a few trades, however, it is often done in the home or small shop; away from public view, and under conditions that can only become known through special investigations.

The height of the sweating evil is surely reached under the so-cailed "task system" in which a contractor agrees with his workers that they shall consider a certain task a day's work. He then solicits work upon that basis. It is easy to see to what abuses this system may lead. In dull times, or, when there is a depression in business, the tasks are often increased until the workers have to toil perhaps two or three days for one day's wage. When it is remembered how small the sweated wages are, even at the best, it is not difficult to understand what this must mean. Bad as it is, the task system has not been uncommon in the eastern cities of this country. It has even been found that in some cases there has been a combination between contractor and wholesaler for the purpose of increasing the tasks. A more vicious combination could hardly be thought of. In other cases again the task system has been used by individual contractors for the sole purpose of underbidding others. This is certainly competition with a vengeance.

The sweated workers are almost invariably unskilled, poor and powerless to better themselves. A large proportion of them are immigrants from eastern and southern Europe, people ill fitted for the operation of high class machinery and for modern factory life. The sweatshop is nothing new to them. Many of them have been accustomed to similiar conditions of work elsewhere and they adapt themselves to circumstances here with but little protest. There is little else for them to do. They know how to do only one thing and their livelihood depends upon finding that thing to do. The work is all done by hand and is greatly subdivided so that one worker performs but an insignificant part of the whole, but though it is not work that requires any great skill it is usually the only thing that he is able to do and he therefore
accepts employment at it at any price and under any conditions. The supply of workers is always far in advance of the demand for them and if he is not willing to make concessions and endure hardships he must give way to someone who will. Consequently, without outside aid he can do little to bring about a change for the better either in wages, hours of employment or sanitary conditions.

There are few occupations in which there is not someone who must contend with one or more of the evils cited. The oppressed are everywhere. It is true that in some occupations only a few have any real hardships to bear but in others almost the entire body of workers is affected. Perhaps no class suffers so much as the garment workers, who live and work in the tenement districts of the large cities. They are often helpless and inefficient, while their work is of a peculiar nature, requiring little or no machinery and capable of such subdivision that it can easily be carried to the home and made up there. It requires little skill and consequently it is eagerly sought by the immigrant class and by women and children who must support themselves and who see no other way of doing so. Such workers, driven by necessity, will work on any terms. Their position is isolated and few of them have come under the influence of the trades union. So far, too, they have practically been beyond the reach of every other force that makes for better conditions. Even factory legislation and inspection have failed to effectively include them because of the prevailing but false view "that every man's home is his castle."

What has so far been said of sweating applies in a general way to the evil wherever and however it is found. In some places all the symptoms may be present. In others only a portion of them may be detected.

## Who is the sweater?

Since there is sweating there must be a sweater,--some one who is really responsible for the fact that people are forced to work under such bad conditions, and for such meagre earnings. So clearly apparent an effect must have a cause but to locate this is no easy matter for the further an analysis of all the facts bear-
ing upon the case is carried the more complex the situation becomes. In fact it soon develops that the underlying reasons for these conditions cannot be laid wholly at the door of any one person or class. The cause appears to be inherent. Every one in general seems more to blame than someone in particular.

The sub-contractor or the person who brings the work and workers together is usually charged with being the real sweater and he is often pictured as a gloating monster who thrives upon his fellow men if he does not actually devour them. But is this view well founded? Can he after all be justly blamed for the suffering and squalor that exist among those whom he employs? It is a question that has not received the attention that it deserves but a survey of the facts points to this, that in most cases the contractor is little if any more to blame than anyone else. He is nothing more' or less than a middleman, serving the same purpose in his line that contractors do in other kinds of business. His position differs but little from that of the retailer. He serves his special purpose. Wherever employed he is found necessary. He brings work and worker together, directing the work and often overseeing all the details of it. In one way or another he works as hard as any of his employes. He performs services that have a definite and necessary place in the social system. He is also as much a victim of circumstances as anyone else. Competition acts upon him with just as much force as it does upon others and he therefore earns no more in proportion to the social value of his services than do his workers. In fact, his wages are often as low as those of his best paid hands. Of coure, this does not make it impossible for the contractor to be oppressive in his methods and for the time being at least he may be overpaid. But such instances are rare. That, as a rule, the sub-contractor is not the real oppressor seems also to be confirmed by the fact that in cases where he has been done away with and where the workers deal directly with the wholesaler the situation is no better. In fact, the general verdict is that where this change has been made the condition of the workers often becomes worse than ever. The wholesaler now assumes the duties of the contractor, thereby saving the amount the latter earned, but it does not follow that this amount is added to the wages of the workers nor does it imi-
ply that the terms of labor will be any better than they were before. On the contrary it has been proved frequently that the wholesaler can drive even harder bargains and is no more inclined to be merciful than was the contractor. All these facts go to show that the sub-contractor is not, as a rule, the real culprit. Indeed they seem to prove the contrary for when the subcontractor sweats his workers it is usuallv because he is himssif sweated and cannot do otherwise if he would remain in business.

But if the contractor is not always the real sweater who is? Many hold that he is to be found in the real employer, and since some of the worst cases of sweating exist where the workers are employed directly by the wholesaler there is good ground for that position. Upon a closer examination of the facts, however, it will be found necessary to modify this view also. Many of the dealers are unscrupulous and greedy and in all their transactions with their employes take full advantage of their superior position. They are often guilty of serious abuses, not only when they deal directly with the workers, but in indirect ways as wivell. Hard bargains usually result in a low cost of production. Those who can produce the cheapest can also sell at the lowest price. The employer who pays the lowest wages, requires the longest hours of work and provides the poorest accommodations for his workers is often able to undersell fair and honest employers in the market. In this way the unscrupulous bargainer forces all others in his line to adopt his methods or get out of business. That such employers are the real sweaters few will question. Another class of employers, who may be held morally responsible for the hardships they inflict upon the workers are those who, while enjoying special advantages, fail to share them with their employes. On the other hand, employers who are exposed to the full force of capitalistic competition cannot in many cases pay higher wages than they do without either lowering the margin of profit down to a point where capital would be withdrawn, or wiping it out altogether. A majority of employers are in this position. Many of they are doing all they can for the comfort and welfare of their workers. In fact, not a few go a great deal out of their way in order to attain this end. With these facts in mind, it is certainly clear that all employers should not be classed as sweaters.

The public which purchases and consumes the goods has also been regarded as the sweater. This may not at first seem quite clear, yet nevertheless the point is not ill taken. In fact, it is the most far seeing view of all. The people, it is said, demand cheap goods. In order to meet this demand producers are forced to reduce the cost of production which means lower wages and poor conditions and the sweating evil can thus be traced back to the general desire for low priced goods. There is more back of this view than appears at first glance. On the part of the purchasers there is certainly a strong and well defined demand for low prices but this is not entirely caused by a desire for cheapness in itself. In many cases the real reason will be found in an inability to distinguish between the goods that are relatively cheap or dear and between the good and the poor in quality and workmanship. The people have bought poor goods at high prices so often that they have become suspicious and conclude that the risk is less when the price is small so they buy accordingly. The art of adulteration and deception therefore comes to play an important part in this social demand.

Whatever the cause the fact remains that almost everyone is looking toward the bargain counter, and is stimulated in his purchasing by the show of low prices made there. That both dealer and producer should endeavor to meet this demand and take advantage of anything that will increase their sales is only natural. It is also easy to figure out what the effect of this upon wages and other conditions of work is likely to be. Business is carried on for profit. Neither consumers nor producers are willing to consider any other effect than what is to their immediate interest. Whar is to their ultimate advantage in most cases is entirely disregarded. So long as both consumers and producers as such are guided exclusively by the idea of gain and disregard entirely the social effect of their actions as well as the ethical principles involved the weaker classes have little hope of relief. Social evils such as sweating, can be completely wiped out through scial actions only. Efforts of individuals or classes may be of some temporary assistance, but in the very nature of things they can not go to the root of the matter. In view of this it is not easy to escape the thought that the public, or society at large, is after all the real sweater.

## SOME CAUSLS OF SWEATING.

No one cause of sweating is perhaps more serious than the oversupply of poor and low-skilled labor, which is to be found in such quantity in the larger cities and which is recruited mostly from the immigrant class though women, children and unfortunate persons generally find place in it. All such workers are at a disadvantage at every turn of life, but the newly arrived immigrant is beset with special difficulties. In many of the countries of southern and eastern Europe, whence he comes, the old hand labor method of industry is still in vogue. Production is carried on in the small shop or in the home, and machinery and steam power are practically unknown. Industrial life follows along the ways of the ante-factory period, the methods in use being entirely different from those of western Europe and of the United States. Some of these countries lack even a fair public school system so that the common people have but little education. The result of all this is that natives of these countries, brought up under such conditions, have neither the skill nor the habits of life that fit them for factory work here. They are not adapted to it. Such trades as they may have learned belong to a past age and the modern factory does not desire their services since they can not operate the delicate and nicely adjusted machinery in use there. But the immigrant must live and therefore he must work. What shall he do? If he has the strength he may find irregular employment at common labor, but if he is weak and sickly he must find something else, something suited to his mental and physical equipment and something that may be quickly learned. Garment making offers such advantages and the immigrant takes to it naturally.

Women and children who, in their enforced pursuit of a livelihood, have joined this rank of workers are imposed upon to even a greater extent than is the immigrant. True, they know the language and the customs of the country, but they are hampered in many other ways. Many of the women are wives and mother; ${ }_{3}$ upon whom the burden of a family's support has fallen, or they are widows left with helpless children to rear, or unmarried women dependent solely upon their own exertions for support;
and but poorly fitted for the task. Those with families find it impossible to leave them for any length of time and so take the kind of work that can be done in their homes. The children are in a still more pitiable condition. They are often weak and sickly. Their schooling has been limited and they have never had any of the advantages which most children enjoy. From the beginning their sordid little lives have been mere rounds of drudgery and want. Forced into work, they too take what comes easiest and lies closest at hand. The men among this class of workers, aside from the immigrants, are usually those who have lost work and health and often hope. They have been worsted in the battle of life and have given up the struggle. Sometimes they are cripples, handicapped for the race. Yet they too must live and so they take what they find, accepting such terms as their employer chooses to make, preferring that to either starvation or beggary.

It is from these varving classes of unfortunates that the socalled sweated ranks are recruited. They are the workers who receive the lowest wages, work the longest hours and suffer from the greatest abuses generally. The reason is plain enough. In the first place they are less efficient than the average worker and consequently are worth less to an employer. Then again, they are subjected to a fierce competition for places. There are always more workers than work in these trades for the work as a rule requires little skill and can be done by almost anyone. It is therefore sought by all such who are looking for employment. Such workers usually get the short end of the bargain because they are not in a position to hold out for a better one. They are not organized, organized action being foreign to them. If one of their number should refuse the conditions offered by the employer some one else would promptly accept them. In almost every respect they are at the mercy of circumstances. They are neither in a position to make a good bargain nor to refuse a poor one so long as there is enough wages coupled with it to ensure the barest living.

This is what unequal competition leads to. The strong can exact good terms, the weak and needy can not. There are many conditions in life where unrestricted competition is the very re-
verse of liberty, a fact which is being more and more generally recognized. What else can be the meaning of the constantly increasing demand for more restrictive legislation? What other reasons are there for the great combinations of capital on the one hand and labor on the other? In cut-throat competition the weaker side is doomed from the start. The weaker capitalist needs protection from those who are stronger and the result is a combination. The workers need protection from their own competition and hence form unions. Then these two forces clash. There is a struggle between capital on the one hand and laborion the other. In such struggles the weaker side ultimately gives way, and usually the weaker side is labor. The employment contract between capital and labor is the result of bargaining, and when it comes to bargaining power the workers, as a rule, are far inferior. This is true even when they are organized. It is this fact that has brought about legislation in favor of labor and the weaker classes, generally. Our present factory laws are simply efforts to limit competition and its injurious effects upon the workers. This is also the purpose of the trade union. Both are steps in the right direction and both have been the means of doing much good. Unfortunately, however, neither covers the whole field. The workers who have been described are not organized, and it is doubtful if they could act together if they were. They are too scattered and too needy to do so. Neither have they as yet derived much benefit from the enforcement of the factory acts, which seldom apply to the conditions that most vitally affect these people.

One of the most potent causes of sweating is to be found in the over-supply of cheap and needy labor arising largely from immigration. A constant stream of workers pouring into any country or place is bound to affect the supply. The increase of labor is then both natural and artificial, and it is only a question of time before the supply becomes greater than the demand. When that point is reached the pressure begins. The workers must have employment and in struggling to obtain it come into competition with other workers. One person will offer to work cheaper than another and that other will under bid him and so on until the effect on wages and conditions is such as to reduce the standard
for all. When a large proportion of these immigrants are of the inferior classes of workers the results are still worse.

The substitution of machinery for skilled hand work auso tendis to increase the supply of cheap labor, though it is true that in this case the increase is an indirect one. When a worker is thrown out of his trade by the adoption of a machine which makes all the skill that he had heretofore acquired useless he must look about him for something else to do. Unfortunately, in seeking employment his tendency is to drift downwards to inferior kinds of work and so he helps to increase the pressure at the bottom.

The existence of the sweating evil is also frequently attributed to the contract or small shop system. It is not difficult to understand why this should be the case. As shown before, sweating is always inseparably associated with the small contractor, the small shop and home labor and that a system including these should be looked upon as one of the causes of sweating is only natural. In considering the system in its several connections it becomes apparent that it is at least partly to blame.

The leading industrial tendencies of the age are plainly towards larger and larger units of production. In many industries tho small shop disappeared long ago. In others it is being rapidly done away with. In only a few does the small producer seem to be able to hold his own successfully against the larger houses and the garment-making trade is one of these. In some manner this trade has managed to resist tendencies that have had a most powerful effect on all other lines of business and the question that naturally arises is as to the possibility of the small shop posscssing certain economic advantages over the large one. Gencrally speaking, everything is in favor of production on a large scale. The big shop, as a rule, can produce at a lower cost and, if necessary, sell at a lower price than its small competitor. It is this that drives the little fellows out of business. But the swcated trades seem to be an exception to the rule. Apparently they enjoy economic advantages of a kind not peculiar to the lig shop, and hence are able to continue in business, if not always to monopolize the trade.

The first of these apparent economic advantages is the fact that the smaller shops pay lower wages than the large ones.

They are able to do this because of the conditions under which they operate. They employ a lower grade of help; their hands are often helpless, ignorant, unorganized and with no knowledge of the labor market. In short, they are the very class of workers who must accept what is offered them. Besides this, such shops are usually hidden from sight and no one known much about them. Their proprietors are not subject to either the pressure of public opinion, which when aroused always exerts itself for fair conditions, nor to their employes' concerted demands for better terms. They thus may do pretty much as they please. Under such conditions the inevitable tendency is towards the minimum wage and wrong conditions generally.

The larger factories, on the other hand, are constantly before the public and the conditions in them become known. Their employes are also likely to be much more intelligent and are often well organized. Consequently the conditions which obtain in the so-called sweatshops would not be long tolerated in the larger factories.

Work in many of the sweated occupations depends upon the season, and in consequence of this is very irregular. Few offer steady work the year around, and this is one of the greatest drawbacks to the trade. For several reasons this irregularity is felt less by the small shop than by the large employer. The person -who only employs a few hands and works in his home or in his living rooms has practically no plant to maintain, and little, if any rent to pay that can be charged against his business. When business is dull he may lose his own time, but that is about all. There is no direct expense piling up against him because of his plant. With the large employers, on the other hand, conditions are entirely different. They have large and costly buildings to maintain and a great deal of high priced machinery to keep up. They also as a rule pay large rentals. The plant and machinery depreciate almost as much when standing idle as when in operation and interest on the investment accumulates just the same whether the factory is running or not. Large factories can not remain idle even for short periods without incurring serious losses. As a rule, they must run or go under. High organization in order to succeed must be combined with regularity of
operation. This is an essential. Low organization, on the other hand, readily lends itself to irregularity. He who employs a few persons only and uses his living rooms as his workshop can stop work and turn his help out at any time without incurring any extra expense.

Most of the small employers in sweated occupations thus have neither extra interest, rent, or maintenance to meet when idle. Neither are they troubled by the demands of unions and can therefore pay lower wages and get along more cheaply than can the larger concerns. They can work as many hours as they please and disregard many things likely to involve some expense. Up to the present writing almost, they have been outside the jurisdiction of the factory inspector, or else, owing largely to the conditions under which they work they have successfully evaded the factory laws. This of course is another saving, for it should not be supposed that it costs nothing to fully comply with these regulations. Most of the items enumerated do not cut much of a figure when considered alone it is true, but when all of them are taken into account they constitute a distinct advantage which operates in favor of the small shop and the home worker.

The employers are often blamed for the existence of the sweating system. When they disregard their duties or take undue advantage of their superior strength in dealing with their employes this charge is likely to be true. There is no doubt but that the employers of today care less for the welfare of their employes than did those of the past, a fact undoubtedly due to the changed conditions of labor. With. the development of the present industrial system the gulf between employer and employe has ever grown wider. Few enterprises are now managed directly by the owners. The business is conducted by managers and superintendents, persons of rare ability and grasp, but who are for all. that simply hired masters. These persons do the actual work of crganizing, and control not only the investment or capital of real owners but also labor itself. Upon them employment depends. The real owners have no direct voice in the matter. In most cases they do not even know the number employed, and certainly they rarely know anything about the actual conditions under which the work is done. It follows that there can be little of
that sympathy and considerate treatment of the more helpless workers which might mean the difference between suffering and comfort. The manager is responsible to the investors for the conduct of their business and wishes to make as good a showing as possible. He is actuated by purely business reasons only and he treats his hands as he does his capital. Their condition is likely to depend entirely upon the status of the market.

This was not always true. Under the old system the master and his journeymen worked together in the same shop. The master knew all about his workers. The mutual relations between them were much closer than now. The market they supplied was narrow but regular. The master was in position to regulate his business in such a way as to serve, at the same time, the best interests of both himself and his workers. Such conditions naturally tended to increase a sense of responsibilty on the part of the masters. So far as employment is concerned its regularity also seems to have been greater under the old system than under the new.

On the whole, however, it is not likely that the workers themselves were so much better off then than they are now. The greater security of employment was, of course, an important matter, and the extent to which the close relation between master and worker contributed to this was of the greatest value. That this relation was advantageous in every other way is not so certain. If the master was harsh his continuous presence could only prove irritating. Both real and money wages were also lower then than now, and the hours of labor were longer. While the old system offered greater security to the workers, it is also true that it was fraught with many disadvantages.

The employer's lack of responsibility for the welfare of his workers is today largely offset by compulsory regulations. When, in the early days of the factory system; it was discovered that the employers shirked their responsibilities as such, the state, in its own interest, began to look about for a remdy. A long and bitter discussion followed. Various remedies were proposed. The contest finally ended by the enactment and fair trial of factory and liability laws, and the appointment of inspectors for their enforcement. The duties which the employ-
ers had and tried to evade were thus taught them by the state. So far as they go these laws have proved effective, but there are many evils which they fail to reach and it is certain that in many ways they should be extended.

Sweating is one of the evils that the state has so far done but little to efface or regulate, though its character is such as to make it a proper subject for state control. It has attracted wide attention, and it is certainly serious enough to demand some action. But so far only feeble efforts to cure this blemish on society have been made. We have noted the characteristics of this evil. They are precisely those which are likely to result from unrestricted competition between strong and unscrupulous employers on the one hand, and a weak, unorganized and helpless class of workers on the other. All the bad results of such competition are present, and they have been brought about through the operation of industrial and social forces. How much employers are to blame for this condition may be a question. To charge them with all the evil results of their failure to live up to their duties as employers may not be fair. Yet that they are at least partly the cause of much of the sweating that is done can not well be denied. Had the factory laws and inspection, at the very beginning of their service, been made to cover the small shop and home worker as well as the factory there would be little or no sweating today, for a free operation of those forces which make for this great evil would have been thoroughly checked long ere this.

The high rent in cities and the importation of goods made under sweated conditions elsewhere has also aggravated the sweating evil. It is a matter of observation that in cities where rents are high the poor live in wretched houses and under more crowded conditions than in places where rents are lower. Overcrowding is by many regarded as one of the worst features of sweating. The fact, however, that high rent is also a cause of the evil is not suggestive for it calls attention to one of the most effective of all the remedies proposed-that of providing. better housing accommodations for the poor. Local and state administrations as well as philanthropists generally would dò well to consider this idea.

The inportation of goods which come into direct competition with goods made here also has a bad effect upon the trade, amounting practically to the same thing as the immigration of sweated labor. This proposition will probably be disputed. But no matter how treated there is no escape from its truth. Immigration of such labor increases the number of workers in the already overcrowded labor market. The importation of goods made under sweated conditions decreases the amount of work that must be done in the sweated trades. In either case the amount of work for each worker is decreased. This is the same as saying that it takes work away from the workers and causes more idleness.

## REMEDIES FOR SWEATING.

An effort has been made to point out briefly just what the socalled sweating system really is, what class of workers are mostly affected by it and some of the reasons for its existence. As defined by the best investigators of the subject it- has been shown that the term does not stand for any particular system of employment, but sums up the general conditions under which persons of little skill and efficiency and who are more or less powerles: to contend with the world are forced to work; that the, term "sweating" has come to stand for low wages, long hours and unsanitary work places; that usually it is associated with the sub-contract system, work in small shops and poor homes; that when the term was first used it was applied to piece workers in the talloring trades who in order to earn more worked long hours, literally "s:veating" themselves; that later the name "sweater" was applied to small contractors who "sweated" not only themselves but the people they hired to assist them. It has also been seen that while sweating máy be found in almost any occupation the term is mostly used in connection with the, garment-making trades; that the small contractor in these trades, who is commonly known as the sweater, is little more than a necessary and convenient middleman and that the real sweater is more likely to be found in the community at large. In seeking the causes of this evil it has been shown that they are to be found mostly in the over-supply of cheap labor; in certain eco-
nomic advantages which the small shop or home worker enjoys over the larger factories; in those employers who take advantage of their superior strength to drive hard bargains with their employes; in high rents; in immigration of cheap labor and in the importation of goods made under the sweated conditions.

This leads up to the pertinent question of remedies and the query alises as to whether a cure is possible or whether the evil is of sucin a nature that it can never be successfully effaced from society. Such questions have been widely and earnestly discussed loth from the theoretical and practical standpoint. Many alle investigators take a most pessimistic view of the situation, while others hopefully look forward to a solution through some of the various remedies that have been suggested and are now being tried. Everyone agrees that the problem is a complicated one not easy of solution and so far-reaching in its baneful results that the necessity of a reform must appeal to all who desire to alleviate the hardships of the poor. Social reformers have spent a great deal of thought, time and money in the hope of reaching a solution of the problem, and both national and state governments have adopted measures looking towards a control and regulation if not a complete wiping out of the thing itsolf. In both cases success as well as failures have attended well-meant efforts, yet it is safe to say that while the problem is still far from being solved much progress has been made. The experiments that have been carried on, whether successfully or not, have served a useful purpose since they have tended to lay bare the weak spots in the remedies proposed, while emphasizing their strong points. Moreover, in many cases actual benefits have accrued to the workers in the sweated trades. The chicf result of such experiments so far, however, has been to indicate the remedies which are likely to prove most practical and effective.

One of the newest and most interesting attempts to handle the sweating problem has been through the organization of individuals into Consumers' leagues. Such organizations are made up for the most part of intelligent women of the better class of society who pledge themselves not to buy goods made under sweated conditions. In this way they hope to be able to reduce
the demand for such goods to the point where the makers will be compelled to either adopt decent methods or go out of business. In one sense, the aim of the Consumers' league may be regarded as an effort to repudiate the cheap and nasty. The purpose is certainly commendable and by persistent and well directed efforts much may actually be accomplished through such means, since while the methods of the league may appear simple they are really most complex. The task before it is, however, a big one for sweating is a peculiar evil and only the most radical means can do away with it.

A wise regulation of purchases implies a great deal. It presupposes, for one thing, that the purchaser shall know all about the article he buys. To carry such principles to a logical conclusion he should know exactly where and how each thing is made, and to make sure of no mistake he would be obliged to personally inform himself of the conditions under which the workers labored, the wages they received, the hours exacted of them and the treatment accorded them in general. Now if such goods were manufactured in only a few places it might be easy enough to do this, but such is not the case. The garments are made in various places and moreover are sent back and forth over the whole country and often beyond it, so that even the dealer rarely knows their starting point and would be unable to give any information as to the environment of the makers. Our industrial system has grown most complex and when all these facts are considered it will be seen how enormous is the task which the Consumers' league has undertaken.

Then again a rough test covering merely the quality and price of an article is often misleading. It sometimes happens that the finest and highest priced articles are made under the worst conditions and vice versa. Of this the läce industry affords: many examples. Much of the cheaper lace is made by machinery in large, light, and well ventilated factories where the wages are comparatively high and the workers are provided with every comfort. A large proportion of the expensive lace, on the other hand, is made by hand in garrets under conditions which as to earnings and sanitation are as bad as they can well be. What is true of lace making is also true of many other industries.

To pay a high price for a thing is not in itself of much help. As things go there is no guaranty that the difference in price will in any way benefit the worker. This is plain from the way in which goods are placed upon the market. The retailer who offers them for sale buys them from the wholesaler. The whole. saler in turn buys them from the manufacturer who employs the real makers. Now the consumer buys from the retailer and any increase in the price would have to be paid to him. The question then arises as to whether the retailer, in the very nature of things, can be expected to pass over the bounty to the wholesaler and the wholesaler in turn to the manufacturer and he in turn to his workers. The chances that any such course would be followed are very remote. Under our competitive methods each one will pay only what he has to and charge what the market will stand. This may not be in accordance with the highest ethical principles but it certainly is the practice of the business world.

These are not all the obstacles in the way of the Consumers' league. There are many cases where practically all the goods of a certain kind on the market are made under conditions that the league would wish to repudiate either in part or as a whole. As a consequence the consumer is forced to buy the sweat shop goods or go without needed articles. Such instances are by no means rare. The makers of cheap goods are usually energetic, pushing business men who advertise liberally and in the end secure control of the market. They literally crowd out goods of the other class. Under such circumstances the consumers are often placed in a position where they cannot possibly carry out their good intentions. Then again the difficulty of telling cheap goods from dear has brought about many impositions and made buyers so suspicious that they often buy as cheap as they can, regardless of how the article may have been made. A large proportion of goods which are imported and some that are exported are also made under sweated conditions, and these the consumers cannot reach. These are only a few of the obstacles the consumer has to overcome when he endeavors to so regulate his purchases as to do away with sweating, but they are quite sufficient to show that he has no small task before him.

Regardless of all these drawbacks, however, the league has already proved its usefulness and power in the social field. Perhaps the most valuable work it has done so far has been of an educational nature, since through it more than through any other one source has public attention been called to the sweating evil. In fact, to its firm stand in this respect is largely due the growing sentiment against sweating, a sentiment that has led to many investigations through which the true situation is becoming known. This of itself is of vast importance. Actual knowledge must precede all intelligent action. Even public opinion can take no definite form without it, and deprived of the support of public opinion all efforts at reform must necessarily fail. The league has also exerted a strong influence upon social legislation both in this and other states, and has in one way or another materially aided the enforcement of the factory laws.

There are certain places, however, in which the league could work to special advantage. Mercantile and similar establishments offer a splendid opportunity for many of the reforms whịch the league has undertaken to bring about. Such places employ many women and children who are often underpaid and required to work excessively long hours. It is true that these stores come under the scope of the factory laws and are frequently visited by the inspectors, but this does not always imply that the conditions there are all that they should be. Moreover the law has little to do with the question of wages and hours and the factory inspectors are powerless to bring about any change in those respects. The members of the league, being purchasers, may however wield their power as such and do so with but little inconvenience to themselves. The stores are being constantly visited by members of the league who would find it easy to come into direct personal contact with the employes, thus definitely ascertaining the treatment accorded them. They could learn with but little trouble the scale of wages paid, the hours of work required, the number of seats placed behind the counters, the presence of child workers under the legal age, the imposition of fines and so on. Such facts are most important, yet they may be had for the asking and no trained investi-
gator is necessary to secure them. Considering everything, the mercantile establishment offers as fertile a field to such social workers as could be desired.

Another way in which it is proposed to do away with sweating is through organization of the workers in trades unions, not a new idea, by any means, since nearly every other occupation has its union. In most cases these unions have been of inestimable benefit to the members and to the trade concerned as well. In the skilled trades particularly the unions have been a decided success as they have often been instrumental not only in raising wages and shortening hours of labor but in improving many other conditions of employment. The chief reason for this is undoubtedly to be found in the fact that the supply of such skilled workers is of necessity somewhat limited. When the union or its representatives make a demand and threaten a strike if it is not granted the employer often is forced to choose between coming to terms or closing down as there are seldom enough workers outside the union to run the shops. In occupations where the supply of workers is always greater than the demand for help the success of such a plan has been less marked. The workers and their families must live and dare not hold out for better terms even when they may desire to do so. As the sweated workers come under this head of the unskilled it ìs easy to over 3 stimate the value of organization among them, though there is no doubt but that something could be accomplished in such a ray, as experience has shown that such organization as has been made among them so far has added greatly to their economic strength.

The advantages of organization come from the fact that it enables the workers to substitute collective for individual bargaining. In union there is strength. Unions enable workers to act together and to make joint demands upon their employers for better conditions. How much this means is plain from every point of view. The individual worker is seldom in a position to enforce even just demands, for there is always some one willing to take his place should he throw up his position. His employer can therefore do very much as he chooses. When a joint demand is made by a union, through those who represent
it, the situation takes on an entirely different aspect. In case all his hands quit work together an employer may, in time, be able to replace them with others, but this is not always an easy matter, and it can seldom be done without sacrifice. In the first place an entire change in the working staff is impossible without loss of much valuable time consequent upon breaking in a new force. Naturally most employers try to avoid this as well as the displeasure of the public and the consequent loss of business that not infrequently follow: These and other reasons are enough to make any employer pause before he incurs a strike. If businesseonditions are such that he can possibly afford to do so he is likely to compromise with his hands on some basis that will grant them at least a part of what they ask.

The unions are also of indirect value to their members by bringing the workers together, thus helping to remove them from their otherwise isolated position. The questions which come up for discussion at their meetings often give them new light and new ideas. They learn to know each other and to realize their wants. They are taught how to act together and how to stand together as well as the necessity for doing so." The unions, in short, have a direct educational value that tends to make not only better workers and bargainers, but better citizens.

The effective use of organization among sweatshop workers is shown by the experience in New York a few years ago. In 1891, encouraged, partly by favorable legislation and partly by agitation and other efforts, the more intelligent among the garment makers organized their fellow workers into a union. This seems to have been the first systematic attempt on the part of the garment makers in this country to do anything towards improving their own condition, and this was soon followed by other efforts. As time went on they began to press their claims for fair treatment. They first asked for an increase in wages, then for improvement in other conditions. This brought things to a crisis and resulted in the great strike of 1894, and though the strike took place in the time of an industrial depression important concessions were won. Among other things the strikers succeeded in having the task system abolished, and this of itself was a great gain,

The :-trike, which seems to have been led by the tailors, began about the time when the worst part of the financial crisis had passed, and when business in some measure had begun to revive. The commercial depression had been so disastrous to the garment workers that they bordered on pauperism, and special relief work for them had become necessary. The strike was caused by the workers demanding the doing away of the task systém. They ulso asked for better wages, shorter hours, and the recognition of their union. To crush the task system, however, seems to have been their special object, and no wonder, for đuring the financial depression the employers had taken advantage of the situation and had so increased the tasks in size that the few who could find work had to toil both night and day to make the barest living. The struggle that followed was both long and fierce. The wholesalers would not give in. By playing the contractors one against the other they had succeeded in constantly increasing the size of the tasks, and they meant to keep the advantage they had gained. The contractors also held out for a long time, bu屯 were compelled to yield at last. An agreement was thén consummated by which the task system was abolished, and nearly all the other points insisted upon by the strikers were granted. The task system had inspired the workers with such terror, and zo fearful were they that the agreement on this point would not be lived up to that they required real estate bonds from the contractors as a guarantee of good faith. At the expiration of this agreement another, that was even more advantageous to the workers, was entered into.

These advantages accrued mostly to the tailors, but the garment workers also gained a few points. Through being organized, and by taking part in the strike they, in the first place, succeeded in having the working day shortened by three hours. This vias an important concession and suggests very forcibly what the day must have been before the strike. The garment workers were also able to drive some of the worst contractors out of business. When it is remembered that some of these contractors resorted to practically any means in order to grind their workers down to the worst possible terms for them, and that in this they had the unqualified support of the wholesalers, it be-
comes apparent that even the gain was important. While many of those who worked in the smaller shops or in their homes were not directly benefited by the strike there were indirect advantages all around. The points gained helped to inspire hope -and ambition in all, and this was really of greater value than the concessions themselves.

The secretary of the Garment Makers' union, from whose report of the strike most of these facts have been taken, also states that since the advantages won by the unions were general, the wholesalers were not greatly affected by the increased cost of producion which the concessions otherwise might have entailed. The inference here, of course, is that the increased cost, if any, was offeet by an increase in the price of the finished articles.

While subsequent strikes have been less successful the experience as a whole on this point goes to show that organized resistance against unjust impositions can be made most effective in improving the condition of the workers when real abuses exist. - To restrict immigration of those persons from whom the ranks of sweated workers are recruited would undoubtedly tend to relieve the situation to some extent at least. It would not, however, be easy to secure legislation upon this point. Objections of all linds are made against such a claim, and while these are often based on self interest or false theories they are plausible and seem to carry conviction. The question, however, is a national one, and as yet is not strongly enough supported by public sentiment for congress to take any action. It is worth considering, however, whether this country could not accomplish more in the interest of civilization and the solution of the social problems by securing a higher standard of living for the people already here, than by trying to provide a home for all who may come to its shores. To restrict the importation of goods which come iato direct competition with the products of sweat shops -would also, of course, tend to help those who are immediately engaged in such work.

But valuable as these and other remedies that have been proposed undoubtedly are they are not likely to cover the entire ground nor to meet all the requirements of the case. Much more zadical measures are necessary for the permanent efface-
ment $0^{c}$ the sweating evil. So long as there is a class of workers who must accept whatever employment they can obtain in order to live and who are powerless to change the conditions they find in it, so long as factories operating under decent conditions find it impossible to compete in the cost of production with the small shop-keepers or home workers who pay low wages, require long hours and have few businéss expenses to meet, so long as men who transact all their other business under modern methods are permit'ed by this ancient system to exploit a helpless class and shirk their own responsibilities by hiding behind their contractors, must some remedy, more drastic and far reaching in its effects, be put into use if these things are to be abolished.

The contrast between the large and well conducte factory and the small shop is almost invariably in favor of the former. In the factory the workers receive the ruling scale of wages and work under conditions that are at least fair. In many establishments the environment is really more cleanly and sanitary than $t^{3}$ at in the homes of the workers. A working day longer than ten hours is almost unknown, and if the wages are low it is because wages in general are low, while it will usually be found that they are higher than those paid in the small shop doing the same line of business.

But this has not always been true of factory life. 'The first stages of the system were marked by abuses that stand as a blot on the industrial history of the world. Labor received barely a living wage and even the stipulated amount was often greatly reduced by fines and other methods of extortion. The length of the working day was almost past the point of humian endurance and only those of the greatest vitality were able to meet its demands without over-fatigue. Fifteen and sixteen hours of work each day was the common lot and often it was longer, fixed only by the worker's limit of strength. Sanitary measures were practically unknown and modern appliances for ventilation, lightine and cleanliness were unheard of. Worst of all very young children were permitted to put in these long, hard, toilsome days for the merest pittance. The situation finally became so bad that the attention of the authorities was called to it and the thinking men of the nation declared that unless something
was done to better the condition of the factory hands the whole workine class would deteriorate. The most bitter discussions followed before remedial legislation was finally passed.

But the modern factory system was not ushered in, fully matured,. Mechanical inventions, upon which the factories depen.' for doing their work, are not perfected in a single night but are the result of a slow development. Yet though the factory plan only gradually made its way in the industrial world it came all too quickly for the workers. Someone always suffers in a period of transition, and while the factory plan was being established the workers were being forced to adjust themselves to new modes of life. Often they did this unwillingly. When 'he factory closed the doors of the master's little shop the workers were thrown out of employment. Often, following after the new work that was all that was offered them, they were forced to give up the homes in which they and their fathers before $t$ ? em had lived for many generations. They were confronted with new conditions of life and the adjustment ẹtailed hardskips and suffering the extent of which is difficult to realize at this time. Moreover, it was a long time before factory employers began to think of their responsibilities as such. For a third of a century after the doing away of the small shop and master method the conditions in the factories were fairly incredibie. Women and children were driven into them and treated without the smallest consideration for decency and comfort. The workers were ground down and occupied a place second to the machines in the eyes of the owners. Their interests were absolutely disregarded and it was not until the passage of factory acts, protecting the workers from the rapacity and cruelty of their employers and insisting upon a strict observance of certair general regulations looking towards a happier day for the wo king class, i:id things begin to brighten.

The first factory legislation in history was passed in England. It began with a few unpretentious efforts to regulate the employment of childron but it has gradually grown in scope until now it covers most of the conditions under which all kinds of factory work are done. Inspectors for the enforcement of these laws have been long employed and the result is seen in the well
regulated factory of the present day. The experience of the past th. ee quarters of a century has conclusively demonstrated the value of factory laws and inspection. The benefits derived by society tis a whole from these regulations are so great and apparent as to be no longer disputed. Even extreme individualists and followers of the old school of economics, who at one time were so loud in their denunciations of all efforts to regulate conditions of employment, have either become silent or have confessed that they were mistaken.

Through these laws and inspection factory life has been made safer and more endurable. They have required that dangerous machinery shall be guarded and the means of escape in case of fire or accident provided. They have also made the factory a comparatively healthy place to work in by insisting upon proper sanitary measures. A factory today must be clean and well ventil:ted, with a complete drainage or sewerage systems. Dust generating machinery must have exhaust fans and mechanical contrivances for carrying the dust away. What a change this has wrought! Today accidents are comparatively few. Formerly the proportion of the workers who were maimed or killed was extremely large. At one time every shop was a disease breedi: g place, reeking with filth and odor. Now there is, generally speaking, little ground for complaint on this score. Besides all this overwork is prevented by limiting the hours of labor fur women and children. This fact is not the least in importance. The effect on society from this one thing alone is worth more than all the regulations themselves have cost.

Factory regulations have also promoted education by preventing the employment of children of school age. It is true as a genersi thing that if children are permitted to work they will be fou.d in the factories, and, if prohibited from doing so, they will be sent to school. There are, of course, exceptions to this, but they are not so common as to affect the rule. That all children should have an opportunity for a proper physical as well as mental development is conceded by almost everyone, but this cannot be secured when they are forced to begin a life of trudgery at a tender age.

The factory regulations have also fostered a spirit of self help
and se' $f$ respect and have promoted a higher standard of life among the workers. Such qualities are absolutely essential to all progress and whatever tends to promote them contributes to the general advancement of the human race. When the factory laws were first enacted the conditions of work were so bad that th. workers had practically given up all hope of anything better. They were filled with despair, and imbued with a hatred of those whose lot was more fortunate. As through the enforcement of these laws their condition improved hope revived. They began to see that improvement was possible and from this on took steps towards duing something for themselves. It was the incentive under which they began to form unions and to learn how to act together in their demands for yet better conditions, more and better factory laws, and more frequent as well as more thorough inspection. In every way the effect of factory leyislation upon the working classes was greater than is generally realized.

In the beginning the conditions in the factories were as bad if not worse than those in the modern sweatshop. With the enactınent of factory laws and inspection these conditions had to give way to better ones, and they have kept on improving as the laws have grown stronger and have been more completely enforced. In factories which now come under the factory and inspection laws things are so much better than when there were no such laws that here is no longer any question as to the efficacy of similar measures as a remedy for the sweating evil. Legislation and inspection have practically abolished the sweating evil in factories and such other places of employment as come under their jurisdiction, and it is reasonably safe to conclude that what has been accomplished in those industries that are carried on within factory walls and by machinery may also be brought about in those trades where the hand is still the chief instrument. If state interference has improved conditions in the factory it is safe to suppose that it will do the same in the sweatshop. The sweater, to be sure, is elusive and his shop is generally hidden from public view. It cannot be reached by the regular factory iaws and consequently but little is known about it. But this is no argument against state interference as a rem-
edy for the evils it engenders. A law can be framed so as to cover such places and special inspectors can be detailed to see that such legislation is properly enforced. Experience has shown that the sweater can be reached quite as well as the factory owne:.

Another point to be considered is the responsibility of the owner of the property on which the sweatshop stands. The landiord should not be allowed to escape his share of blame and he should be held strictly to account for the condition of his property As a general thing it can be said that the work rooms and living rooms in such a shop should be entirely separated. People should not be permitted to work in the place where they live. No building or room should be used as a workshop unless it is in proper sanitary condition, nor should overcrowdiryr be allowed. These and other conditions can be regulated by law. Landlords who violated such provisions should be fined or their rent confiscated. Such regulations are perfectly proper and can be enforced as readily as the factory laws and by the same inspectors. With these and similar provisions incorporated into the factory acts, and with these acts so extended as to include the small shop and the home as well as the factory, the sweater could be made to feel very uncomfortable to say the least.

Factory and workshop acts are often said to be failures, and the reason for this is attributed to the fact that those whose business it is to enforce these laws fail to do their duty. While there is a great deal of exaggeration about this, it is unfortunately true that these statements have not always been made without cause. Factory inspectors are no more likely to be perfect than persons in other walks of life. Sometimes they are negligent of duty and careless in their work, and it is not too much to say that they have often accomplished little or nothing. This condition of things, however, is not the rule, and it is well that it is not, for without an efficient system of inspection the factory acts might as well never have been enacted. Such laws are simply police regulations and, as in the case of all regulations of the kind, there is a tendency to disregard them. In every locality there can always be found the reckless person who for
the sake of a temporary advantage will endeavor to evade factory as well as other laws. The effect of this is to "ither incite or force others to follow in the same course, as most people are inclined to look more to that which is to their immediate interest than to that which is to their ultimate good. It is this that makes factory legislation and inspection necessary. Indeed, the tendency to do what these laws forbid is so strong that it can only be prevented by a sufficient number of the most careful and vigilant inspectors. When an inspection service is poor the factory laws will be of comparatively little use, but with an honest and efficient inspection force these regulations are the greatest remedial force for certain social evils that has so far been tried. Everything, however, depends upon the methods of inspection.

Failure on the part of the factory inspectors to properly enforce the laws may be due to lack of interest in the work, political influence, the lack of a sufficient number of inspectors, general incompetency, and to shirking of duty. Most of these causes would properly come under incompetency or shirking, but for the sake of convenience they will be considered separately.

The work of enforcing the factory laws is of a reformatory nature, and thus differs greatly from the common conception of police duties. To be a really good inspector one should possess the temperament of a reformer, and be a'student of economic and social conditions. Both by habit and inclination the inspector should be an investigator. He should be imbued with an honest desire to perform his duties in such a way as to do the most good to all concerned. Without these qualities no inspector can take a real interest in his work, and without the right kind of interest in it he cannot do his best. To these qualities must of course be added fair intelligence and a fund of com-. mon sense. Persons who fail as inspectors are almost certain to lack the right kind of a temperament for the work.

Political influences often lie in the way of the best work of an inspector. In enforcing the laws requiring protection from dangerous machinery, bad sanitation or other conditions, the inspectors are likely to incur the displeasure of the proprietors or
owners who are often politically powerful. Not only do they sometimes wield a strong local influence, but their power is farreaching and they may make or unmake appointments. Such considerations as these are likely to affect even the best of inspectors. Again, in enforcing the child labor laws the inspector may offend not only the employers, but the parents and friends of the children affected. This is another awkward situation, for these people control votes and often give vent to their feelings at the ballot box. Both employer and employe can also set other influences to work that are likely to operate against the interest of the inspectors. In the face of all this it is not so strange after all that even good and honest inspectors should often stop and count the cost before they proceed against many - of those who are violating the laws.

In many cases the inspection service is a partial failure because the inspectors provided for are too few in number for the amount of work they have to do. When this is the case the blame should not be laid on the inspectors, but on the state. Like many other laws the factory acts are constantly violated in one place or another. In order to prevent even a proportion of these violations it is necissary for the inspectors to be on hand practically all the time. With industries of all kinds scattered over an entire state, and with an inspection force consisting of a few persons, the problem of being omnipresent is not an easy one. To build up an efficient inspection department is slow work. It has been accomplished, however, in many of the eastcrn states, but as yet few of the western states have as many inspectors as are needed, though many are constantly increasing their staffs so that the time is not far distant when all manufacturing states will be in position to enforce their factory laws.

General incompetency on the part of the inspector would, of course, be a complete barrier to the enforcement of the factory laws. It sometimes happens that persons entrusted with these duties ought in the interest of the service to be left in some other field. In states where several inspectors are employed the danger from this is not so great, for while some of the persons so selected may not be exactly the ideal choice for the position, it is more than likely that a part of them will be up to, and per-
haps above, the average of the qualifications required. It is true that since so much depends upon the inspectors, the utmost care ought to be exercised in their selection, yet those who are best fitted for the work can usually be had. In this, as in most other branches of the public service, and in private employment too for that matter, average results are really as much as can be expected in the long run. Incompetent inspectors can s.lways be removed and there are plenty of ways in which to get good service from the others.

Those who deliberately shirk their duties are apt to cause as much harm as any. General report would have it that this class is numerous and difficult to deal with, but the proportion of those who evade their duties is not so large as is commonly thought. As a rule, those who hold public positions are charged with much more than they are guilty of, though it is true that shirking is no uncommon thing, either in office or out of it. Those who neglect their duties are everywhere out of place, and the sooner they are dismissed the better. In public office the temptation to shirk is perhaps greater than elsewhere. In the first place the tenure is short and efficiency and close application to work is seldom an aid to promotion. It is often known that the position will end with the term no matter how well the work has been done. Public office thus offers little or no encouragement for good work, and many see no reason why they should do more than is absolutely necessary to hold their positions until the end of the term. Then again, the duties of the public service are generally believed to be less arduous than in private employment, and the effect of this is detrimental: Especially is this so when applied without discrimination. It imbues many with the feeling that there is no use of working when one gets no credit for it. Supervision in public service is also likely to be less strict while the working day is shorter. This gives those who are so disposed an opportunity to take unfair advantages of the situation. Last of all, many inspectors are by their temperament ill-suited for their duties, and others again yield to political pressure, or to the fear of making enemies. These are only a few of the reasons that often contribute to slackness in the public service, but they are enough to show some of the tendencies of official life.

From what has been said it should not be understood that all factory inspectors are dishonest, shirkers of duty, or unfitted for their places. To believe this would be doing a gross injustice. A large proportion of inspectors are both competent and faithful and take special pride in doing effective work. It is doubtful if the exceptions are more numerous, comparatively speaking, in this service, than in private enterprises. After all, the inspection service is about what the public makes it. In places where public sentiment strongly favors a strict enforcement of the factory laws the laws are gencrally obeyed. In places where public opinion is behind the times on this point the inspectors are apt to overlook a great many things.

The first essential to a complete enforcement of the factory laws is that they should be backed by a strong public opinion. This is so plain that to mention it sounds almost like a truism. When backed by such an opinion, however, the inspectors are almost certain to comply with their duties. The effect is even more far-reaching than this, for it extends even to the employer and property owner. Few can afford to incur the ill will of the public. Happily the general sentiment is in favor of factory legislation and its strict enforcement, and this is one of the best signs of the times.

There are also many semi-private agencies through which a favorable public opinion may not only be created, but the inspectors made to do their duty. Among these are Consumers' leagues, women's clubs and trade unions. The Consumers' league is particularly well adapted to such a mission as this. Not only does it agitate for just such reforms as the factory laws are designed to bring about, but the very purpose of the organization is identical with that of factory inspection. By controlling the purchases of its members the league is endeavoring to bring about decent conditions for the workers and thus protection for the purchaser as well. The factory laws aim at the same result by prescribing conditions and imposing penalties on those who fail to live up to the regulations placed upon employers of labor. The league has already succeeded in affecting to no inconsiderable extent the attitude of the public towards the question of better terms for the toilers in the
sweated industries and it•would be easy to extend the scope of its work. In most states the factory laws cover practically cverything for which the league is striving and by a strict enforcement of these laws its object would be gained without anything further being done. It is in helping such an enforcement through the means that it possesses that the Consumers' league and all similar organizations can be of the greatest assistance to the state. It can help, first of all, to create a public sentiment in favor of factory inspection and against impositions on the part of employers, and it can then make it its business to see that factory inspectors do their duties. This does not mean that the members of the league shall act as spies upon the inspector nor follow them about in their work. That would imply altogether too much trouble. The method proposed is much easier to carry out. All that is necessary would be to keep a watch on things in general and to report to the proper authorities any case of violation or neglect of the laws. This would not necessarily entail much work and but little trouble, while the moral effect would be out of all proportion to the effort involved. Not only would public sentiment be affected, but the inspectors would be stimulated to greater conscientiousness and they would be likely to be more on their guard in completely enforcing the laws. This would tend to bring about the very thing for which the league stands and for which, also, the factory laws were enacted.

What has been said of the Consumers' leagues applies with equal force to women's clubs, which though not always organized with a similar purpose in view, are more and more becoming concerned with such matters. Both these organizations wield a vast amount of influence which, properly directed, could not fail to have the best results in bringing about a better state of things for the working class, particularly in the sweated industries.

The varions trades unions have a similar power for good. In some ways if even excels that of any other body. The members of these unions are employed just where the factory laws are most likely to be violated, and know by experience the nature, extent and danger of such violations. They can point out
what machines are dangerous and why, and are also usually able to suggest the best method of protection. They are also able to point out weak, dangerous and unhealthy spots about the factory or shop when these may have escaped the eye even of the best and sharpest inspector. Likewise they are likely to know the age of children who are working alongside them and - can thus tell whether such children are under the factory age, even though they may be protected by papers signed by unscrupulous parents who think more of the earnings of their children than of their future. The workers are in position to give the inspectors, as well as the public, valuable pointers, though on the other hand they may not always be in a position to tell what they know. They may fear, and often with good reason, that dismissal will promptly follow should their employers discover that they had been the medium through which such information was given, and though there are ways of avoiding most of the risk in thus coming to the assistance of the authorities, they involve caution and some trouble. Yet where there is a will there is a way even in such a situation, and many an intelligent workingman, knowing of violations of the law, has found a way in which to let a knowledge of such infractions come to the ears of the proper authorities without appearing in the matter publicly at all and with but small danger of ever being detected in doing what is manifestly his duty, however it may be misunderstood by his employer. Such disclosures have resulted often in bringing about improvements in the regime of the factory or workshop that have been of the greatest benefit to the people employed in it. Such commendable work can and should be greatly extended. It is to be hoped that as a body the workers will adhere to their rights and take a hand in seeing that the factory laws are properly enforced.

With good factory and sanitary laws, competent inspectors to enforce them, and the co-operation of the public, and especially of such voluntary organizations such as the Consumers' league, women's clubs, and trade unions there can be no question but that sweating can be stopped, other abuses done ay with and fair conditions in general secured for the weaker classes. These are points which should be carefully considered, not only by such organizations, but by the public in general.

## SWEATING IN WISCONSIN.

In the preceding pages an effort has been made to show how leading writers upon the subject have defined sweating, how the evil originated, and what are the symptoms by which it may usually be recognized. Since the word itself implies that there must be a sweater who can rightfully be held responsible, an attempt was made to point out the class upon which the blame rests most heavily. Brief mention was also made of the causes and the remedies for sweating, but there was no attempt to go into details or to present an extended discussion of the questions involved. Only the leading facts were touched upon, the purpose being to show what sweating is and thus to offer an explanation for the facts bearing upon this evil as it exists in this state. What will follow is the result of recent investigations carried on under the auspices of this department.

It has already been shown that the most aggravated forms of sweating invariably appear in the larger centers of population. New York, Chicago, Boston and Philadelphia are cities that may be cited as examples of this, the conditions existing in them being enough to conclusively demonstrate the bad results of unrestricted competition for work among the poorer classes of society. But it is also true that in many of the smaller cities of the country may be found exactly the conditions that make for sweating, though in many only the earliest symptoms of the evil may be detected now. One of these places is Milwaukee, where though sweating exists in only its mildest and least harmful form, the thing is there and is constantly gaining ground.

The fact that it has appeared at all has been deemed of enough significance to call for remedies that shall check it in its very beginning. Both in Milwaukee and elsewhere about the state students of social conditions have taken the matter up in the hope of gaining so early a control of the evil that there will never be any danger of its reaching the stage at which it flourishes in other places. At the suggestion of ex-Attorney General C. E. Estabrook of Milwaukee, Assemblyman Soltwedel of that city introduced, in the legislative session of 1899, a bill for a law which was designed to regulate and discourage the growth
of sweating. The bill was championed by both of these gentlemen and became a law before the end of the session. While its provisions affected regular work shops only, and therefore could not include the home worker with his family, it was timely and a long step in the right direction, as it reached places which before this had been subject to no legislation at all and which therefore had been allowed to operate as they saw fit, regardless of the effect of their course upon their workers and the public.

Among the more important provisions in this law were the following: No work room shall have any connection with rooms used for living or sleeping purposes, nor contain beds, bedding, or household utensils of any kind; it shall have separate entrance from the outside; it shall be well lighted, heated and ventilated, with air space of not less than 250 cubic feet to each worker. Proper closet facilities must be provided, and the closets, as well as the premises, shall be kept disinfected and clean. The work room shall also be painted or white-washed when necessary and be kept free from vermin and obnoxious odors.

The law was classed with the other factory laws of the state, and this bureau was charged with its enforcement. In compliance with this the bureau entered upon the work soon after the passage of the law, making its first inspection in the summer of 1899 . The results of this inspection will be found in the report of this bureau for 1899 and 1900.

In making the inspection, 79 workshops and over 700 places where garments of one kind or another were made were discovered in Milwaukee. These 79 shops employed 1,050 persons at the time of the inspection, of whom 268 , or 25.52 per cent., were males and 782 , or 74.48 per cent., were females. There were thus over three females to on male worker. Of the total number 107, or over 10 per cent., were under 16 years of age, while 15 , or less than one half of one per cent., were under 14 years of age. As no affidavits as to the age of those under 16 years of age had been obtained and kept on file and no child under 14 years had the requisite permit to work, these children were of course illegally employed. While many of the other provisions
in the factory and sweatshop laws were being violated in these shops the condition, as a whole, was not so bad as might have been expected, being, aside from a few features which are peculiar to the industry, little if any worse than that existing in small shops doing other kinds of work.

As the law affected only the small shops or places where others than immediate members of the family were employed, not a great deal of attention was given to the homes or the home workers. Enough homes were visited, however, to gain a fairly good idea of the conditions existing in them. In regard to the number employed in these homes it is perhaps fair to place it at about two persons to each home on the average. In some cases the whole family was at work, in others again only one member, mostly the mother. In other respects the conditions varied. Perhaps about 58 per cent. of the homes came within the ordinary sanitary requirements, while the remaining places were either in good, or fairly good, condition in almost every respect. Very few cases were found where things were so bad as they are in some of the larger cities.

During the last weeks of 1900 and the first part of 1901 another investigation was instituted. The purpose of this was to ascertain whether the conditions in the shops had improved, and what other changes had taken place since the first regular inspection. On the first point the results were quite gratifying. Many of the shops had been put into better shape, and there seemed to be a desire on the part of most of the proprietors to comply with the law. This does not mean that no violations were discovered during the second investigation, for many were found. But on the whole there was an improvement. In other respects the changes were limited, as will appear from the comparisons which follow:

Number of Worleshops:-By workshops is here meant the places in which goods were made up, or manufactured through the employment of outside help, and which were exclusively utilized for this purpose. The places thus investigated numbered 79 at each inspection. In the number of places covered there was thus no variation between the first and second inspection. Considering the shifting nature of such places and also
the fact that the inspections were made fifteen months apart, it is rather peculiar that there should have been neither an increase nor decrease in the number of such shops during this period. The coincidence is somewhat singular, but it has absolutely no other significance than that it shows the number of places reached on each occasion. The number does not even include all such shops in Milwaukee, nor in all cases was it the same shop or the same proprietor that was visited. Every such place should have been reached, but the time was far too short for this. The proprietors of such shops, as a rule, move about á great deal, this being especially true of those who manufacture on only a small scale, and while many such changes had taken place in the interim between the two inspections, both the employing and producing capacity remained about the same. Hence the facts for the two cases may be fairly compared.

Number of Persons Employed:-The total number of employes in these places at the time of the last inspection was 1,177 . Of these 284 , or 24.13 per cent., were males and 893 , or 75.87 per cent., were females. The average number of persons to each shop was about fifteen.

Of the total persons employed 78 , or 6.63 per cent., were under 16 years of age, while 18, or 1.60 per cent., were under 14 years. Children between fourteen and sixteen years thus numbered sixty, while those under fourteen years numbered eighteen.

All but seventeen of the children had affidavits as to age on file with the employer, and all but eight of those under fourteen had the required permit. In all there were but twenty-five violations of the child labor law. Considering the circumstances this cannot be regarded as out of proportion when compared with the same conditions in other lines of employment.
A few comparisons between the number of persons employed at the two inspections may be interesting:

|  | Males. | Females. | Total. |
| :---: | :---: | :---: | :---: |
| Number employed at first inspection |  |  |  |
| Number employed at second inspection | 284 | 782 893 | 1,050 1,177 |
| Increase at second inspection ......... | 16 | 111 | 1,127 |

The first of these inspections was made during the early part of the fall of 1899, the second in December, 1900, and in January, 1901, or about fifteen months later. For most of the occupations included this time is perhaps as busy as any during the whole year. It is therefore likely that these figures are somewhat above the average employment in these places.

In comparing the above figures an all around increase for the last inspection may be noticed. The actual increase amounts to 16 males, 111 females, or a total of 127 , or nearly 12 per cent. The statement that there is a rapid growth in the garment making industries in Milwaukee has been made again and again, and its truth seems to be in a measure borne out by these figures.

The proportion of females increased from 74.48 to 75.86 per cent., or a little less than one and one half of one per cent. This indicates a slow substitution of female for male labor. Owing, however, to the changing character of these industries this conclusion might perhaps be regarded as somewhat hasty. But whether it is justified or not the fact remains that the proportion of females is extremely large.

In the number of children employed the following changes took place:

|  | Under <br> 14 years. | 14 to 16 years. | Total. |
| :---: | :---: | :---: | :---: |
| First inspection | 14 | 97 | 111 |
| Second inspection | 18 | ${ }_{37}$ | 78 |
| Increase or decrease | + 4 | 37 | 33 |

+Increase. -Decrease.
There was a decrease from 111 to 78 , or of 33 in the total number of children under 16 years. This decrease is gratifying, but is somewhat offset by an increase of 4 among those who were under 14 years. Most of those under 14, however, were employed on permits and these were good for limited periods only. Those without the necessary papers had been working but a short time, most of them only for a few days, and according to the stories told by the employers, in almost every case the preliminary steps towards obtaining the requisite papers had already been taken. The real object of keeping children out of
shops and factories is to afford them the opportunity for a proper physical and mental development of which they are undeniably robbed when set to work at an early age. The tendency among the working classes, however, is often to ignore the claims of the child and to set him to the task of earning money when he should be in school, and to correct such tendency certain legal restrictions have been made protecting those who may not protect themselves from the rapacity and short-sightedness of adults. 'It has been proved that such restrictions have had a most beneficial effect, though it can not be denied that so far they have not succeeded in entirely eliminating child labor. The criticism has been made that either the law is imperfect or the inspectors are not vigorous in the prosecution of their duties. It is quite true that few laws are perfect and few inspectors so vigilant as they might be, but it does not follow that child labor can not be wholly checked through such means. Past experience has proved the contrary. Wise laws and honest inspectors are quite sufficient to do away with both child labor and sweating, but the laws must be strong and the inspectors bent on doing their whole duty.

The difficulty of preventing violations of the law was amply shown in the investigations under discussion. While there was a lapse of fifteen months in the completion of the two inspections, some of the larger places were visited very often in that period, the last visit being made about ten weeks previous to the last of the two inspections. At that time several violations of the child labor law were found, but these were corrected and things in general set right, the employers being warned that future violations of the sort would be followed by prosecutions. Regardless of all this, however, in less than ten weeks afterwards the employers were discovered to be violating the law in every respect. Now what does that mean? Simply, that children can not be kept out of the factories and in the schools until the best and most complete system of inspection and truancy service has been established and the officers of these two branches of public service have found wise methods of working together. A less complete system of factory inspection doubtless daes much good, and often may reduce the number of violations to
an extremely low figure, but it is not likely to prevent them altogether.

Kind of Goods Made:-The articles of wear which were made, in the 79 shops included here, consisted of overcoats, coats of all kinds, vests, pants, overalls, jumpers, cloaks, jackets, sweaters, stockings, shirts, etc. In some shops one of these classes of articles only were made, in others several. In order to obtain some idea of the number of shops and persons in each line, the following classification is given :

| Kind of Goods Made. | No shops. | Persons Empley ${ }^{\text {d }}$ d |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Ma'e. | Female. | rotal. |
| Coats of all kinds. | 48 | 200 | 520 | 720 |
| Pants, etc. ........ | 17 | E7 | 223 | 280 |
| Vests, etc. | 7 | 15 | 83 67 | 98 79 |
| Totals | 79 | 284 | ¢93 | 1,177 |

The preceding exhibit presents several important features. The first thing is the prominence of the coat makers. Here we find 48 , or nearly 61 per cent., of the shops and 720 , or over 61 per cent., of the persons employed. This occupation thus comprises nearly two-thirds not only of the shops but of the workers as well. The pants makers embrace over one-fifth of the shops and nearly one-fourth of the employes. The vest makers and those engaged in other occupations in the garment making trade are of less importance. Together they only include about 17 per cent. of the shops and about 15 per cent. of the persons employed.

Another feature of this table is the proportion of males and females in each of the occupations. In coat making the females constituted 72.23 per cent.; in pants making, 79.64 per cent.; in vest making, 84.70 per cent. ; in the other occupations, 84.85 per cent., while for all the proportion of females was 75.87 per cent. of the total.

For Whom Made:-The garments were mostly made for local concerns, as a matter of fact almost entirely for two wholesale houses which furnished work for 92 per cent. of the shops and 91 per cent. of the workers. These houses were, therefore, the
real employers, though they acted through middlemen or contractors. They bought the material and saw to its cutting, making their own bargains with the contractors for the remainder of the work. The material was then turned over to the contractor to be made up and returned when finished. The distribution and sale of the completed garment was left wholly in the hands of the wholesale houses, which also furnished practically all the capital and assumed all the risk. By turning the work of manufacture over to contractors, they merely relieve themselves of the necessity of maintaining workshops of their own, with all the attendant worry of hiring and superintending workers.

The Proprietors of the Shops:-The proprietors of the shops undertake the actual manufacture of the garments, entering into contract with the wholesalers to do this at a certain price. They furnish the shop, hire the workers, pay their wages and return the garments when finished. They have nothing to do with the purchasing of the material or with the sale of the finished article, these things being done by others. This is what makes the difference between the proprietors of such shops and manufacturers in most other lines. The price for which the proprietors undertake the work is fixed at the time of making the bargain, and is usually at so much per piece or dozen. The whole transaction is a very simple one, the chief responsibility of the proprietor towards the wholesaler being for the quality of work done in his place and for the safe keeping of the goods while in his hands and the proper return of the garments when finished.

These proprietors are thus contractors in every sense of the word. They are not paid any fixed salary or wages, their compensation coming out of the difference between what they. receive for the job and what they must pay out as wages to their workers, rent for the shop, and other expenses connected with operating their business. The conditions under which they operate, however, are more nearly fixed than is the case in most other lines of contracting. They simply attend to the actual labor of making up the garments. ' The material is furnished them, and the sale of the finished product is attended to by others, The risk they assume is, therefore, very small, and this
is reflected in their low profits. The eapital needed is also small, much less in proportion to the amount of work done than in other lines of business. Those who are conducting the larger shops must, of course, be backed by enough capital to meet the rent and furnish a few machines and perhaps some mechanical power. Other expenses, such as fuel and perhaps light, must be met, but the amount to be allowed for depreciation of plant and interest in the investment is light. In many cases little more is required than will readily be advanced by the wholesalers. The proprietors of the smaller shop and those who work in their own homes require even less in the way of capital. Most of them, in fact, have none at all. They use little in the way of tools, and the work is performed in their living rooms. When the garment is finished it is brought back to the wholesaler, the pay obtained, and the responsibility of the contractor ends.

As a rule the contractor understands all parts of the work. Very often he is a person who began at the bottom and advanced through the ranks. He is thoroughly familiar with the details in every branch, and can assist in any place where help is needed. The importance of this should not be underestimated, since the work is so subdivided, and so few of the workers are familiar with all branches that the contractor is often the only one in the shop who knows all about it. Many of the contractors, indeed, work as hard, if not harder, than any of their employes, besides attending to all the over-seeing and management.

The contractors employ their help much as other employers do, going into the open market for it. The supply of such labor as they want is plentiful, most cases so much so that the contractors do not even need to go outside of their shop to find it. At most seasons of the year more applicants for work are turned away weekly than the entire number of persons employed. At least, this is the story told by one of the contractors. The workers are paid out of the contract price and the less they get the bigger is the contractor's margin. With a supply of workers greater than the demand it is easy to see to what this order of things may lead. Some of the workers are employed by the day, others by the piece. In most cases, however; they are paid
weekly. The rate whether by the day or piece, as will be seen later, is very low; in fact, it seems on the whole to be even lower than for factory workers in general. Help, too, is hired only as needed and no one is paid for any time during which he is not actually at work.

All the work, however, is not always done in contractors' shops. As said before, garment making is subdivided. Some workers, for instance, make only button holes. Others again sew on the buttons, while still others perform equally insignificant parts of the whole task. As much of this work can be done as well in one place as in another, the contractors often sub-let a part of it to individuals who take it to their homes for completion, returning the articles to the contractor and receiving their pay. This method is often more convenient, as well as cheaper, and is quite generally followed.

The contractors seem to hail from everywhere. Some were born in this country, others in eastern and southern Europe, and others still in other European countries. The greater proportion, however, were from eastern Europe, or descendants of people from these countries.

Who the Workers Are:-Much is heard first and last about the workers in the garment-making trade. They are described as working longer hours and for smaller wages than the people do in other trades. It is also asserted that they live in poorer homes, that their work is irregular and their mode of life out of harmony with that of the working class in general. In short, garment workers are said to live under sweated conditions as a usual thing and to be almost' always foreigners of an inferior social grade, inefficient in skill and of comparatively low intelligence. While many of these statements are more or less true it is not easy to tell wherein the garment makers differ greatly from workers in other occupations. Most of them, it is true, come from the countries of that portion of Europe where hand labor is still the rule and factory work uncommon. A large proportion of their number are women and children and it must be admitted that many of them are unskilled, inefficient and helpless. But this is also true of other trades than garment making.

In both spirit and method the garment making trade as it is carried on is neither modern nor American in character. In all other lines of industry, except that of repairing, production is carried on on a large scale. The factory has supplanted the small shop and the machine, operated by steam, has taken the place of the tool, guided by the hand of the worker. This, on the whole, has tended to increase the amount of cheap products and has proved beneficial to humanity. But the garment making trade stands today just where it stood in the last century. Some changes have taken place in that period, no doubt, but they are few and unimportant and in general the industry has progressed but little, lagging far behind all others. Little machinery or mechanical power is required even today when most things are done by steam and electricity, and the work is still carried on in small shops and homes, when the tendency in every other line is to concentrate production in large factories. The contractors who hire the workers and superintend their labors neither furnish the material or sell the product, and all the workers themselves are required to do is to sew into garments the pieces of cloth that have been cut into shape before the contractor receives it. Moreover, even this work of sewing is greatly subdivided so that no one worker ever makes the whole of a garment. This no doubt increases the amount that can be made in a given time, but it is a distinct detriment to the worker as he has no way of advancing in his trade and is likely to remain inefficient and unskilled in everything except the very small part of the work that falls to his share.'

The actual work can be done almost anywhere. It can be performed with as much facility in the home as in the shop. A sewing machine is practically the only tool needed and in many cases even this can not be used. - The work also requires less physical strength than most other kinds, and thus offers opportunities to those who are weak and infirm, or who lack the necessary stamina to enter other occupations. In considering the peculiarities of this trade it is easy to see why it is over-crowded, why the earnings are small and other conditions bad. It is here that the effects of over-supply of poor labor are most strongly felt. The trade is one that strongly attracts certain classes of
workers. It is the place of refuge for immigrants from countries where factory conditions are unknown, and it absorbs many of those who are in a position where they must chose between starvation or accepting such work as they can get. It also affords employment to many who have neither had the time, means, opportunity or energy to learn a better trade. It is eagerly sought by poor women who must support themselves, and widows who have families besides themselves to look after and so must find work that can be done at home. Children are also employed not only in the homes, where they are made to assist the mother, or, perhaps, the father, but also in the regular workshop, for the proprietor, there as elsewhere, very often finds that child labor is cheap. While the trade thus harbors the more helpless classes, many able bodied and capable workers are to be found in it. Some of these are persons who have learned the tailoring trade in their native countries and who, upon arriving here, readily find work in the small shops, but as a rule such skilled workers ultimately drift into custom work where both the pay and other conditions compare favorably with those in other skilled trades.

Kind of Power Used:-At the last inspection the inspectors ascertained whether mechanical power was used in any of the shops. The inquiries resulted in showing that four of the shops had gas engines, one employed electricity, and that seventy-four used no power of a mechanical nature. This showing is significant. It tends very strongly to substantiate the fact that these places are merely workshops on the old plan, rather than factories in the sense in which the word is used today. It does not follow that garment making is not suited for factory production or for the manufacture by machinery in large establishments. There is plenty of evidence to the contrary to be found in those places where strikes and the enforcement of the factory laws have been directed at the evils connected with the smaller shops and tenement work.

- Again, the facts indicate that mechanical power is not out of place in this industry. The shops which were equipped with gas or electricity were among larger ones. The very fact that mechanical power was used at all indicates that it is practicable.

That garments can be made with profit on a large scale in modern factories has also been shown by experience in some of the larger cities. During the past ten years sonse of these places have witnessed the slow transition from the shop to the factory. This transition was not voluntary by any means, but was forced by strikes, factory laws, and by public opinion. The change, however, is slow, and seemingly lacks the necessary stimulus. The reason for this tardiness can undoubtedly be found in some of our social conditions. In this country, at least, sweating is certainly the exception rather than the rule. It would be considered entirely out of the quiestion at all were it not for a large class of workers who silently accept sweated conditions. No doubt most of them are forced to do so from necessity. Their character, training, habits and other circumstances unfit them for the well regulated and sometimes exacting duties of the large factory, as well as for factory life generally. Cut off from this they must look for work in other directions. Through the natural process of elimination they are finally located in the occupations that most nearly meet their capacity, where the least is demanded of them, if not in actual work, in discipline and regularity. It is this class of workers that makes the small shop possible and profitable. Remove the conditions under which they live and work and the small shop would soon be a thing of the past.

Kind of Buildings in which Shops Were Located:-The garment making shops are to be found in all sorts of buildings. Of the 79 shops included in the report, 26 were located in one story frame buildings, 13 in one story frame with basement, 33 in two story frame buildings, 2 in two story and basement buildings, 1 in an one story brick, 3 in two story brick buildings, and 1 in a three story frame building.

Of the workshops 10 were located in the basement, 3 in the basement and on first floor, 58 on the first floor entirely, 3 on the first and second floor, and 5 on the second floor.

These facts are important. They indicate for one thing that in Milwaukee the garment making industry is not intimately associated with the tenement house evil. Some consolation is to be found in this. One of the greatest evils in this in-
dustry is the crowded, ill-ventilated and unsanitary condition of the places, or rooms in which it is usually conducted. By far the greater part of the work, as it was done in Milwaukee, was carried on on the first floor of one or two story buildings. Fhis of itself, in the absence of other evidence, would be enough to show that these houses were not tenement houses, which are ordinarily constructed on entirely different plans.

Milwaukee fortunately is not a city of tenements. Such buildings are to be found there but they are not so numerous as to constitute a source of danger in themselves. Milwaukee is essentially a city of homes. It has spread out considerably and now covers a great deal of territory. Every house, outside of the business section, stands alone, and, as a rule, is surrounded with plenty of ground, air and sunlight. There are, of course, exceptions to this, but it may be regarded as the rule. The advantages of individual homes as compared with the much decried tenement are many. It is true that a small house standing alone may not be much more attractive inside than a large and crowded tenement building. The rooms may be as small and no cleaner, and the conveniences as few as in the most crowded quarters of the largest cities. Still this would apply to the interior of the homes only. On the outside the conditions in the two cases differ entirely. The immediate surroundings of a tenement are usually as bad, if not worse, than the interior conditions. The alleys and streets are bad, and the air is contaminated by the stench of decaying garbage. Sunlight is often almost entirely shut out. This can hardly be the case when the dwellings of the workers stand alone and are surrounded by open ground. Even if the rootns and the conveniences of the home are far from what they should be, the situation is much relieved by sanitary conditions out of doors. During at least one half of the year the children can play in the open, and fresh air be had by simply opening doors and windows.

## SANITARY CONDITIONS AND HOUSING.

Sanitary Condition: The sanitary condition of places where clothing and other garments are made is a subject about which a great deal has been heard. Social workers dwell upon it. In fact many of them regard it as the most important feature of the sweating evil. Legislatures are considering it and their position in the matter may be judged from the provisions in laws which have recently been enacted. It is probably not too much to say that to bring about better sanitary conditions in the small shop, and thus to protect society from the evil results of unhealthy work places is the real purpose of nearly all legislation upon this subject.

The subject is one of the first importance, whether the matter is looked upon from the point of view of those who are immediately affected or from that of the state or society as a whole. People who live in crowded and unhealthy places deteriorate physically, mentally and morally. The squalor and want with which they are surrounded not only sap their bodily and intellectual vigor, but deaden their moral sense, making them less and less able to maintain themselves and to bring up their families as they should.

As said before, the worst sanitary conditions are found in the larger cities, such as $\cdot$ New York and Chicago, where the poor are huddled together in rows of tenements that are absolutely unfit for human habitation. In smaller cities, where the tenement is almost unknown, this problem is less pressing. The poor in these places may be no better off than the poor in large cities. Their standard of living may be no higher. They may be no cleaner, and their homes may be as filthy. Still, the atmosphere in which they live is much better and can not possibly have the deadening effect of the fully developed slum, where the dwellers in tenements have neither fresh air or sun, and where nothing but filth and squalor can be seen no matter in what direction one turns.

It is true that there are poor elsewhere than in tenements and slums and that they suffer no matter where they happen to be. In such herding places, however, they are sure to be found, and
it is there that they sink the deepest and endure the most. Porerty and suffering are made worse by similar environment. People who see nothing else and who have but vague ideas of anything better, are not likely to try hard to improve their condition. They have nothing to stimulate or encourage them to the putting forth of better efforts. They have no hope or ambition. All their better qualities have through the lives they lead, been stifled to at least a certain extent. Of course, there are exceptions to much of this, but they are fewer than could be desired. The tenement not only shelters but breeds poverty. Many of those forced to live within it have lost all hope and have virtually given up the struggle for anything but the most meager existence. Their self-respect and desire to better themselves are gone. These are qualities that are absolutely indispensable to progress and without them no reform is possible. Therefore, the chief concern is that they should be restored where lacking. - The question as to how this can be done at once arises. Mere precepts and good advice are not enough anil are not likely to be heeded if given. The appeal must be made to the sense rather than the understanding. Anything short of an actual change in the conditions themselves is not likely to have a lasting impression. The poor must be made to actually pass from a bad to a good environment before they will begin to really appreciate that there are things in the world worth working for.

The first step towards such an end is better housing for the poor. The extermination of the tenement house evil, wherever it exists, is a problem that all cities should take up for consideration and solution. Decent homes in decent neighborhoods are an essential to any reform work among the poor. Sunlight and fresh air must have access to every home if it is to shelter good and useful citizens. Decency must be enforced, by the law if in no other way. The old time tenement is a breeder of pestilence and misery and it should not be allowed to stand. So long as it is permitted the poor are not likely to find themselves much better off.

At first glance it may seem a question as to how the poor can ever afford to live in better homes, but experience in New York
and elsewhere shows that the model tenement is not an impossibility and that it can not only be built but that it can be made to pay, without demanding a higher rate of rent than that now paid for places that are unfit for human beings to live in. To condemn and tear down such structures will not therefore result in higher rents or in hardships anywhere except such few as may be incidental to the transitory period. On the other hand, more than any other one thing will good homes contribute to the lifting up of those who are now on the lowest round of the ladder of progress.

Happily this commonwealth has no city where a fully fledged tenement district may be found. Wisconsin ranks high as a manufacturing state and the wage-earner constitutes a large proportion of the population, but its industries are fairly well distributed throughout the state. Instead of one great manufacturing center there are several small ones and in these the conditions in regard to overcrowding are apt to be less severe. Milwaukee is, of course, a large city as well as an important manufacturing center, but even there the conditions as a whole are not so very bad. The city covers a wide territory. Its industries are scattered. It has a splendid street car service. Tenements are found there but not of the worst kind. The wageearners live in separate houses, which, even though small and no more convenient or comfortable than similar homes in larger cities, have, as a rule, open surroundings and plenty of both air and light. The instances where the home is used for workshops as well as for living purposes are, as yet, comparatively few, though already the home-worker, as has been shown, constitutes in point of number a good sized and apparently growing class.

Some idea of the sanitary conditions in the seventy-nine regular workshops in Milwaukee where garments of one kind or another are made may be gathered from the following facts which show the condition in this respect with reference to the various provisions in the law.

In only three per cent. of the places was the work-room also used as living and sleeping rooms .Comparing this with the condition at the first inspection, as given in the last report, it will be noticed that there was no change either for the better or
the worse. While the proportion of violations was the same at both inspections, the places and proprietors affected were not. Those who were at fault the first time had made the necessary improvements. Those who were so at this inspection had lately entered business in new places.

Only about one per cent. of the shops were insufficiently lighted and heated.

In twenty per cent. of the places vermin or bad odors were discovered. In this respect conditions seemed to have grown worse since the first inspection. This is probably largely due to the fact that the last inspection was made after the cold weather had set in, when it had become necessary to close up the houses in order to keep out the cold.

Eight per cent. of the shops needed re-painting and whitewashing as well as a general cleaning up.

The sanitary condition of the immediate surroundings of the shops was very good in eighteen per cent. of the places, in sev-enty-one per cent. it was good, and in eleven per cent. fair, or bordering upon a condition where the health officer might be expected to put in an appearance at almost any time.

In twenty-one per cent. of the shops the work-rooms were either by doors, windows or in some other way connected with living and sleeping rooms. This is somewhat of an improvement upon the condition in this respect at the first inspection.

Four per cent. of the shops could only be entered through living or bed rooms. In this respect there is also an improvement since the first inspection.

Twenty-one per cent. were in violation of the law which requires separate closets for males and females, while seven per cent. failed to regularly disinfect them.

These facts certainly indicate conditions that from a sanitary point of view are much better than those of similar workshops in most of the larger cities. In fact the workshops in the gar-ment-making industries in Milwaukee, compare fairly well with the smaller shops in other lines. It is true that the same standard of cleanliness can hardly be applied to the two cases and that therefore what might be regarded as good conditions in one might be held to be bad in the other. Garments or cloth of
any kind will absorb filth and disease much more readily than most other articles. Garments are also used in a way that exposes the owner or user to great danger from any contamination to which they have been exposed. Hence, from a sanitary point of view it is necessary that the places where they are made be kept absolutely free from filth and disease. This cannot be insisted upon too strongly. Any other condition is highly dangerous not only to those immediately interested but to the community as a whole. How many cases of diphtheria and other infectious diseases can be traced to the shop or home where some newly purchased garment was made! If the real facts in this respect were fully known to the public no such laxity in enforcing the sanitary laws as is now witnessed almost every day in our cities would be tolerated.

The description, in official reports and other publications, of how the poorest classes live in some of the larger cities is almost beyond belief. Page after page is filled with notes running somewhat after this fashion: No. -_. Two story frame occupied by two families. First floor store, three living rooms and stable. Thin boards between kitchen and stable. Kitchen door opens into stable. Horss two feet from kitchen door. Stable not clean and foul odor from same. House unfit for human habitation. This is only one of the many illustrations that might be produced. What is the result of this condition of things? It breads disease and fearfully increases the death rate, a statement amply sustained by the following facts relating to New York city: In a population of about 255,000 less than one-eighth of one per cent. had bathrooms in the house in which they lived. Among these classes the death-rate of children under five years was 255 in a thousand, and the general death-rate 62 in a thousand. At the same time the general death-rate for the city at large was only about 20 . The death-rate in the poorer districts is thus several times as great as that for the better, and even for the city as a whole when all classes are included. But what else can be expected? The old tumbledown, filth-soaked, dark, unventilated places where these people live, and which it is almost criminal to call homes, are merely death-traps of the worst kind.

It may be asked why the poor should choose to live in such places. The answer is simple. They live there simply because they have to. Their income is too small to enable them to rent better houses. They must have food and clothing as well as shelter, and what they earn is not enough to go around. In order to live at all they must be satisfred with the cheapest tenement. Comfortable homes rent at prices that are beyond the reach of the very poor. The landlord who might put his property into better shape does not always feel called upon to do so. Sometimes he is an absentee, who does not know how bad it is, and those who look after his property may be more interested in what they make out of it than in how the tenants fare. He may be aware that his property brings a greater net income in its present condition than it would if put in better shape, as the additional outlay might not even increase the gross income, and from his point of view would therefore be wasted. Philanthropic and humanitarian instincts stand a poor show when brought into conflict with greed. Or it may be that the landlord himself has not been accustomed to better conditions, and for this reason as well as because he is financially interested sees no cause for making improvements. It also sometimes happens that the landlord "stands in" with the powers that be and is ailowed to have his own way in spite of both sanitary and building regulations, and those whose duty it is to enforce them.

While the housing problem is most insistent in large cities it is not peculiar to any particular state or country. It is felt wherever sanitary science has made any advance. It has also been thoroughly studied, for men who are experts in their line have given their best efforts to its solution. Much has also been accomplished in the way of providing better houses for the poor in many cities. Private as well as municipal efforts have been enlisted in this work, but while many people have been helped in this way there are others just as badly off who have not been reached at all. The field is too big for any but the best organized and most comprehensive social movement.

The efforts that have been made to bring about better sanitary conditions in homes, factories and workshops are of a most varied character, National, state and municipal governments
have taken a hand in the matter by instituting investigations, enacting laws and ordinances for the regulation of the sanitary conditions and the construction of buildings, and by providing inspectors for their enforcement .Private individuals and associations have also contributed by looking up and reporting upon conditions as well as by organizing and operating building companies. Such moves are along the right line, and if continued and enlarged they will be almost sure to bring the desired' results.

The first step in all reform movements is a thorough investigation of all existing conditions. The local situation must be studied in detail. It is necessary to know what the trouble is before a remedy can be advanced. All such investigations should, moreover, be as complete as possible. There should be no guess work, nor anything visionary about them. Hard facts only are wanted. Before the true condition is known no safe remedy can be applied. The importance of such investigations has been generally recognized and several have been conducted by national, state, and municipal governments, as well as by private associations and persons. Many of them have been both fair and complete and often they have resulted in legislation and inspection that have proved timely and effective. Such investigations are not difficult to make as they can be carried out successfully by persons of ordinary talents and good hard common sense, if they are not afraid to work, and will take enough interest in it to do it as it ought to be done.

The reports of such investigations are of the greatest value. To police authorities they serve as a guide and their publication alone is often sufficient to bring about extensive reforms. No landlord likes to have the public know that his houses are unfit for habitation. It may injure his social standing and even hurt his business. Publicity is one of the great forces that work for public good. Sometimes a mere inspection of the premises is sufficient. Many landlords who will let the matter drift so long as they attract no notice take immediate steps to set things right when attention is called to the situation.

The landlords can, of course, do a great deal in this matter. They own the property and certainly have the power to see to
it that it is kept in a good sanitary condition. It is their duty to do this, and if they fulfilled their obligations in this respect there would be no housing problem. The landlords are also the persons to inform the health authorities when any of their tenants fail to keep within the bounds of propriety. Some do all that can be expected of them in this respect, but others violate every principle involved. Since filthy, poor and disease, breeding dwellings can be made to bring in as much rent as cleaner and more expensive ones it is perhaps too much to expect all landlords to keep their property in the best condition. Greed is a strong motive force, and human nature is full of imperfections. But there are other ways in which the property owners can do much. They can help to establish closer business relations between themselves and their tenants, by making fair contracts and seeing to it that the requirements of the same are promptly fulfilled. In short, they should get into close touch with their renters. There are many instances where a little effort in this direction has resulted beneficially to both sides. The landlords have found that their rent increases and the tenants have become inculcated with a few good business habits which, once started, have gradually strengthened and encouraged them until hope has taken the place of despair.

Those who desire to know what can be done in this way, either by the landlords themselves or by others who may have control of the property, have only to examine the work of Octavia Hill who, with the help of John Ruskin, secured control of some houses in London the inmates of which had a bad record for untidiness. She entered the work as a rent collector, and one of her principles was to require prompt payment of the rent. This before long established natural business relations between her and the tenants. Disobedient tenants she had, of course, and the power to eject but the power was kept in the background and replaced by friendly counsels as she discovered before long that no coercion was necessary. Those who took the best care of her property she found some way of rewarding, and those who were heedless and who neglected the premises had to wait for improvements or conveniences until after the others had been supplied. In this and other ways she not only transformed the houses but reformed the people who lived in them.

Such a method of social service is highly commendable and has been taken up more or less in this country. It is not always a pleasant task to spend a great deal of time in the tenement district, yet many who have leisure and money are doing it and with the best of results. Their accounts of what they have had to put up with as well as of what has actually been accomplished is not only interesting but highly instructive. No one can read these reports without learning a great deal about the "other half"-their desires and needs, how they live, who they are, what they do, or how they make their living-facts that are indispensable in all intelligent efforts to deal with the poor. Direct aid, such as is furmished by charity organizations, is not always the best thing that can be done. Such assistance has its place, but to help people to help themselves is usually the best for all concerned.

Private individuals and companies have contributed much to better housing accommodations for the poor. Employers, for instance, located in small places have often seen to it that their employes have been placed in a position to acquire modern houses on terms of payment that amount to little, if any, more than the ordinary rental asked in other places. The greater proportion of these efforts have proved successful and resulted in benefit to both sides. Many objections have of course been raised to the nature of the employment contract in such cases, and perhaps some of these objections have been well taken. This, however, is another question which does not belong here. The facts are, that joint undertakings of this kind, as a rule, mean comfortable living apartments and pleasant if not artistic surroundings.

In factory districts the housing problem is often of the greatest importance, and the question of a possible improvement there has caused much discussion. The American spirit is noted for its independence and anything that savors of paternalism is likely to be resented. Employers do not always take kindly to suggestions and the more intelligent workers hope some day to own their own homes and gardens. Both alike often turn their back on health officers and inspectors. Little of the co-operative spirit that has made some of the factory communities in Eng-
land veritable gardens is met here, and the outcome of some of the experiments in providing better homes for the workers has often been such as to give but scant encouragement to others. The method adopted by Mr. Pullman certainly resulted in fine houses for his employes. He built a town that to an outsider at least appears in every way a model. Beautiful buildings and grounds, model workshops, charming lodge rooms, library, reading room, hotel, theater, play grounds, park, flower beds, shade trees, all so arranged as to present a beautiful view, were to be seen. The town was a conspicuous illustration of what can be done under capitalistic leadership and centralized control. The people there were better housed and enjoy better surroundings than in almost any other place. Still life did not go on smoothly. Differences between employer and employe soon arose and the strife which followed neutralized almost entirely all the good that had been done.

A few cotton manufacturers in the south are trying the same plan, but have not as yet had a fair trial. A few remarkable experiences in this line both here and in England deserve mention.

The Draper Company at Hopedale, Massachuetts, secured a tract of land thirty acres in area on which it erected a number of houses which are rented to the workmen at $\$ 3.00$ per week. The place was laid out by an expert and now resembles a village with well kept streets and sidewalks, an excellent sewer system and all necessary improvements. Arrangements have also been made for the effective disposal of garbage. Both front and back yards are kept perfectly clean. The houses are double, each side having six or seven rooms, with good cellar, attic and store room, and are also furnished with water. The firm has also donated a town hall and high school building and takes a great deal of interest in the welfare of its employes and in local matters generally.

The Merimac Manufacturing Company, of Lowell, Massachusetts, has erected a number of tenements which are well fitted and kept. Each apartment has from four to ten rooms and these are rented for much less than the usual prices for such quarters.

The Peace Dale Manufacturing Company, of Rhode Island,
has also done a great deal in the way of assisting its men. Its efforts in this respect begun almost with the century. Among other things they built a number of single houses and sold them to their employes on easy terms. The company has also provided the place with a town hall, library, village church, and is assisting in other ways.

The Westinghouse Air Brake Company, of Wilmerding, Pa., several years ago purchased a large tract of land which was laid out in building lots on which it also erected houses. The èntire property was then sold to its employes at actual cost prices on monthly payments. The prices varied from about $\$ 2,000$ to about $\$ 3,700$, which was from $\$ 300$ to $\$ 500$ less than the ordinary cost, owing to the fact the company paid cash for everything and took advantage of larger contracts. The payments, which also include an insurance policy for the purpose of clearing the property to the purchaser in case of death, does not exceed the usual rental price. The plans under which this work has been carried on certainly seem practical. A large proportion of the employes have also availed themselves of the opportunity and now own valuable homes.
N. O. Nelson, of St. Louis, Mo., who has done so much in various ways for his employes, secured some years ago a tract of land near Edwardsville, Ill. On this he erected his factories and laid out a beautiful town. He built homes and sold them to his employes on the monthly payment plan, the payments not amounting to more than the rental in cities. The houses are well built and provided with modern conveniences, the water and light even being free or furnished by works which are maintained by the company. The company has also provided schools, libraries, amusement buildings and a campus. In order to encourage improvements among the people, Mr. Nelson has also built a greenhouse and provided a gardener who gives free instruction in the raising and caring of plants and flowers of all kinds. This place is described as a model which it is hoped others will imitate.

England furnishes many examples of the same fine spirit and enterprise on the part of employers. Lever Bros, Port Sunlight, not long ago acquired a large estate. On one corner of
this they erected their factories. The land adjoining has been converted into a beautiful town for the employes. The houses consist of cottages with from four to six rooms each. These are rented to the employes at from seventy-five cents to $\$ 1.25$ per week, or for just enough to defray maintenance and taxes. The houses are built with a view to beautiful effect, and are surrounded by lawns and vines, and are very well cared for. Everything that is needed for comfortable living seems to be provided. In addition to this the company has also furnished schools, town hall and other public buildings.

There are records of many other employers there who have provided their employes with comfortable and pleasant homes in the neighborhood of their factories at an extremely low cost. In many places there are also, in addition to this, recreation grounds for men and women, play grounds for children, parks, pools, plunge baths, and other features that go to make up an ideal village.

The illustrations thus given have been picked out because they seem to throw more than ordinary light upon what employers can do and are doing in many cases in the way of securing comfortable and pleasant homes and healthier surroundings. Such undertakings, if properly managed and appreciated, must be productive of a world of good. Is it not possible that their importance has been greatly underestimated in this country?

Building companies, organized for the purpose of facilitating the ownership of homes among the working classes, also show good results. One of these, The City and Suburban Homes Company in New York city, deserves attention. This company is purchasing areas of vacant land where good and cheap transit facilities are afforded .'On this they erect houses at the lowest possible cost. The purchaser pays down ten per cent. of the purchase price of the house and lot. The balance is paid in monthly instalments during such period as the parties agree upon. The monthly payments also cover a life insurance policy and amount to little more than the rent alone in the larger cities. This company started out under competent management and is endeavoring to profit by past experience in this line. Its capital stock of $\$ 1,000,000$ was largely subscribed by wealthy busi-
ness men but is open to the public at $\$ 10$ per share. Interest on it at the rate of five per cent. is offered. Any surplus above this is to be used for extending the business. The company seems to have provided for practically every emergency and the indications are that it will meet all expectations.

The advantages offered by this company cannot be opẹn to all classes of wage-earners, however, as only those who are better paid and whose hours of labor conform more nearly to the regular business hours are likely to be able to meet its terms. Those who earn little may not be able to raise either the first or any subsequent payment. Those again who depend on odd jobs, or who are occupied long hours or at night, may find it impossible to go out into the suburbs. Much also depends upon the kind of transportation service. Rapid electric trains with low rates are one of the requisites. Those who are working hard all day cannot afford to spend much time in waiting for or riding on trains; nor can they afford to pay out a great deal in fares. The success of such undertakings as the one proposed by this company is therefore largely dependent upon an efficient electric street car service, which emphasizes the importance of these systems of transportation.

But this company does not limit its activities to the erection of homes. It goes much further than this. Recognizing the fact that many cannot get away from the crowded districts, it has taken steps to assist even here by furnishing plans for model apartment houses. These plans are prepared by architects who are experts in their line. The arrangement is such that no room will be without air and light and each apartment will have private water closet and laundry tub. The smallest bed room will have a floor area of seventy square feet, and the smallest living, one hundred forty-four square feet. Laundries, drying-rooms, baths, gas stoves and other conveniences are also supplied. These apartment houses can be built at a cost so low that the rent for each apartment will not exceed that exacted for the filthy places now bearing that name. This is a long step in advance, especially when it is remembered that the new apartments in addition to the modern improvements also have at least twenty-five per cent. more room. The appliances which go to
make a model living house cost money. Expensive houses in turn mean high rent. It may be hard to believe that a building with modern conveniences can be rented as cheap as one of the old pest-ridden tenements which lacks everything that makes existence even tolerable, but experience shows that it is a fact.

It is, of course, not expected that a few companies will be able to furnish all the buildings of this kind that are needed. The real purpose is to set a good example by showing what can be done. It is hoped that the beginning thus made will tend to create such a demand of decent accommodations that landlords generally will be forced to erect better buildings.

Such efforts as landlords, employers, associations and private individuals are likely to make will not, however, wholly solve the housing problem. Landlords are in their business for profit. The per cent. of the earnings upon their investment is likely to be a stronger motive than the comfort of persons in whom they are in no way interested except as renters. The same is true of most employers. The fierce competition which all have to meet permits little to be expended outside of strictly necessary expenses. Many are so situated that they could not assist in providing better houses if they would. This is certainly the case with many who are located where real estate is high. Associations and individuals can reach certain classes among the wageearners, but not all. The problem is too big, the ground to cover so large, the questions involved so many and intricate that all such efforts as those mentioned are likely to prove inadequate.

If undertakings of this kind fall short of what is really. needèd something else should be done. The problem is one that properly comes within the province of governmental interference. The government, whether state or municipal, is stronger than any private persons, or semi-private association. It can therefore successfully enter a field that is too great or too difficult for others. The state by extending its factory acts and inspection, and the municipality by a complete body of health and building ordinances and inspection, can supply what is wanted. An inspector or health officer, backed by the necessary legal provisions and with power to enforce them, will command respect and hearing where a private individual is powerless. They can employ force where all other means fail.

Nearly all manufacturing states have their factory laws and inspectors. These laws may not as yet be very complete, nor is the inspection service always the most efficient. In spite of these drawbacks, however, they have been productive of much good. Sanitary conditions have been improved and work in general has become safer. In most cases, however, the factory laws have been limited to factories and the larger workshops only. The smaller shops and places used for both living rooms and workshops have often been left to their fate. This is a serious shortcoming, for it is well known that some of the latter places are the most dangerous. By extending the laws and perfecting the inspection so as to include the home worker as well as the factory, the state can do much towards raising the standard. It can for one thing make dirty places clean. Some states have gone this far and with good results. The principles upon which such interference is based are now settled and there seems to be no reason why the state cannot go as far as necessary in this direction.

When it comes to tenements and other places used for living purposes only it is perhaps best to leave the regulating power to local authorities. In the open country a man may build almost any kind of a house without danger or detriment to his neighbors. It also matters but little how things about it are kept. In the cities, however, the situation is different. Here people are living close together and private dwellings are not mere private interests. A building that is too high may cast a depressing shadow upon its neighbors. It may turn the sun and light which they need and to which they are entitled into a gloom: A defective flue or cracked chimney may endanger the entire block, if not the city itself. Defective closets or sewerage, a filthy backyard, foul air in or about one dwelling of a tenement may threaten not only those who happen to live there but all who live under the same roof and in the vicinity. In such cases single families are helpless. Even the efforts of several families may result in nothing. Without aid from local authorities who have the power to set things right, these people may have to suffer untold injury. Often the better people in such districts lack the knowledge if not the courage to defend them-
selves from filth, disorder and demoralizing influences of bold and shameless neighbors. When all or any of these conditions exist in a crowded city district it is certainly the duty of its government to interfere, both in its own interest and in that of those. immediately affected.

In order to do their duty in this respect the cities should have the necessary ordinances and be equipped to enforce them. Such ordinances should be comprehensive and broad enough to cover every emergency that may arise. Their enforcement should be in the hands of competent and conscientious inspectors. Among other things they should prescribe the height of a building, the number of stories, the space it will cover and the space left free, the qualitv of materials in walls and roof, the height of ceiling, the cubic feet of air space and the window space for admission of light for each room, the quality of plumbing, the kind and position of drain pipes, the methods of ventilation and the kind of chimneys, the means of escape in case of fire, the means for quick and effective care of those who are sick with infectious diseases, and the prevention of their spread, the care of garbage, the removal of filth, and for every other condition of health and safety, including even the condemning and tearing down of the reeking tenement. The ordinances of many cities are now fairly complete and should be closely studied. The parts which need strengthening the most are those which relate to the construction, use and condemnation of buildings. There is also, in many cases, a slackness about the enforcement of such regulations, a thing much to be regretted, as no law of this kind amounts to much unless vigorously enforced. If enlightened self interest had worked in the way laid down for it such regulations would never have become one of the necessities of city life.

While the housing problem is not so pressing in this state as in many other places it is great enough to receive some attention. Our manufacturing centers are growing rapidly and many of the elements which make for overcrowding may easily be detected there. Proper action at this time and a little watchfulness from now on will not only act as a cure but as a preventative.

## WEEKLY EARNINGS.

This part deals with wages. It shows the weekly wages. It shows the weekly earnings of coat, pants, vest, cloak, overall, shirt, and jacket makers as well as those of a few persons engaged in custom work. The data were obtained directly from 'the time books of the employer at the time the inspection was made, and as they were carefully put down and verified they may be regarded as representing the true condition. They were collected because of their importance. No investigation of the condition of any class can be complete until the earnings of its members have been considered, for except in a few cases the earnings constitute an almost unfailing index to the actual condition of the class as a whole. Data relative to the earnings of the various classes of workers also furnish material for useful comparisons.

The figures presented give the earnings by the week of six working days. This unit was selected merely as a matter of convenience as it corresponds more closely to that used for the same purpose in other occupations than any other that could have been chosen. The employment of the workers was in various ways. Some worked by the day; others again by the week; while still others worked by the piece. In the larger shops the foreman was often employed by the month. In computing the weekly earnings different methods, therefore, had to be used. For those employed by the day the amount was obtained by multiplying the daily rate by six. For those employed by the week the weekly rate was of course used. For piece workers the amount of the actual earnings when employed full time was taken. This basis of computation is easily comprehended. Those who may desire to know the rate per day or the earnings per month or year for full employment can readily obtain the desired data from the basis thus given.

Of the eight tables which follow, table I gives the weekly earnings of coat and pant sewers; table II, the earnings of vest makers and custom workers ; table III gives those facts for shirt, overall, and jacket makers; table IV includes a few cloak makers; table V includes all of the above tables and is a sort of
summary. In table VI the facts in tables I, II, III and IV have been reduced to a basis which more readily permits comparisons between the wages in each occupation. In table VII the earnings in the above tailoring trades have been reduced to the same classification as that used for the manufacturing returns made by this bureau. This has been done for comparative purposes and the table as it stands opens the way for the comparisons which are made in table VIII.

Table I-WEEKLY EARNINGS OF COAT AND PANTS MAKERS.

| Weekly Earnings. | Coats. |  |  | Pants. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female. | Total. | Male. | Female. | Total. |
| \$19.00 per week... | 1. |  |  |  |  |  |
| 18.00 per week ... | 1 |  | 1 |  |  |  |
| 15.00 per week ... | 4 |  | 4 | 3 |  | $\ddot{3}$ |
| 13.50 per week. | 1 |  | 1 |  |  |  |
| 13.00 12.50 per week week. | 4 |  | + |  |  |  |
| 12.00 per week | 8 |  | 8 | 4 |  | 4 |
| 11.00 per week | 7 |  | 7 | 4 |  | 4 |
| 10.50 per week | 4 |  | 4 |  |  |  |
| 10.00 per week | £9 |  | 39 | 5 |  | 5 |
| 9.50 per week <br> 9.00 per week | 3 29 | 1 | ${ }_{3}^{3}$ | ${ }_{2}^{2}$ |  | 2 |
| 8.50 per week | 5 | 1 | 3 5 | 8 |  | 8 |
| 8.00 per week | 9 | 2 | 11 | 6 |  | 6 |
| 7.60 per week | 5 | 5 | 10 | ${ }_{2}^{6}$ |  | $\stackrel{6}{2}$ |
| 7.00 per week | 5 | 11 | 16 | 1 |  | 1 |
| 6.75 per week 6.50 per week |  |  |  |  | 1 | 1 |
| 6.00 per week | $1{ }^{-1}$ | 26 | 27 |  | 2 | $\frac{1}{7}$ |
| 5.75 per week |  | 1 | 1. |  | 2 | 7 |
| 5.50 per week |  | - 19 | 19 | 1 | 6 | 7 |
| 5.25 per week |  | 1 | 1 |  |  |  |
| 5.00 per week | 2 | 64 | 66 |  | 17 | 17 |
| 4.50 per week |  | 40 8 | 40 8 | 1 | 42 | 43 |
| 4.00 per week |  | 61 | 61 | 1 | 27. |  |
| 3.75 per week |  | 16 | 16 |  | 9 | 9 |
| 3.50 per week |  | 28 | 28 |  | 28 | 28 |
| 3.25 per week |  | 14 | 14 |  |  |  |
| 3.00 per week | 1 | 36 | 37 |  | 19 | 19 |
| 2.50 per week | 1 | ${ }_{23}^{17}$ | 17 24 |  | 5 | 5 |
| 2.25 per week |  | 1 | 1 |  |  |  |
| 2.00 per week |  | 10 | 10 |  | 4 | 4 |
| 1.75 per week |  | 2 | 2 |  |  |  |
| 1.50 1.25 per week |  | 9 3 | 9 3 |  |  |  |
|  |  |  |  |  |  |  |
| Totals | 132 | £99 | 531 | 40 | . 169 | 209 |

Table II-WEEKLY EARNINGS OF VEST MAKERS AND CUSTOM WORKERS.

| Weekly Earnings. | Vests. |  |  | Custom Work. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males. | Females. | Total. | Males. | Females. | Total. |
| \$17.00 per week |  |  |  | 1 |  | 1 |
| 12.00 per week | 1 |  | 1 | 1 |  | 1 |
| 10.00 per week | 4 |  | 4 |  |  |  |
| 9.00 per wefk. | 5 | $2{ }^{\cdots}$ | 5 2 | 1 |  | 1 |
| 6.00 per week |  |  |  |  | $i$ | 1 |
| 5.00 per week |  | 4 | 4 |  |  |  |
| 4.50 per week |  | 4 | 4 |  | 1 | 1 |
| 4.00 per week |  | 11 | 11 |  |  |  |
| 3.50 per week |  | 12 | 12 |  | 1 | 1 |
| 3.25 per week |  | 5 | 5 |  |  |  |
| 3.00 per week |  | 11 | 11 |  | 2 | 2 |
| 2.50 per week |  | 8 | 8 |  |  |  |
| 2.00 per week <br> 1.75 per week |  | . ${ }^{5}$ | 5 |  | 1 | 1 |
| 1.25 per week |  | 1 | 1 |  |  |  |
| Totals' | 10 | 64 | 74 | 3 | 7 | 10 |

Table III-WEEKLY EARNINGS OF SHIRT, OVERALLS, AND JACKET MAKERS.

| Weekly Earnings. | Shirts. |  |  | Overall, Jackets, Etc. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males. | Females. | Total. | Males. | Females. | Total. |
| \$15.00 per week | 2 |  | 2 |  |  |  |
| 10.00 per week |  |  |  | 1 |  | 1 |
| 9.00 per week |  |  |  |  | ${ }_{9}^{1}$ | 1 |
| 6.00 per week |  | 10 | 10 | 1 | ${ }_{9}$ | 10 |
| 5.00 per week |  | 9 | 9 | 1 | 2 | 3 |
| 4.50 per week |  | 12 19 | 19 |  | ${ }_{2}^{2}$ | $\stackrel{2}{2}$ |
| 3.50 per week |  |  |  |  | 2 | 2 |
| 3.00 per week |  | 10 | 10 |  | 20 | 20 |
| 2.00 per week |  | 2 | 2 |  |  |  |
| Totals | 2 | 62 |  | 3 | 88 | 41 |

Table IV-WEAKLY EARNINGS OF CLOAK MAKERS.

| Classification. | Male. | Female. | Total. |
| :---: | :---: | :---: | :---: |
| \$14.00 per week | 1 |  | 1 |
| . 800 per week | 1 |  | 1 |
| 4.75 per week 3.00 per week |  | 2 | 3 2 |
| Totals | 2 | 5 | 7 |

The four preceding tables relate, as already explained, to the weekly earnings in the various tailoring trades when employed full time.

Table I deals with the earnings of those who make coats and pants. Of the former there were 132 male persons and 399 female persons, or a total of 531 . Of the latter there were 40 males, 169 females, or a total of 209 persons. In the case of coat makers the male workers thus constituted 24.86 per cent. of the total, while for the pants makers the males made up only 19.14 per cent. of the total number.

As to the earnings themselves, the first thing to attract attention is the wide range between the highest and the lowest point. Especially is this true of the coat makers. The highest point is at $\$ 19.00$ and this amount was received by only one person. The next lowest class is $\$ 18.00$ per week, while the third in order is $\$ 15.00$. Only four persons, however, received this last amount. From this point the earnings gradually fall. In no class does the number of persons included exceed 8 until $\$ 10.00$ per week is reached, but in this class the number foots up to 39 . This is the largest number for any one class until the point of $\$ 5.00$, which shows 66 persons, nearly all females. Thirty persons, 29 males and one female, received $\$ 9.00$ per week or $\$ 1.50$ per day. This is the highest point in which any female workers are found. From this down through the lower-paid classes, however, the females largely predominate in number. In fact among the males only a few boys or young men learning the trade received less than $\$ 7.00$ per week. For females the earnings mostly range from $\$ 6.00$ down to $\$ 2.50$ per week, though there is a number both above and below this limit.

For pants makers the range in wages is not quite so wide as for coat makers, but in other respects the tendencies in the two occupations seem to be about the same. Thase in the higher classes of earnings are mostly males, those in the lower are nearly all females. This is, of course, true in practically all occupations, regardless of the nature of the duties and the responsibilities involved.

Table II includes 74 vest makers and 10 custom workers. Of the vest makers 10 were males and 64 females. Of those doing
custom work 3 were males and 7 females. This table does not seem to present many features that are not apparent in all the tables. The custom workers included are few in number, and this class cannot be said to be adequately represented in the table.

Table III covers shirts and ovèralls and jacket makers. Of shirt makers there were 2 males and 62 females, or a total of 64 persons. Of overalls and jacket makers, etc., there were 3 males and 38 females, or in all 41 persons. In this table the earnings of the females are seen to range from $\$ 3.00$ to $\$ 6.00$ per week.

Table IV deals with the earnings of 7 cloak makers of whom 2 are males and 5 females. These persons were all employed in one shop, the only one of the kind included here. Owing to the few persons included, the table can hardly be regarded as representative.

In the following table the number of persons given in the four preceding tables are combined. This table therefore shows the situation with respect to the weekly earnings in the tailoring trades in Milwaukee:

Table V-WEEKLY EARNINGS OF COAT, PANTS, VEST MAKERS, AND SHIRTS, OVERALLS, JACKET AND CLOAK MAKERS WHEN COMBINED.

| Weekly Earnings. | Males. | Females. | Totals. |
| :---: | :---: | :---: | :---: |
| \$19.00 per week | 1 |  |  |
| 18.00 per week | 1 |  | 1 |
| 17.00 per week | 1 |  | 1 |
| 15.00 per week | 9 |  | 9 |
| 13.50 per week | 1 |  | 1 |
| 13.00 per week | 4 |  | 1 |
| 12.50 per week | 2 |  | 2 |
| 12.00 per week | 14 |  | 14 |
| 11.00 per week | 7 |  | ${ }^{14}$ |
| 10.50 per week | 4 |  | 4 |
| ${ }^{10.00}$ per week | 49 |  | 49 |
| 9.00 per week | 5 42 | 2 | 5 44 |
| 8.50 per week | 5 |  | 5 |
| 8.00 per week | 17 | 4 | 21 |
| 7.50 per week | 7. | 5 | 12 |
| 7.00 per week | 6 | 11 | 17 |
| 6.50 per week |  | 1 | 1 |
| 6.00 per week. | 7 | 48 | 55 |
| 5.75 per week |  | 1 | 1 |
| ${ }_{5}^{5.50}$ per week | 1 | 25 | 26 |
| 5.00 per week |  | 1 | 1 |
| 4.75 per week | 3 | ${ }_{3} 9$ | 100 |
| 4.50 per week. | 1 | 101 |  |
| 4.25 per week |  | 1 | 18 |
| 4.00 per week | 1 | 120 | 121 |
| 3.75 per week |  | 126 | 126 |
| 3.50 per week |  | 71 | 71 |
| 3.25 3.00 3.00 per week |  | 19 | 19 |
| 2.75 per week | 1 | 100 22 | 101 |
| 2.50 per week | 1 | 40 | 22 |
| ${ }_{2}^{2.25}$ per week |  | 1 | 1 |
| 2.00 per week |  | 21 | 21 |
| 1.50 per week |  | 3 9 | 3 |
| 1.25 per week |  | 4 | 9 4 |
| Totals |  |  |  |
|  | 192 | 744 | 936 |

The above table is the fifth in order. It does not represent any one occupation, but all that were included in the four tables that precede it, being a summary of the tailoring trades. It shows the condition in regard to earnings in these trades more fully than the other tables do. The table includes the earnings of 192 male, 744 female, or of 936 persons who were employed in 63 shops in Milwaukee. In one of the occupations, that of cloak making, only one shop is included. Custom work, overalls, etc., shirts, include three shops each. Vest making is represented by six shops and coat and pants making by thirty-five and twelve shops respectively. From this it might seem that some of the occupations are poorly represented, and in a sense
this is the case, though the inequality is not so great as it appears. The table as it stands furnishes a reliable picture of what the weekly earnings really amount to for those who are employed in the occupations represented. The actual earnings vary greatly. In some classes the number is much greater than in others. In the higher classes those of $\$ 12.00, \$ 10.00$ and $\$ 9.00$ per week show the greatest number of persons. Among the lower paid classes those of $\$ 6.00, \$ 5.00, \$ 4.50, \$ 4.00$ and $\$ 3.00$ are especially prominent in this respect. Only two women earned as much as $\$ 9.00$ per week, while the lower paid classes, such as $\$ 5.00, \$ 4.50, \$ 4.00$ and $\$ 3.00$, have one hundred women or more in each. This is a forcible illustration of the difference between men's and women's earning's. This table, or table V , should be closely studied by all who are interested in the condition of those who are employed in the tailoring trades.

Table VI, or the one next in order, is devoted to a few comparisons intended to show the relative earnings in the occupations included:

Table VI.-COMPARISON OF CLASISIFIED WEEKLY EARNINGS IN ABOVE INDUSTRIES.

| Classified Weekly Earnings. | Number of Persons. |  |  | Per Cent. of Persons |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males. | Females. | Totals. | Males. | Females. | Totals. |
| Coat, Pants Makers: |  |  |  |  |  |  |
| \$9.00 and over .... | 125 | 1 | 126 | 72.67 | . 17 | 17.03 |
| 7.00 and over | 158 | 19 | 177 | 91.86 | 3.35 | 23.92 |
| 6.00 and over | 165 | 49 | 214 | 95.93 | 8.63 | 28.92 |
| Under \$6.00 | 7 | 519 | 526 | 4.07 | 91.37 | 71.08 |
| Total | 172 | 568 | 740 | 100.00 | 100.00 | 100.00 |
| Vest, Cloak, Custom work:\| |  |  |  |  |  |  |
| \$9.00 and over ........ | 13 |  | 13 | 86.67 |  | 14.29 |
| 7.00 and over | 15 | 2 | 17 | 100.00 | 2.63 | 18.68 |
| 6.00 and over | 15 | 3 | 18 | 100.00 | 3.95 | 19.78 |
| Under \$6.00 |  | 73 | 73 |  | 96.05 | 80.22 |
| Total | 15 | 76 | 91 | 100.00 | 100.00 | 100.00 |

Table VI-Continued.

| $\underset{\text { Classified Weekly }}{\text { Earnings. }}$ | Number of Persons. |  |  | Per Cent. of Persons. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males. | Females. | Totals. | Males. | Females. | Totals. |
| Shirts, Overalls, Jackets: |  |  |  |  |  |  |
| $\$ 9.00$ and over .......... | 3 | 1 | 4 | 60.00 | 1.00 | 3.81 |
| 7.00 and over | 3 | 1 | 4 | 60.00 | 1.00 | 3.81 |
| 6.00 and over | 4 | 20 | 24 | 80:00- | 20.60 | 22.86 |
| Under \$6.00 | 1 | 80 | 81 | 20.00 | 80.00 | 77.14 |
| Totals | 5 | 100 | 105 | 100.00 | 100.00 | 100.00 |
| All of above industries: |  |  |  |  |  |  |
| $\$ 9.00$ and over .......... | 141 | ${ }_{2}^{2}$ | 143 | 73.44 | . 29 | 15.28 |
| 7.00 and over ${ }^{6}$. | 184 | 22 | 198 | 91.67 | ${ }_{9}^{2.96}$ | ${ }_{27}^{21.15}$ |
| Under \$6.00.. | 184 | 672 | 680 | 4.17 | 90.32 | 72.65 |
| Total | 192 | 744 | 936 | 100.00 | 100.00 | 100.00 |

The preceding table is divided into four sections, each one of which is given up to comparisons of the earnings in certain occupations. The first section deals with coat and pants makers; the second with vest and cloak makers, ete. ; the third with shirt, overalls and jacket makers, and the fourth with all of these when combined. The earnings in each case are divided into four classes, or those who received $\$ 9.00, \$ 7.00$ and $\$ 6.00$ per week and over, respectively, and those who received less than $\$ 6.00$ per week.

The table is so arranged as to give both the number and per cent. of the persons in each class. For an illustration of what is meant by this we may turn back to the section for coat and pants makers in the table. Here opposite $\$ 9.00$ and over we find that this class included 125 males and one female, making a total of 126 persons. It is further found that the 125 males constituted 72.67 per cent. of the total males in this section; that one female constituted .17 per cent. of the females, and that the 126 persons, which is the total for the class, constituted 17.03 per cent. of the total persons in this section. One-half of the table is thus given up to the number, while the other half of the table shows the per cent.
99.00 PER WEEK AND OVER.

| Occupations. | Malo. Per cent. | Females. Per cent. | Total. Per cent. |
| :---: | :---: | :---: | :---: |
| Coat and pants makers | 72.67 | . 17 | 17.03 |
| Vest and cloak makers, etc | 86.67 60.00 |  | 14.29 <br> 3.81 |
| All industries ................ | 73.44 | . 29 | 15.28 |

Here is a comparison of the proportion of persons in each of the occupations who received $\$ 9.00$ per week and over. As an example of what the figures show those in the last column may be cited. In this column it is found that 17.03 per cent. of the coat and pants'makers, 14.29 per cent. of the vest and cioak makers, 3.81 per cent. of shirt, overall and jacket makers received $\$ 9.00$ per week and over; while for all of these occupations the average proportion who received this amount was 15.28 per cent. of the total. These figures clearly show that the coat and pants makers enjoyed the greatest earnings when the occupations as a whole are considered. Next in order are the vest, etc., makers, while shirt, overall, etc., makers fall far below the other two classes.
\$7.00 PER WEEK AND OVER.

| Occupations. | Male. Per cent. | Females. <br> Per cent. | Total' Per cent |
| :---: | :---: | :---: | :---: |
| Coat and pants makers | 91.86 | 3.35 | 23.92 |
| Vest, cloak makers, etc. | 100.00 60 | 2.63 1.00 | 18.68 |
| Shirts, overalls, etc. | 60.00 91.67 | 1.00 2.96 | 3.81 21.15 |
| All Industries | 91.67 | 2.96 | 21.15 |

The preceding figures show that $\$ 7.00$ per week and over was received by 23.92 per cent. of the coat and pants makers, 18.68 per cent. of vest and cloak makers, 3.81 per cent. of shirt and overall makers, and 21.15 per cent. of the total for all occupations. In this case also the first class in order seems to have the advantage in point of earnings.
\$6.00 PER WEEK AND OVER.

| Occupations. | Males. Per cent. | Females. ler cent. | Total. <br> Per cent. |
| :---: | :---: | :---: | :---: |
| Coat and pants makers | 95.93 | 8.63 | 28.92 |
| Vest and cloak makers | 100.00 | 8.63 3.95 | 19.78 |
| Shirt and overall makers, et | 100.00 80.00 | 3.95 20.00 | 19.78 |
| All industries | 95.83 | 9.68 | 27.35 |

The tendency that may be observed in these figures differs but little from that in the preceding tables. Occupations in which only about one-fourth of the employes receive over one dollar per day in wages are not very promising.

UNDER $\$ 6.00$ PER WEEK.

| Occupation. | Males. <br> Per cent. | Fem?lès <br> Per cent. | Total. Percent. |
| :---: | :---: | :---: | :---: |
| Coats, pants | 4.07 |  |  |
| Vests, etc. ..... | 4.07 | ${ }_{96.05}^{91.37}$ | 81.08 |
| Shirts, overalls, etc. | 20.00 | 80.00 | 77.14 |
| A.ll industries | 4.17 | 90.32 | 72.65 |

In this table we find that 71.08 per cent. of the coat and pants makers, 80.22 per cent. of vest, etc., makers, 77.14 per cent. of the shirt, etc., makers, and 72.65 per cent. of the total for all industries received less than $\$ 6.00$ per week for their labor. This means that practically three out of every four persons who are engaged in these trades earn less than one dollar per day.

In table VII, the one which foilows, the weekly earnings in the tailoring trades have been compiled on the same basis as those for the manufacturing industries found elsewhere in this report.

Table Vil-Classified wherly karnings.

| Classified Weekly Earnings. | Number of Persons. |  |  | Per Cent. of Persons. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males. | Females. | Total. | Males. | Females | Total. |
| Under $\$ 5.00$ per week | 4 | 548 | 552 | 2.08 |  | 58.97 |
| \$5.00 but under $\$ 6.00 \ldots$ | 4 | 124 | 128 | 2.08 | 16.67 | 13.68 |
| 7.00 but under 8.00 | ${ }_{13}^{8}$ | 50 | ${ }_{29}^{58}$ | 4.18 | 6.72 | 6.19 |
| 8.00 but under 900. | ${ }_{22}^{13}$ | 16 | 29 | 6.78 11.45 | 2.15 | 3.09 |
| 9.00 but under 10.00. | 47 | 2 | 49 | ${ }_{24.48}^{11.45}$ | . 27 | 5.24 |
| 10.00 but under 12.00 . | 60 |  | - 60 | ?1.24 | . 27 | 6.41 |
| 12.00 but under 15.c0. | 22 |  | 22 | 11.45 |  | ${ }_{2} .26$ |
| 15.00 but under 20.00. 20.00 and over..... | 12 |  | 12 | 6.26 |  | 1.28 |
| 20.00 and over |  |  |  |  |  |  |
| Total | 192 | 744 | 936 | 100.00 | 100.00 | 100.00 |

As said above the purpose of the preceding table is to present the facts for the tailoring trades on the same basis as that on which similar data in other industries is given. Uniformity is essential to any comparison. Without it intelligent comparisons would be out of the question. As it now stands the above table presents a fairly good picture of the earnings in the trades included.

The following table, or table VIII, compares the earnings in the tailoring trades included above with that in 46 manufacturing industries in 1900. It will be noticed that these comparisons are limited to the percentages only, the actual number of persons having been omitted:

Table VIII-COMPARISON OF WEEKLY EARNINGS IN TATLORING TRADES AN'D MANUFACTURING INDUSTRIES.

Per Cent of Persons in each Earning Class.

| Classification of Weekly Earnings | Tailoring Trades. |  |  | Manufacturing. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males. | Females. | Total. | Males. | Females | Total. |
| Under $\$ 5.00$ per week | 2.08 | 73.65 | 58.97 | 8.60 | 62.82 | 16.23 |
| \$5.00 but under $\$ 6.00 \ldots$ | 2.08 | 16.67 | 13.68 | 2.97 | 19.19 |  |
| 6.00 but under 7.00. | 4.18 | ${ }_{6}^{6.72}$ | 6.19 | 7.16 | 8.62 | ${ }_{10}{ }^{7.36}$ |
| 7.00 but under 8.00. | 6.78 | $\begin{array}{r}2.15 \\ \hline .54\end{array}$ | 3.69 2.78 | 11.91 | 4.21 2.12 | 12.67 |
| ${ }_{9}^{8.00}$ but under 9.00 . | 11.45 24.48 | . 27 | 2.78 5.24 | 14.39 19.09 | 1.72 | 16.65 |
| 10.00 but under 12.00 | 31.24 |  | 6.41 | 14.43 | 1.04 | 12.54 |
| 12.00 but under 15.00. | 11.45 |  | 2.86 | 11.97 | . 25 | 10.32 |
| 15.00 but under 20.00 | 6.26 |  | 1.28 | 7.06 | . 02 | ${ }_{6}^{6.07}$ |
| 20.00 and over |  |  |  | 2.42 | . 01 | 2.08 |
| Total | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| $\$ 9.00$ and over | 73.43 | . 27 | 15.29 | 54.96 | 3.04 | 47.64 |
| 7.00 and over | 91.66 | 2.96 | 21.16 | 81.27 | 9.37 | 71.15 |
| 6.00 and over | 95.84 | 9.68 | 27.35 | 88.43 | 17.99 | 78.52 |
| Under \$6.00 | 4.16 | 90.32 | 72.65 | 11.57 | 82.01 | 21.48 |
| Total | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |

The preceding table shows the per cent. of persons in 8 tailoring trades and 46 manufacturing industries who received classified earnings in 1900. The figures for the tailoring trades appear to the left and those for the manufactures to the right. The table is also divided into two sections. The first in order of these gives the situation in a more extended form; the second gives it in a form that has been so reduced as to make comparisons easier,

As arranged, the second part presents a fairly clear view of the earnings of both classes, and the relation which the earnings of one bear to the other. Opportunity is given to compare the earnings not only of males and females separately, but of the total of both sexes for each of the two occupations.

In comparing the males alone it appears that those in the tailoring trades are the best paid. There are several reasons for this. In the tailoring trades comparatively few males are employed, and those who are so employed receive better wages because they are doing work which requires the greatest skill. At the time of this inspection very few boys were employed and this also tends to make the showing for the males much better.

In the case of the females, however, the situation is reversed. In the tailoring trades the females earned less than in the manufacturing industries. The condition in this respect is fairly illustrated by the figures in the table which show that 90.32 and 82.01 per cent., respectively, for the two occupations received less than one dollar per day. In the tailoring trades the competition for work among the women is even greater than in the factories. This fact perhaps largely accounts for the lower earnings in the former class.

In considering the total of both males and females it developed that on the whole the best wages are earned in the manufacturing institutions. This is well shown by the fact that in these, 78.52 per cent. received one dollar per day or over, while in the tailoring trades this was the case for only 27.35 per cent. of the workers.

In the tailoring trades the females constituted 79.95 per cent. of the total number; in the manufacturing industries they constituted only 14.07 per cent. This fact largely accounts for the lower earnings in the former trades.

In the foregoing pages has been seen, first, the actual weekly earnings of each worker investigated in the tailoring trades when employed full time, the classified weekly earnings, and comparisons of earnings as between the different occupations in these trades, as well as between those employed in these trades and those employed in the manufacturing industries in this state, The real object of these presentations is to give some
idea as to the situation in the tailoring trades with reference to earnings. The facts thus given will here be supplemented by the notes of one of the inspectors in his visits to sixteen shops. where clothes were made. These notes are interesting. Facts are brought out in them that could not have been included in the tables:
———. Makes overcoats for -_ employs 35 hands; all work by week; small girls are paid from $\$ 1.25$ to $\$ 2.50$ per week; experienced sewers from $\$ 4$ to $\$ 7$ weekly; men get from $\$ 9$ to $\$ 13$. Season for work is about nine months in the year; price paid by the wholesalers is from $\$ 1$ to $\$ 1.75$ for each garment.
__ - Makes overcoats for _—_ 15 employed ( 4 men; all work by week and receive from $\$ 2.50$ to $\$ 6$ per week; one girl gets $\$ 7.50$; one gets only $\$ 1.25$; men get $\$ 10$ a week. Prices paid by wholesalers range from $\$ 1.00$ to $\$ 1.75$ for each garment.
___ Makes high grade overcoats for —__ employs about 18 people ( 3 men) ; all work by week; girls' are paid from $\$ 4$ to $\$ 5$; men from $\$ 10$ to $\$ 11$; proprietor is paik from $\$ 1$ to $\$ 2$ for the making of the coat complete; coats for which he gets $\$ 2$ are retailed at from $\$ 20$ to $\$ 24$, and the material in them costs from $\$ 4.50$ to $\$ 7.50$, according to the grade of the linings. Season about eight months in the sear.
————. Manufactures men's working shirts and jackets; employ 28 girls, who all work by the piece except one girl, who earns $\$ 1.50$ per week. Other girls work by piece on different parts of shirt ( 5 girls to a shirt). Experienced girls on piece work earn from $\$ 3.50$ to $\$ 5$ per week. Experienced girls on working jackets gets 58c. per dozen for making the fronts and can make about eighteen per day with steady work. Working season is' all year round, except during the summer months only about half the number are employed.
__-_. Makes men's working shirts for _._. Employs 11 girls, three of whom work by the week and are paid $\$ 3, \$ 3.50$ and $\$ 4$ per week. vther girls work by the piece and earn from $\$ 3$ to $\$ 4$. Proprietor makes about 100 dozen per week, for which he receives 55c. per dozen.

Miss _- _ Makes rubber lined mackinaw coats for ——. Works by piece and gets $\$ 2.70$ per dozen for rubber lined and $\$ 2.25$ for coats not rubber lined. If she works steady and hard can make eighteen coats in a week of ten hours per day.

Mrs. _-. Makes mackinaw jackets for -. By working steady she can make four dozen in six days of ten hours each, but could not keep it up. Gets $\$ 1.05$ per dozen.

Mrs. ——. Makes vests for ——. Gets from 25 to 33 cents for each vest, and from this amount she pays out six cents for the making of the button holes. Mother and two daughters work steady and make seven vests a day working about eleven hours. .

Mrs. -. Makes crocheted hoods for the ——Co. Gets 12 cents apiece for them, and if she worked steady can make about three in a day of 10 hours.

Miss $\quad$ Makes infant's crochet jackets for the -_ Co.
Could not make over six a day working hard and steady. Calls for and deliv-
ers her own work. Gets 6 cents apiece for them.


#### Abstract

Makes men's pants for ——. Employs about 15 people, most of whom work by the week. One girl works by piece, making back pockets and makes about three dozen a day, for which she rrceives 24 cents per dozen. Girls working by the week get from $\$ 2.50$ to $\$ 5$ per week and one gitl is paid $\$ 7$. Two men employed get $\$ 9$ each per week. Boss receives an average of 23 cents per pair for the finished pants from the wholesaler. Season about ten months of the year.


Missies __ and __. Make pants for _——. Employ about 48 people, all of whom work by the week. Girls are paid from $\$ 2$ to $\$ 6$. according to the ability of the operator; average about $\$ 3.75$ per week. Men get $\$ 9$ and $\$ 11$ per week for pressing. These women make the best grades of pants for the finest ready-made suits, turning out about 1,600 pairs per week. The prices for the finished pants' range from 22 cents to 33 cents per pair, and from this amount the maker has to pay from 6 to 8 cents for "finishing" (sewing on buttons, etc.). This part of the work is done by women who take the work' home.

- Company. Make overalls and working jackets; also a few cotton pants. Employ about 13 girls in shop, all of whom work by the piece and are paid from 36 cents to 50 cents for overalls and 65 cents for cotton pants (per dozen). Most experienced employes earn from $\$ 5$ to $\$ 5.50$ per week at these prpees.
———Company, ——. Most of the work is given out to be made up by the plece. Four girls work in shop by the piece and average about a dozen and a half a day, for which they receive 50 cents per dozen.

[^36]—— Company. Manufacturers of ladies' cloaks, jackets and ladies' tailoring. Employ eight people for about five months in the year. Girls are paid by the week from $\$ 3$ to $\$ 5$, and men are paid $\$ 8$ to $\$ 15$.

These notes explain themselves. To attempt to summarize the facts they contain would in no way enhance their value. In connection with the tables which precede them they furnish a fairly comprehensive view of the situation.
Hours of Labor Daily:-The number of hours which constitute a day's work in these trades corresponds quite closely to those in other industries. This is seen from the following facts:

```
73 shops employing 1,088 persons were runn'ng 10 hours dails.
    3 shops employing 63 persons were running 9 hours daily.
    2 shops employing 21 persons were ruming 91/2 hours datly.
    1 shop employing }5\mathrm{ persons were running ơ hours daily.
```

Of the 1,177 persons which were thus employed in 79 workshops, 1,088 , or about 92.5 per cent. of the total were thus employed 10 hours per day. The other 89 persons were employed from 8 to $9 \frac{1}{2}$ hours.

These figures represent the regular workshops only. Families or persons who take their work to their homes seldom have regular hours. Most of them, in fact, are at work the greater part of the time.

## THIRD INVESTIGATION.

The preceding investigations convey a fairly clear idea of the conditions in this state with regard to the sweating evil. Sweating in its worst form is not generally present, but the conditions upon which it develops are here and unless checked at this point it is only a matter of time when we will be confronted with the sweating evil in all its phases. It also had become evident that our present laws relating to sweating and the system of inspection by which they were enforced were inadequate to afford the necessary check to any further growth of sweating. In considering the situation as a whole, therefore, there was much to be desired. While it was gratifying to know that sweating was, as yet, not a fixed institution among us, it was rather discouraging to find that it had acquired some foothold, that the elements of growth are present, and that our means for preventing any further growth were, at least, partially lacking. It was plain that something ought to be done, some step taken that would result, not only in improving the present situation, but that would effectively prevent this evil from becoming a fixed condition. To this end a bill for a new law upon the subject was prepared and introduced in the legislature of 1901. This bill passed both houses, was signed by the governor, and became law. It reads as follows:

## CHAPTER 239, LAWW OF 1901.

Providing for the preservation of public health.

## Manufacturing, altering, repairing, and finishing articles; Li-

 cense.-Section 1. No room or apartment in any tenement or dwelling house or in a building situated in the rear of any tenement or dwelling house, shall be used for the purpose of manufacturing, altering, repaining or finishing therein, for wages or for sale, any coats, vests, knee pants, trousers, overalls, cloaks, hats, caps, suspenders, jerseys, blouses, dresses, waists, waist bands, underwear, neckwear, knit goods of all kinds, furs, fur trimmings, fur garments, skirts, shirts, purses, feathers, cigarettes, cigars or umbrellas, unless a license is secured therefore as provided in this act. Application for such a license shall be made to the comm:ssioner of labor and industrial statistics by any family or a member thereof or any person, firm or corporation, desiring to manufacture, alter, repair or finish any such articles in any room or apartment in any tenement or dwelling house or by any person, firm or corporation desiring to perform such work in any building in the rear of any tenement or dwelling house. Such application shall describe the room or apartment, shall specify the number of persons to be employed therein, and shall be in such form as the commissioner of labor and industrial statistics may determine. Blank applications shall be prepared and furnished by the commissioner of labor and industrial statistics. Before any such license is granted, an inspection of the room, apartment, or building sought to be licensed, must be made by the commissioner of labor and industrial statistics, factory inspector or assistant factory inspector. If the commissioner of labor and industrial statistics, factory inspector, or assistant factory inspector, ascertain that such room; apartment or building, is in a clean and proper sanitary condition, and that the articles specified in this section may be manufactured therein under clean and healthful conditions, he shall grant a license permitting the use of such room, apartment or building, for the purpose of manufacturing, altering, repairing, or finishing such articles. Each license shall state the maximum number of persons who may be employed in the room or rooms to which such license relates. The number of persons to be so employed shall be determined by the number of cubic feet of air space contained in each room or apartment mentioned in such license, allowing not less than two hundred and fifty cubic feet for each person employed between the hours of six o'clock in the morning and six o'clock in the evening, and unless by a special written permit of the commissioner of labor and industrial statistics, factory inspector, or assistant factory inspector, not less than four hundred cubic feet for each person employed thereln between the hours of six the evening and six in the morning, but no such permit shall be issued unless such room or apartment has suitable light at all times during such hours, while such persons are employed therein. Such license must be posted in a conspicuous place in the room or apartment to which it relates. lt may be revoked by the commissioner of labor and industrial statistics, factory inspector or assistant factory inspector, if the health of the community or of the employes requires it, or if it appears that the rooms or apartments, to which such license relates, are not in a healthy and proper sanitary condition. Every room or apartment in which any of the articles named in this section are manufactured, altered, repaired or finished, shall be kept in a clean and sanitary condition and shall be subject to inspection and examination by the commissioner of labor and industrial statistics, factory inspector, or assistant factory inspector, for the purpose of ascertaining whether said garments or articles or any part or parts thereof are cleanand free from vermin and every matter of infectious or contagious nature. No person, firm or corporation, shall hire, employ or contract with any member of a family or any person, firm or corporation not holding a license therefor, to manufacture, alter, repair or finish any of the articles named in this section in any room or apartment in any tenement or dwelling house or in any room or apartment in any building situated in the rear of a tenement or dwelling house as aforesaid; and no person, firm or corporation' shall receive, handle or convey to others or sell, hold in stock or expose for sale, any goods mentioned in this section unless made under the sanitary conditions and in accordance with this act. This section shall not prevent the employment of a tailor or seamstress by any person or familly for the purpose of making, altering, repairing or finishing any article of wearing apparel for such person or for family use.
Appeal to board of health.-Section 2. Whenever the commissioner of labor and industrial statistics, factory inspector or assistant factory inspector in his judgment revokes or refuses to grant a license to any person or persons because of the unhealthy or unsanitary conditions in or surrounding the place where any of the aforesaid goods are or are to be manufactured, the person or persons aggrieved by such decision may appeal to the board of health of such city, village or town wherein said license was refused or revoked. The board of health after receiving a written notice of the appeal from the person or persons aggrieved, shall immediately investigate the conditions and surroundings of the place wherein any of the goods are or are to be manufactured as mentioned in the aforesaid, and if they find that a license can be granted without injuring or impairing the public health, that such finding shall be immediately reported in writing to the commissioner of labor and industrial statistics, who shall thereupon grant such license.

May iequire separate rooms; sanitary measures.-Section 3 . The commissioner of labor and industrial statistics, factory inspector or any assistant factory inspector may, when he deems it necessary, require that all rooms or apartments used for the purpose of manufacturing, altering, repairing or finishing therein any of the aforesaid goods or articles as mentioned in section 1 shall be separate from and have no door, window or other opening into any living or sleeping room of any tenement or dwelling and that no such rooms or apartments shall be used at any time for sleeping purposes and shall contain no bed, bedditig or cooking utensils. He may further require or direct a separate outside entrance to the room or apartments where the work is carried on, and if such work is carried on above the first floor, then there may be directed a separate and distinct stairway leading thereto and every such room or apartment shall be well and sufficiently lighted, heated and ventilated by ordinary, or if necessary, by mechanical appliance. He may also require suitable closet arrangements for each sex employed ás follows: Where there are ten or more persons and three or more to the number of twenty are of either sex, a separate and distinct water closet, either inside the building with adequate plumbing connections or on the outside, at least twenty feet from the building, shall be provided for each sex. When the number employed is more than twenty-five of either sex, there shall be provided an additional water closet for such sex 'up to the number of fifty persons, and above that number in the same ratio, and all such closets shall be kept strictly and exclusively for the use of the employes and employer or employers. All closets shall be regularly disinfected and the commissioner of labor and industrial statistics, factory inspector or (any) assistant factory inspector may require all other necessary changes or any process of cleaning, painting or whitewashing which they may deem necessary before the issuing of the license.

Register of persons to whom work is given.-Section 4. Any person, firm or corporation, by themselves or by their agents or managers, contracting for the manufacturing, altering, repairing, or finishing of any of the articles mentioned in section 1 of this act, or giving out material from which they or any part of them are to be manufactured, altered, repaired or finished, shall keep a register of the names and addresses, plainly written in Engli,sh, of the persons to whom such articles or materials are going to be so manufactured, altered, repaired or finished or with whom they have contracted to do the same. Such register shall be subject to inspection on demand, by the commissioner of labor and industrial statistics, factory inspector, or (any) assistant factory inspector, and a copy thereof shall be furn:shed at his request.

Board of health to condemn; when.-Section 5. If the commissioner of labor and industrial statistics, factory inspector or (any) assistant factory inspector find that infectious or contagious diseases exist in a workshop, room or apartment of a tenement or dwelling house or of a building in the rear thereof in which any of the articles specified in section 1 of this act are being manufactured, altered, repaired or finished or that articles manufactured or in process of manufacture therein are infected or that goods used therein are unfit for use, he shall report to the local board of health, and such board shall issue such order as the publie health may require. Such board may condemn and destroy all such infectious article or articles manufactured or in the process of manufacture under unclean or unhealthful conditions.


#### Abstract

Owners of tenement and dwelling houses not to permit the unlavful use thereof.--Section 6. The owner, lessee or agent of a tenement or dwelling house or of a building in the rear of a tenement or dwelling house shall not permit the use thereof for the manufacture, repair, alteration or finishing of any of the articles mentioned in this act contrary to its provisions. If a room or apartment in such tenement or dwelling house or in a building in the rear of a tenement or dwelling house be so unlawfully used, the commissioner of labor and industrial statistics, factory inspector, or (any) assistant factory inspector, shall serve a nbtice thereof upon such owner, lessee or agent. Unless such owner, lessee or agent shall cause such unlawful manufacture to be discontinued within thirty days after the service of such notice or within fifteen days thereafter, institutes and faithfully prosecutes proceedings for the dispossession of the occupant of a tenement or dwelling house who unlawfully manufactures, repairs, alters or finishes such articles in any room or apartment therein, he shall be deemed guilty of a violation of this act as if he himself was engaged in such unlawful manufacture, repair, alteration or finishing.


Penalty.-Section 7. Any person, firm or corporation, agent or manager of any corporation who whether for himself or for such firm or corporation or by himself or through agents, servants or foremen shall violate any of the provisions of this act shall upon conviction thereof be fined in any sum not less than twenty dollars nor more than one hundred dollars for each offense, or imprisoned not less than twenty or more than sixty days or both, and in all prosecutions brought by or under the direction of the commissioner of labor and Industrial statistics for the violaton of this act, he shall not be held to give security for costs or adjudged to pay any costs but in all cases where the accused be acquitted or is found to be indigent, the costs shall be paid out of the county treasury of the county in which the proceedings are brought the same as the costs in all other cases of misdemeanor.

Section 8. Chapter 232 of the laws of 1899 is hereby repealed.

This law is now upen the statute books of this state and has been in force about one year. It is not the only law, however, in this state by which sweatshops are affected. Our factory laws contain many provisions that relate not only to factories but to the smaller shops, or practically every place where persons are employed and work is performed. They affect shops where garments are made just as much as shops where other articles are made. In order, therefore, to convey a fairly accurate idea of the various provisions not only in the above law, but in the factory laws as a whole, which affect places where garments are made, the following analysis is presented. The references under each provision indicate whether said provision may be found in the above law, or in the factory laws generally.

An analysis of Ch. 239, L. '01, and other laws applicable to making, finishing or repairing wearing apparel, etc.

Rooms or apartments in tenements, dwellings, etc.-
Shall not be used for making, finishing or repairing wearing apparel, unless a license is secured therefor to conform with this act.
Shall provide for each person employed therein not less than $250 \mathrm{cu} . \mathrm{ft}$. air space from 6 A . M. to 6 P . M., and 400 cu . ft. from 6 P . M. to 6 A . M., unless special written permit given by Bureau officials provides otherwise.
If conmissioner or factory inspector require it, shall be separate from and not open into living or sleeping rooms.
Shall have an entrance from outside direct. (If above first floor a separate stairway.)
Shall be properly lighted, heated and ventilated, if necessary by mechanical appliance (Sec. 3, Ch. 239, L. '01).
Goods shall not be contracted to be made in any building that does not conform to this act or unless occupant possesses a license as herein required (Slec. 1, Cht. 259, L. '01).
Premises to be clean and subject to inspection of Bureau-officers.
Those giving out material to be made into these goods shall keep a register, written in English, of the names and addresses of persons to whom work is given out. This register is subject to inspection by Bureau officers, and a copy thereof furnished at their request (Sec. 4, Ch. 239, L. '01).
Owners, lessees or agents shall not permit them to be used for the making, finishing or repairing of wearing apparel contrary to this act.
When so unlawfully used the Bureau officers shall serve notice upon such owner, lessee or agent (Sec. 6, Ch. 239, L. '01).

## Closets-

If commissioner or inspectors require it there shall be suitable closets for each sex.
Shall be kept strictly and exclusively for the use of employees and employer.
Shall either be inside the building with adequate plumbing or outside at least 20 ft . from building.

Where the number employed exceeds 25 of either sex there shall be an additional closet for each sex up to 50 persons and above that number in the same ratib.
Shall be regularly disinfected and supplied with disinfectants (Sec. 3, Ch. 239, L. '01).

Note.-The provision as to closets in Ch. 239, L. '01, should be construed with more rigid requirements in Sec. 7, Ch. 79, L. '99, which relates to cigar factories only.

## Employees-

More persons shall not be employed than can be kept at work without violat. ing laws of health (Sec. 1021 g ).
Shall each have not less than 250 cu . ft. air space from 6 A . M. to $6{ }^{\circ} \mathrm{P}$. M., and 400 cu . ft. from 6 P. M. to 6 A . M., unless special written permit given by the Bureau officials provides' otherwise (Sec. 1, Ch. 239, L. '01).
Number of employees must be specified in application for license.
Shall be provided (if females) with suitable seats, and permitted to use them when not necessarily engaged in duties (Ch. 77, L. '99).
Women shall not be employed in any place used for mfg. over 8 hrs . in any one day (Sec. 1728).
Note.-For provisions as to outward swinging doors, fire-escapes on factories three or more stories high, and having twenty-five or more employes, see Sec. 4390 , as amended by Ch. 380, L. '01, and 4390 . For provisions as to "Closets," see above.

## Child labor-

Shall not (ff under 14 years of age) be employed in any factory (except a special written permit has been issued as herein required).
A register shall be kept in factory in which must be the name, age, date o birth, residence, of every child at work under 16.
Employes under 16 must nut work unless there is on file in factory an affidavit as herein provided. (Affidavit and register on demand must be produced for inspectors.)
Employes under 16 must not work after 9 P. M. or before 6 A. M., nor have charge of any elevator.
Minors must not work who cannot obtain from a physician a certificate of physical fitness for the work (Ch. 274, L. '99, amended by Ch. 182, L. '01).

## License-

For making, finishing or repairing wearing apparel in room or apartments of dwelling or tenement houses, or in rear thereof, is required before rooms, etc., can be legally thus used.

## Applications for-

Applications to be made to the commissioner to make, finish or repair any wearing apparel:
Shall describe such room or apartment.
Shall specify number of persons employed therein.
Shall be in such form as the commissioner may determine.
Applications-blanks for-
Shall be prepared by said commissioner.
License-pre-requisite to granting-
Before granting license an inspection must be made.

To be granted when-
If premises are clean and satisfactory and the work may be done under healthy conditions, a license shall be granted.

What to state-
To state maximum number of persons to be employed in room, etc., which shall be determined by the number of cu. ft . of air space.

Must be posted-
In conspicuous place in room, etc.
May be revoked-
By commissioner or inspector if rooms, etc., are not in sanitary condition.
When revoked or refused mfrs. may appeal-
When license is refused or revoked owing to unsanitary conditions, the person aggrieved may appeal to the local board of health and said board may investigate and report in writing to Gureau officers if it is found that a license can be properly granted, and it shall thereupon be issued (Sec. 2, Ch. 239, L. (1).

Wearing apparel-
Shall not be received, handled, held in stock or sold unless made under the requirements of this act (Sec. 1, Ch. 2£9, L. '01).
May be condemned and destroyed by local board of health if unfit for use, because made in places where infectious or contagious diseases exist (Sec. 5, Ch. 239, L. '01).

Duties and powers-
.Of commissioner-

## Power-

Commissioner may prescribe blank forms and transmit them to employers to be filled out under cath and returned to him (Sec. 1021 i).

Of commissioners and factorv inspectors-
Duty-
To enforce this law and prosecute its violation.
To visit and inspect all places covered by this act.
To serve notice upon owner, lessee or agent of building when rooms and apartments are unlawfully used (Sec. 6, Ch. 229, L. '01).
To report to local board of health when infectious or contag'ous diseases exist where wearing apparel is made (Sec. 5, Ch. 239, L. '01)..

## Power-

May demand a physician's certificate of physical fitness to work in case of children who seem unfit for work at which they are cmploycd. May in their discretion, after due examination, grant permit to children over 12 years to work under cond.tions hereln named (Ch. 274, L. '99, , amended by Ch. 182, L. '01).
May require all necessary changes, cleaning, painting, white-washing, which they deem essential to insure freedom from yermin, stench, or condtion liable to impair health or breed disease (Sec. 2, Ch. 2ie9, L. '01). May file charges and demand removal of Dist. Atty who fails to briag proceedings at once where law is violated after having written notice (Sec. 10211.)

[^37]The law thus given in full above and which, as is seen from the preceding analysis, includes the main provisions for the regulation of garment making in this state, was prepared with advice and assistance of ex-attorney general of the state, Mr. C. E. Estabrook, of Milwankee, who takes a great deal of interest in legislation of this nature. The bill embodying the law was introduced into the legislature by Assemblyman H. J. Soltwedel, also of Milwaukee. Both Mr. Estabrook and Mr. Soltwedel presented facts and arguments in favor of the passage of the bill before the legislative committee to which it was referred, and it is largely due to their efforts that this law was placed upon the statute books.

This law differs from the one that preceded it mainly in this, that it requires a license to be obtained by all who manufacture garments, or the articles named in the law. In other words, under this law no room or apartment, etc., shall be used for the manufacturing, etc., therein for wages or for sale any of the articles mentioned in the law unless a license as provided by law
is secured for such purpose. This was regarded as an important provision. The license system would not only permit the inspection of private homes where such work was carried on, but would assist the inspectors in keeping some kind of a check on the evasive sweater and thus enable the laws to be more fully enforced.

The first inspection under the new law was begun in the fall of 1901. Between that time and July 1st, 1902, about 300 licenses were granted. In granting these licenses the inspectors visited each place and reported in full upon the conditions. These reports for 280 places have been compiled in a series of tables which are presented in the following pages.

The table which follows is the first in order of these presentations. In this table the places visited are classified as to the kind of goods made and the number of establishments and persons employed for each industry are given:

INDUSTRIES, ESTABLISHMENTS, EMPLOYES.

| Industries. | Establishments. |  | Employes. |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Number. | Per cent | Number | Per cent. |
| Coats | 75 | 26.80 | 734 | 47.89 |
| Vests | 55 | 19.64 | 179 278 | 10.93 |
| Trousers, etc. | 56 | 20.00 | 278 79 | 17.00 |
| Miscellaneous | 29 | 10.35 | 317 | 19.37 |
| Total | 280 | 109.00 | 1,637 | 100.00 |

In the preceding table it is seen that the places included were classified as follows: Coats, vests, trousers, etc., gloves, mittens, etc., and miscellaneous. These classifications, however, do not strictly conform to the actual situation, and the reason for this is that in many places more than one kind of article was made. Places which thus turned out a mixed product were either classified with the one which they regarded as the largest or most important, or placed with the "miscellaneous."

Each place or shop, regardless of size and number of persons employed, was regarded as an establishment. The total number of places or establishments included is 280, of which nearly 27 per cent, turned out mostly coats of all kinds. About 20
per cent. in each case were making vests and trousers, while about 23 per cent. turned out gloves and mittens, and over 10 per cent. showed a miscellaneous product.

In all 1,637 persons were employed in the 280 establishments included, and of these the greatest proportion were engaged in the making of coats. The next in order of importance from this point of view is miscellaneous, with 317 persons, and trousers, with 228 persons. Vests and gloves have 179 and 79 persons, respectively. The per cent. of the total for all of the persons in each class is, coats, 47.79 per cent.; vests, 10.93 ; trousers, 17.00 ; gloves, etc., 4.81, and miscellaneous, 19.37 per cent.

The average number of persons to each shop is as follows: Coats, 10.45 persons; vests, 3.25 ; trousers, 4.96 ; gloves, etc., 1.21, and miscellaneous, about 10 persons.

A classification of the persons employed in each establishment gives the following results:

| Classification. | Coats. | Vests. | Trousers | Gloves. | Miscellaneous. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| One person . ... | 20 | 30 | 32 |  | 8 |  |
|  | 23 | 19 | 15 | 10 | 7 | 74 |
| 6 to 10 persons, inclusive. Over 10 persons |  | 2 4 | 2 7 |  | 4 10 | 17 44 |
| Over 10 persons Total | 23 75 | 54 | $\begin{array}{r}7 \\ \hline\end{array}$ | $6{ }^{-\cdots}$ | 10 29 | 44 280 |

Here it appears that of the establishments included, 145, or about 52 per cent., had only 1 employe each, that 74 had from 2 to 5 persons inclusive each, that 17 had 6 to 10 persons inclusive, each, and that 44 , or over 16 per cent., had over ten persons each. These facts convey a fairly good idea of the relative importance of the establishments.

KIND OF BUILDING OCCUPIED.

| Industries. | Wood. Stories high. |  |  | Brtck. Stories high. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | One | Two. | Three. | One. | Two | Three. |
| Coats | 42 | 32 |  |  | 1 |  |
| Vests . .................... | 21 | 31 | 1 |  | 2 |  |
| Trousers ${ }_{\text {Gloves and }}$ mittons, | 28 | 26 | 1 |  | 1 |  |
| Gloves and mittens, etc.. Miscellaneous . .......... | 43 15 | 21 10 |  |  | 1 | 2 |
| Total | 149 | 120 | 2 |  | 7 | 2 |

The preceding table shows the kind of buildings occupied by the establishments in question. Of the 280 buildings, 271 were of wood and 9 of brick. Of the wooden, or frame buildings, 149 were one story structures, 120 two stories, and 2 three stories in height. The brick buildings show 7 two story and 2 three story structures. The buildings were also in practically every case separate structures, and this fact, in addition to the table, makes it clear that the garment making in Milwaukee is not carried on in tenements as is the case in many other cities.

PURPOSE FOR WHICH BUILDINGS AS A WHOLE WERE USED.


Of the 280 buildings occupied, 227, or 81 per cent. of the total, were dwellings, 33 , or 12 per cent., regular factories, and 20 , or 7 per cent., also for othér business purposes, mostly store buildings with the shop above the first floor. The most striking feature about this table is the large proportion of the shops which were located in the regular dwelling houses, and which therefore had to serve in the double capacity of home and workshop. This, as has been pointed out already, is one of the most serious evils in the sweating problem.

PART OF BUILDING OCCUPIED EY SHOP.

| Industries. | Basement | Floors. |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | First. | Second. | Third. |
| Coats | ${ }_{4}^{6}$ | 57 38 | 12 |  |
| Vests ${ }^{\text {Tre}}$ | 4 | 48 | 8 | 1 |
| Trousers | 8 | 47 | 9 | 1 |
| Gloves, etc ${ }_{\text {Miscellaneous }}$ | 3 | 22 | 3 | 1 |
| Total | 27 | 295 | 45 | 3 |

In the above table is shown what part of the building was occupied by the shop. Taking the totals for all industries it is
found that 27 shops, or less than 10 per cent., were located in the basement; while 205 , or over 73 per cent., were on the first floor; 45 , or about 16 per cent., on the second floor, and about 1 per cent., or 3 shops, on the third floor. Of those located in the basement, 3 were in such condition that no license could be issued and in one, for which a license was issued, it has since been revoked.

NUMBER MALE AND FEMALE EMPLOYES.

| Industries | Male. | Fomale. | Total. |
| :---: | :---: | :---: | :---: |
| Coats | 252 | 532 |  |
| Trousers | - 27 | 152 | 179 |
| Gloves, etc. | 59 | 219 | 278 |
| Miscellaneous | 83 | 74 234 | 79 317 |
| Total | 426 | 1,211 | 1,6.7 |
| Per cent. | 26 | 74 | 100.00 |

PER CENT. OF MALES AND FEMALES.

| Industries. | Per cent. Males. | Per cent. Females | Total. |
| :---: | :---: | :---: | :---: |
| Coats |  |  |  |
| Vests | 32.12 | 67.88 | 100.00 |
| Trousers, etc. | 21.23 | 84.92 78.77 | 100.00 |
| Gloves etc. | 6.33 | ${ }_{93.67}$ | 100.00 |
| moenaneous | 26.17 | 73.83 | 100.00 |
| Total | 26.00 | 74.00 | 100.00 |

The preceding two tables show respectively the number and per cent. of the male and female employes. In considering the totals it is found that of the whole number of 1,637 persons employed, 426 , or 26 per cent., were males and 1,211 , or 74 per cent. were females. In these industries therefore the females greatly outnumber the males, in fact out of each 100 persons employed there were 74 females as against 26 males.

This is the situation when all the industries are considered. When each industry is taken by itself the situation is somewhat different. In coats, for instance, the proportion of males is much greater; in fact, it constitutes over 32 per cent. of all who were engaged in this trade. In trousers and miscellaneous the proportion of males stands at 21.23 and 26.17 per cent. re-
spectively. In vests the per cent. of males is much smaller, and in gloves, etc., it is smaller still, standing at 15.08 in the former and 6.33 per cent. in the latter. These facts would seem to indicate that the garment making industry is essentially a women's industry, especially is this true in some of its branches.

The next presentation in order deals with young persons and children. It shows the number of young persons between 16 and 18 years, the number between 14 and 16 years, and the number of children under 14 years who were employed in the occupations in question.

NUMBER OF YOUNG PERSONS AND CHILDREN.

| Industries. | $\begin{gathered} 16-13 \\ \text { years. } \end{gathered}$ | $\begin{aligned} & 14-16 \\ & \text { years. } \end{aligned}$ | Under 14 years. |
| :---: | :---: | :---: | :---: |
| Coats | 64 | 73 | 5 |
| Vests | 14 | 8 | 2 |
| Trousers | 24 | 17 | 3 |
| Gloves, etc. | 5 |  | 1 |
| Miscellaneous | 24 | 18 | 1 |
| Total | 131 | 116 | 12 |

From the above table it is seen that there were employed in the five industries included, 131 young persons between 16 and 18 years of age, 116 children between 14 and 16 years of age, and 12 children under 14 years of age. Except in cigar factories, where no person under 18 years of age shall be employed more than eight hours in any one day, there is practically no restriction upon the employment of young persons over 16 years of age that does not also apply to the employment of adult persons generally. As to children under 16 years their employment is, of course, more or less restricted in all the regular occupations. The number of children, however, was not very large. Including all who were under 16 years, and they numbered 128; or about 7 per cent., of the total persons employed, a relation that varies but little from that shown in the two former investigations. As has been pointed out already, the garment making industries can not be said to be in the hands of the child-worker. Compared in this respect with many other occupations their record is fairly clean. By this is not meant that the sweater, as
a rule, has any scruples about employing children if it is to his advantage to do so, for he very often has none; at least he is no improvement in this respect over the run of other employers. But there is only a certain part of the work in the making of garments that can be safely placed in the hands of children, and this fact acts as a regulating force. The enforcement of the factory laws is; of course, tending towards the reduction of child labor everywhere.

In considering each industry by itself it will appear that the greatest proportion of children were found in the shops where coats were made. The difference in this respect; however, as between the industries is not great.

The two tables which appear next in order deal with the hours of labor, showing first the hours in operation by each establishment, and second, the number of hours of labor daily by each employe.

CLASSIFICATION OF THE HOURS OF LABOR DAILY AND THE NUMBER OF ESTABLISHMENTS IN EACH CLASS.

| Industries. | 8 hours or less. | $\stackrel{9}{9}$ | $91 / 2$ <br> Hours. | $\begin{gathered} 10 \\ \text { hours. } \end{gathered}$ | Over <br> 10 bours | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Coats | 11 | 3 | 1 | 56 | 4 | 75 |
| Vests | 22 | 8 | 2 | 20 | 3 | 55 |
| Trousers | 21 | 5 | 2 | 22 | 6 | 56 |
| Gloves, etc. | 17 | ${ }^{2}$ |  | 44 | ${ }_{1}$ | 65 29 |
| Miscellaneous | 5 | 1 | 1 | 21 | 1 | 29 |
| Total .... | 76 27.14 | 19 6.78 | 6 2.14 | 163 58.22 | 16 5.72 | 280 100.00 |

It appears from this table that of the 280 establishments 76 , or 27.14 per cent., were in operation 8 hours or less daily; that 19 establishments, or 6.78 per cent., were in operation 9 hours̀ daily; that 6 establishments, or 2.14 per cent., were in operation $9 \frac{1}{2}$ hours daily; that 163 establishments, or 58.22 per cent., were in operation 10 hours daily; that 16 establishments, or 5.72 per cent., were in operation more than 10 hours daily. The greater proportion of all the regular shops or places where others besides the proprietor were employed were in operation 10 hours daily.

CLASSIFICATION OF THE HOURS OF LABOR DAILY AND THE NUMBER OF EMPLOYEES IN EACH CLASS.

| Industries. | 8 hours or less. | $\begin{gathered} 9 \\ \text { hours. } \end{gathered}$ | $91 / 2$ hours. | $\stackrel{10}{\text { hours. }}$ | . Over 10 hours | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Coats | 17 | 6 | 16 | 738 | 7 | 784 |
| Vests | 32 | 28 | 5 | 110 | 13 | 178 |
| Trousers | 31 | 6 3 | 6 | 53 | $\stackrel{13}{2}$ | 78 |
| Gloves, etc., | $\stackrel{21}{6}$ | ${ }_{13}^{3}$ | 4 | 293 | 1 | 317 |
| Miscellaneous |  |  |  |  |  |  |
| Total | 107 | ${ }_{56} 5$ | ${ }^{31}$ | ${ }_{8}^{416}$ | 1. 27 | 1,637 100.00 |
| Per cent. | 6.53 | 3.43 | 1.89 | 86.50 |  |  |

Of the 1,687 employes, 6.53 per cent. were employed 8 hours or less daily; 3.43 per cent. were employed 9 hours; 1.89 per cent were employed $9 \frac{1}{2}$ hours; 86.50 per cent. were employed 10 hours; and 1.65 per cent. were employed more than 10 hours daily. By far the greater proportion of the persons were thus employed 10 hours daily. As to the hours in operation and of employment there was some variation as between the different industries, but this variation was hardly important enough to call for a detailed explanation.

## NUMBER OF WINDOWS.

| Industries. | No. windows | No. rooms. | Average. |
| :---: | :---: | :---: | :---: |
|  | 84 | '672 | 8 |
| Coats . | 60 | 166 | 2.77 |
| Vests . | 65 | 270 | 4.16 |
| Trousers . | 65 | 139 | 2 |
| Gloves, etc. Miscellaneous | 39 | 262 | 6.70 |
| Total and average | 813 | 1,509 | 4.80 |

The preceding table shows the number of rooms which were used by the shops included, the total number of windows of the same and the average number of windows to each room. The windows being the means through which light for the workrooms is obtained and very often the only means through which ventilation is secured, are of considerable importance. Poor light in the workrooms usually means impaired eyesight; bad ventilation leads to poor health and loss of both physical and mental vigor.

In all there were in use 313 workrooms, having together 1,509 windows, or an average of 4.8 windows to each room.

The persons employed numbered 1,637. This makes an average of 5.23 persons to the room. A large proportion of the regular workshops were large and roomy, with plenty of both air and light. In many of the home-shops the situation was not so promising, though even here the conditions were not often really bad.

From the table it appears that "coats" comes first in the number of windows having an average of 8 to each room. This is accounted for by the fact that this occupation is mostly plied in comparatively large and well appointed shops. Miscellaneous is next in order and then trousers, and these industries or occupations are also largely carried on in regular shops. Vests, gloves and similar articles, on the other hand, are largely made in the homes by the so-called home worker. In such cases it is plain that the workrooms are not likely to be equipped by more windows than are usually found in houses occupied by working men and their families.

The tables which follow relate mostly to sanitary conditions. They show the air space of workrooms, whether used for living purposes as well as for workrooms, or connected with rooms used for such purposes, condition of closets, etc. These facts do not include everything that is necessary to know in order to show just what the situation is, but they throw a great deal of light upon it.

AVERAGE CUBIC FEiA' OF AIR SPACE TO EACH WORKER IN THE ROOMS OCCUPIED AS WORKSHOPS.

| Industries | Number Work Rooms | Air space Cubic Feet. |
| :---: | :---: | :---: |
| Coats' |  |  |
| Vest . ${ }_{\text {Trousers }}$ | 84 60 | 774 1,006 |
| Gloves, mittens, etc. | 65 | 1,023 |
| Miscellaneous . ..... | 65 | 1,250 |
|  |  |  |
| Average ....... | 313 | 955 |

The above table shows by industries the average number of cubic feet of air space to each worker. In considering the situation as a whole it is found that the average space to each employe in the 313 rooms was 955 cubic feet. This is almost
three times as much space as has been regarded necessary for a good healthy workroom. It is certainly all the space that can possibly be needed if properly ventilated.

The largest air space was enjoyed by the glove, etc., workers. Next the trousers and vest makers are the most favored, while coat makers and mincellaneous workers had the least space.

NUMBER OF WORK ROOMS ALSO USED FOR LIVING AND SLEEPING PURPOSES.

| Industries. | Living and Work Rooms | Work Ronms only. | Total. |
| :---: | :---: | :---: | :---: |
| Coats | 14 | 70 | 84 |
| Vests . . | 33 | 27 | 60 |
| Trousers . .... | 35 64 | 30 1 | 65 |
| Gloves, etc. . ${ }^{\text {Miscellaneous }}$ | 64 7 | 32 | ${ }_{59}^{65}$ |
| Total . | 153 | 160 | 313 |

Here we find that 153 rooms were used for living as well as for workrooms and 160 were used for workrooms only. The home worker in Milwaukee as well as everywhere else nearly always performs his work where he lives. There are but few exceptions to this, and this is one of the greatest evils of sweating.

As alluded to already, the coat makers and miscellaneous workers were mostly employed in shops, a fact which is corroborated by the above table. Of the 84 rooms occupied by the coat makers only 14 were used as living rooms as well as workshops. In the case of the miscellaneous workers the relation is about the same, as is seen from the fact that 32 of the 39 rooms were used as workshops only. In the case of those who made trousers and vests over one-half performed their work where they lived, while practically all the glove makers were employed in the homes.

WORK ROOMS CONNECTED WITH LIVING AND SLEEPING ROOMS.

| Industries. | $\stackrel{\text { Not }}{\text { Connected }}$ | Connected. | Total. |
| :---: | :---: | :---: | :---: |
| Coats | 59 | 25 48 | 84 60 |
| Vests | 12 | 48 | 65 |
| Trousers Glove. | 15 1 | 64 | 65 |
| Gloves, etc. .... | 17 | 22 | ¢9 |
| Total | 104 | 209 | 313 |

It appears from the preceding table that of the 313 workrooms, 104 were not connected with living rooms, while 209 , or over twice as many were so connected. This table especially when read with the one that precedes it, throws much light upon where the work was actually performed. Nearly onehalf of the work rooms were living rooms also, and of those, which were not actually used for living as well, many were directly connected with such rooms, making the access to them for any purpose convenient.

ROOMS ENTERED DIREETLY THROUGH SEPARATE DOORS AND STAIRWAYS.

| Industries. | Through other rooms | Directly | To:al |
| :---: | :---: | :---: | :---: |
| Coats | 9 | 75 | 84 |
| Vest . ... | 14 | 46 | 60 |
| Trousers . | 16 | 49 | 65 |
| Moves, etc. ${ }^{\text {Miscl. }}$ | 46 | 19 | 65 |
| Miscellaneous . | 7 | 32 | 39 |
| Total | . 92 | 221 | 313 |

While two-thirds of the work rooms were connected with living and sleeping rooms, if not all were actually used as such, it transpires from the above table that 221 , or over 70 per cent. of the 313 rooms, could be entered directly from the outside or from the hall through a separate entrance. In nearly threefourths of the cases the situation was, therefore, such that the work rooms could have been easily separated from the living rooms

NUMBER AND LOCATION OF WATER CLOSETS.

| Industries. | Basemont | First Floor. | Second Floor. | O.tside. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Coats | 45 |  | 6 | 40 | 105 |
| Vests . | 26 | ${ }_{2}^{14}$ | 4 | 26 | 58 |
| 'Jrousers <br> Gloves ete | 27 | 4 | 2 | 32 | 65 |
| Cloves, etc. Miscellaneous | $17 \times$ | 1 | 21 | 63 | 85 |
| Total |  |  |  |  |  |
| Per cent. | 22.67 | 6.00 | 34 9.63 | 182 51.73 | $\begin{array}{r} 352 \\ 100.00 \end{array}$ |

Water closets are often a menace in crowded quarters and a source of many unsanitary conditions. For this reason the
location and condition of all such closets were ascertained. The above table gives the location and number of the closets for the 280 shops inspected. Over one-half of them were located outside and entirely separated from the shop, and one-third were found in the basement. The total number of the closets was 352 , or about one and one-third to each shop.

- ORDERS ISSUED.

| Industries. | , Coa's. | Vests. | Trousers | Gloves. | Miscellaneous. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fire escapes |  |  |  |  | $\stackrel{2}{4}$ | 2 4 |
| Doors, stairways, etc. |  |  | 7 |  | $\stackrel{4}{9}$ | 72 |
| Affidavits for children | 4 | 2 | 3 | $1{ }^{-}$ | 1 | 10 |
| Reg.sters for children | 22 | 4 | 4 |  | 2 | 32 |
| Ventilation, light, etc | 8 | $\stackrel{2}{3}$ | 6 4 | $\stackrel{2}{2}$ | ${ }_{6}$ | $\stackrel{21}{25}$ |
| Closets, etc........ | 10 | 3 5 | 4 | $\stackrel{2}{4}$ | 32 | 69 |
|  |  |  | 31 | 9 | 59 |  |
| Per cent. | 48.12 | 10.13 | 13.04 | 3.82 | 24.89 | 100.00 |

At the inspection of the 280 shops in question, 237 more or less serious violation of the laws were discovered. Classified according to the industries affected, these violations stood as follows: Coats, 48.12 per cent.; vests, 10.13 per cent. ; trousers, 13.04 per cent.; gloves, etc., 3.82 per cent., and miscellaneous, 24.89 per cent.

Classified according to the nature of the violations they stand as follows: Fire escapes, 2; doors and stairways, 4; affidavits for children under 16 years of age, 72 ; permits for children under 14 years of age, 10 ; registers or records of children employed, 32 ; ventilation, light, etc., 21 ; closets, 25 ; cleaning, painting, etc., 69.

All of these violations were ordered remedied; that is, the proprietors of the shops were ordered to set matters right, or to comply with the laws.

## THE CONSUMER'S INFLUENCE ON PRODUCTION.

## IN'TRODUCTORY.

A man's first economic function is consumption. If he were not a consumer, economically he would be nothing. The source of all his economic activities can be traced directly to the necessity of consumption.

On account of this necessity, or to supply the wants that prompt consumption, there has been developed an economic machine, highly perfected in parts, in parts exceedingly complex, and on this account characterized by certain well recognized defects. The purpose of this chapter will be to discuss the part of the consumer in this mechanism, to discover where the defects lie, the nature of the corrective force best suited to apply, and the place to apply it.

Because it was unnecessary to produce wealth, man at first was a consumer only, He became a producer when the intensity of his desire to consume prompted him-not because of the love of producing. Of the two forces, production and consumption, the latter has always been dominant; but their relative positions have been changed. A man now looks further into the future when producing. He has extended and multiplied his wants, but with them has also gained forethought. This has caused a reversal of the primitive rule of consuming everything in stock before going for more.

Thus saving is added as another important part of the economic machine. Consumption causes production, but there must be means of producing. A part of the result of one day's labor must serve as capital for the next. One economist even emphasizes saving so strongly as to call it the cause of production. Consumption is destruction-the satisfaction of those wants that instigated production being its justification. Saving demands a regulation of consumption and granting that saving is a necessary element, there should be a science in consumption as there is in production.

To thoughtlessness in consumption may be charged innumerable economic ills. Many persons seem not to have developed the element of forethought to as great an extent as have many of the lower animals. Yet that trait is undoubtedly more highly developed today than it was centuries ago; and it has been developing in the direction of unselfishness as well. "It is the spirit of the age," says Professor Marshall, "to give more attention to the question whether increasing wealth may not be made to go farther in promoting the general well being."

There seems to be no dispute concerning the statement there implied, that wealth can be made to go farther--that by thoughtless expenditure many, while not realizing it, are doing their share toward preventing a better distribution of wealth.
"The vital question," says Professor Patten, "is to decide what may be consumed so as to give the greatest sum of happiness for an honest day's work." That statement, made in regard to the individual consumer, may nevertheless be applied to society in general. From a selfish standpoint certainly no one could dispute that the object in spending is to get the greatest amount of satisfaction, or happiness. Everyone in making purchases or disposing of money in any manner must certainly believe at the time that the want in question is the greatest, all things considered, that can be satisfied by the amount of wealth with which he parts. Even the drunkard that puts his last coin into liquor must, at that moment, rate his craving for intoxicants above anything that he can get for his money. Judging such selfish wants from the social standpoint none would attempt to justify them. But some would perhaps excuse them on the theory that what a man earns is his to treat as he pleases. Morally such a theory has no standing. Yet like many so-called economic laws it has passed so long unchailenged that it becomes accepted as an axiom-so much and so abnormally developed and abused that the real element of moral worth has become almost entirely obscured. At first thought it may seem unreasonable to suggest that the.fruit of a man's toil is not to be disposed of by him regardless of the desire or comfort of others. But why not equally well apply the same the-
ory to the use of a man's fist? It is looked upon as a perfectly proper function of society to prevent a man from using his wealth directly to injure another; why should indirect injury be countenanced-nay, even justified?

An astonishingly large amount of human misery may be traced directly to unwise spending. If economic society would insure mental as well as physical happiness, with the present facilities for production, equitable distribution would be the only problem-and wise and unselfish spending would go a long way toward solving it.
"Every act of spending that has as its result some physical or intellectual development of mankind," says Charles. Gide, "should be regarded not only as being good in itself, but also preferable to saving." Of course the result of such spending is increased ability to produce, bringing still more to consume. But the importance of saving should not be overlooked. Only the crudest sort of production-if indeed it might be termed production at all-would be possible unless saving had first been practiced.

Saving, however, must not be construed so as to include hoarding. The miser is even more to be condemned as an enemy of society than is the profligate. But the margin of difference is not great. The man that with a lavish hand dispenses hospitality in the shape of sumptuous dinners confers upon society a greater benefit than does the miser, in this: That even by the wasteful banquet the participants are benefitedprovided the excess does not work bodily harm-to the extent of a square meal; the miser's hoard benefits no one. He permits no one else to put it to good use for him ; he serves simply as a vault in which gold is preserved until liberated by his death. "In respect to consumption," says J. B. Say, "prodigality and avarice are the two faults to be avoided." And that statement is just as applicable now as it was a century ago when it was made.

It may be said that production must equal consumption, hence the consumer is the benefactor of society. This is true enough, but it is not a justification for any and every indiscretion that may be classed as consumption. Says Professor Ely:
"It is extensive use that justifies great expenditures." Adam Smith said: "A man grows rich by employing a multitude of manufacturers; he grows poor by maintaining a multitude of menial servants." Such servants do nothing to increase the wealth of any one save indirectly by purchasing food, etc., which they would do in just as great a measure if they themselves were producing. Their time is thrown away. The employer of menial servants in greater numbers than is reasonably necessary may think he confers a benefit upon society by his extravagance. He does not realize that he would be doing just as great an economic good-and all things considered, probably greater-by going around smashing windows and paying for them to give idte men jobs.
J. E. Thorold Rogers says: "The larger the number of persons in a community who simply devote themselves to enjoyment, or expend their labor in supplying the wants of unproductive consumers, or the more wealth is accumulated in a few hands, the lower is the material condition of those who labor for the supply of that which constitutes the substance of all." ${ }^{1}$

Concerning this problem of spending, Professor Alfred Marshall says: "The world would go much better if everyone would buy fewer and simpler things and would take trouble in selecting them for their real beauty, being careful, of course, to get good value in return for his outlay, but preferring to buy a few things well made by highly paid labor rather than many made badly by low paid labor." ${ }^{2}$

But here the difficulty arises. If people as a mass were brought face to face with the actual conditions, and elements in and surrounding the production of every article they purchased, human nature would assert itself and productive activities would without doubt undergo great changes. But this is not the case. Buyers seldom see back of the counter from which they purchase goods, and if in a few instances they do get glimpses of sweat shops and child labor it appeals to them only as a pitiful state of affairs toward the rectification of which the influence of the individual buyer can do nothing.

[^38]And then, the buyer usually has his own economic troubles. After he has deducted from his income the cost of a living such as the times and his position dictate, he has little left. Yet even if the buyer were to choose the simplest, best made articles today, paying perhaps the highest price, he has no assurance that his philanthropy has not benefited some opulent employer rather than a needy employe. The complicated industrial system is the cause of this. The buyer buys in ignorance, and the man that stands alone trying to sell his labor suffers from the same cause. He is also dealing with men much shrewder than himself in such matters.

The "entrepreneur," or industrial captain, stands in the position of the middleman, virtually the agent of the people in such dealings, and he finds that the more shrewdly he drives the bargain with those that are to do work for the consumer, the greater will be his reward. With him it is a question of surviving, just as much as it is with his employe. How long would his margin of profit be allowed him by the public were his bargain for his employes' labor to place him on a business footing unfavorable in comparison with his competitors for public favor? How long would he "hold his job" as agent for the people?

This brings in the question of competition-the life of trade and yet its death. When the germ of the present industrial system sprung up in England, it was fostered with great care by the government. Under Queen Elizabeth monopolies were granted in innumerable branches of industry, and the queen backed up these monopolies by passing laws that made markets for them. It was decreed, if the queen saw the need for developing a certain line of manufacturing, that the people must, for instance, wear caps of a certain make; to assist manufacturers of woolen goods one regulation provided was that the dead must be enshrouded in nothing but woolen. This policy started the building up of strong manufacturing industries and two centuries later it was hard to convince the English lawmakers that the continuation of the then highly developed mercantile policy was contrary to England's best interests.

When Adam Smith wrote, however, in the last quarter of the
eighteenth century, the tide had begun to turn and his strong plea for laissez faire made the changing current irresistible. Free competition was his hobby. Let men alone in their economic activities and the best ends of society and the individual would be subserved, he said. For a while that policy filled its place and England's manufactories did prosper. But the time came when the government deemed it necessary to interveneto prescribe regulations limiting the power of the manufacturers. This time, however, the government's interference was in a different cause. The laws passed were in the interest of humanity, and especially benefiting' those people that came directly under the influence of the factory owners. But England's factory legislation, now lauded as the most complete and perfect in the world, was long under the ban of public disapproval.

Thus in each step of advancement made in dealing with the industrial system the government has met with determined resistence, and often from the very source which was destined to be most greatly benefited by the changes. It was hard to convince the man of the Elizabethan period that by wearing calico caps he was doing his share toward making England the foremost commercial nation of the world. Neither could the manufacturer see how, when his monopoly had been so thoroughly established, that it would benefit him to have the government's protecting arm removed. And even with the great evils attendant upon the factory system in its early days, causing misery and abject poverty to thousands, it was a thankless and almost impossible task to convince people that the government was the proper party to intervene.

Today it is generally considered by economists as a proper function of the government to prescribe the straight and narrow path for manufacturers in regard to protecting employes and the public from direct injury through them. In the matter of prices and general methods of conducting business, however, publie opinion has become almost universal in favor of freedom.

But the manufacturers themselves have been abandoning the maxim that competition is the life of trade and are now at-
tempting to limit competition by combination. This has brought on agitation in favor of government interference to prevent such combination in the interest of the public. This agitation is carried in some countries to a demand for government ownership of industries. Some considerable political parties point to that ideal as the only ultimate solution of the present political, social and economic problems.

But in regard to government influence in the conduct of industries privately owned there is much adverse criticism. "Those that decried competition," says Professor George Gunton, "are now decrying combination." There is, he says, an element of truth in both positions, but also, undoubtedly, much error therein. Present so-called monopolies differ from those of the Elizabethan period in that they have not a government guarantee. They are at least influenced by "potential" competition. They are a natural consequence of natural trade conditionsunhampered competition. If they control the market by virtue of better machinery, system or management, "from such an exclusive control there is no disadvantage," says Professor Gunton. The real source of cheaper wealth, he points out, is improvement in methods and machinery.

Competition is by A. F. Walker compared to steam or electricity. When controlled and restricted it is invaluable-uncontrolled, it scatters death and destruction. Unhampered competition is war, not peace. Mr. Walker further says: "The policy of undertaking, by legal barriers, to prevent the regulation of eompetition, has been fully tried and found wanting." J. B. Clark speaks of these combinations as the "result of evolution and the happy cutcome of competition so abnormal that its continuance would have meant wide-spread ruin." They should, he maintains, be neither deprecated by scientists nor suppressed by legislators, but should be accepted, studied and, probably, regulated.

For another reason Professor R. T. Ely advises caution in interfering, with political weapons, in private business. "That," he says, "is the true source of corruption." If extentive legislative interference is inevitable in any business, Professor Ely regards that as a sign that that business should be
made a public one. Interference on behalf of labor is, he says, inevitable, but it should be confined chiefly to the protection of women and children and those naturally unable to help themselves.

Where then is the evil of thesa combinations? Why should the consumer be alarmed lest the "results of evolution" do him injury? The danger is not that aggregate social wealth will be diminished by this process. The danger is that those in charge of such gigantic producing concerns, and having thereby such great power over so many persons, will use that power to bring about inequitable distribution of wealth. If interest in the public weal were as great as self interest there would need be no regulation, no hampering of the great combinations. If then there is to be any regulating, its object should be to prevent avariciousness on the part of the great industrial organizers and at the same time to conserve the increased ability to produce, gained by the improved systematization. And in doing this there are two phases of distribution to be considered: First, are consumers of the particular product getting just returns for their money; second, are those employed in producing that product receiving a just share of the proceeds?

Competition was hailed as the solution of the price problem, but when its ruinous effects were seen, writers began to advocate potential, rather than active competition. It is, still more or less of an open question, however, whether the possibility of new competitors entering a field is strong enough to holdi a well grounded "trust" to a just level of prices. On the other hand this condition leaves an opening for blackmailers who would not hesitate to make money by threatening producers with active competition, in order that they might be bought off. Such competition must, of course, add to the cost of production; and the consequences will probably fall upon the consumer in the long run, although he may gain temporarily.

But from the employe's standpoint there cannot be that potential competition. There is no one standing ready to give a similar employment to the discharged or striking empioye-producer, in the line in which he is proficient. He may be able to procure no work at all or he may be compelled to accept work
in which his lesser degree of proficiency will bring him a much smaller proportion of the net proceeds of society. Such a process would tend inevitably toward the lowering of the standard of employe-producers, both intellectually and morally.

Yet should the correction of such evils be left to the competitive system and the unencouraged sense of humanity or justice of the employer? In the one case some sort of coercion would seem necessary, at least until education could accomplish the change; in the other case, suppose the motives are right, a substantial backing is also needed.

If society organized as purely a political unit (i. e., government) is not the proper power to intervene for the purpose "of giving such backing, then society organized as an ethical, moral or economic unit must be the one, either to solve the problem itself or to supply the existing deficiency to back the other forces.

But a human weakness intervenes. Society is not an organized unit from the standpoint of consumption. There is no social, economic, ethical or even political bond sufficient to direct the great body of consumers as a unit against the temporary self-interest of the individuals composing that body. Were there such a force, in the economic world it would be irresistible. Self-interest, however, becomes almost a passion when sufficiently encouraged by enticing bargains held forth as bait by competing dealers. That love of bargains is characterized by Mr. Isaac L. Rice as the one indestructible passion of the consumer. The desire to get something for nothing is a cousin to that trait remarked upon by Tacitus when he visited the ancestors of the present Anglo-Saxon and Teutonic races. They were inveterate gamblers, often staking their very freedom on a throw of the die. Today these same men would be speculators and their wives most persistent bargain hunters.

Among the women purchasers-representing in this capacity probably the greater part of the consuming public-is perhaps, from the standpoint of consumption, the field of greatest possibilities. But in this direction also lies apparently the greatest need for organized resistence to present conditions.

Yet the conssumer hịmself iṣ between two fires, In demand-
ing bargains he is compelling producers to draw more or less upon two principal sources-wages and profits. Self-interest will impel the industrial manager to draw first upon wages; when that source is drained and the strain upon profits becomes too heavy, production stops so far as that institution is concerned. But on the other hand, self-interest impels the producer to drain the consumer. The consumer, engaged in a fight of his own, can hardly be expected to fight battles for others; for after all the average man is kept very busy producing just enough to support those dependent upon him.

The whole process is war. Education is urged as the only proper method for solution. But is the trend of economic and intellectual activities as affecting each other, toward a more peaceful condition? Are not some artificial barriers-at least temporary-needed?

Competition, unless some other potent force takes its place, is perhaps needed to lend an impetus to the desire to improve methods of production. But that competition fosters in the consumer that passion for bargain hunting which compels one producer to win favor over the economic corpse of his rival; thus is combination presented as the only alternative, and then the question is resolved to war between producer and consumer, with the employe-producer-consumer getting it from both sides-an elastic bumper. Thus is the consumer unwittingly demanding more and more the elimination of wages and profits, hence the lowering of the intellectual and moral standard.

There is a danger pointed out by Professor Patten in regard to the natural trend and effect of improvements which make production more extensive and make it easier. The cheaper the food consumed-that is, the food requiring the least skill and capital to produce-the lesser the degree of intelligence required to do the necessary labor. In countries where such conditions obtain, Professor Patten says that people fall into two classes-the poor and oppressed, and the rich and the 'powerful; Egypt and the Southern states of the United States are cited as examples. On the other hand, where obstacles to production are greater, as in England and in the Northern states, no such division is found. There is need there for
higher average intelligence to overcome obstacles in the way of production.

If this be true, natural forces can scarcely be relied upon to insure a general increase in intellectual and moral conditions keeping pace with the increase of productive powers. What is the remedy? Says Professor Ely: "There is no one remedy for social evils. A multitude of agencies for good must work together. Private individuals and private assuciations of individuals must supply a multitude of these."

There have recently been many attempts to control consumption by legislation. These attempts have usually been made on account of some objectionable result attendant upon that consumption as, for instance, in the case of the liquor or the cigarette habit. But there is great doubt whether the legislative force is the proper one to use at present. Certain it is that without a public sentiment to sustain it, the executive department will ultimately fail in the attempt to enforce such laws. Experience with the so-called "blue-laws" furnishes sufficient evidence of this. Sunday liquor laws and others in that category invariably fail of enforcement unless public sentiment demands it. On the other hand, there is no more potent force in securing the passage and enforcement of such laws than public sentiment. This is true of all laws of importance, and especially has it been true of laws effecting people economically, when the benefits of the law are not immediately apparent.

If it were possible to enforce to the letter and in the spirit, any laws placed upon statute books it is by no means so certain that legislation could not overcome the existing evils of the social and industrial system. At least it is certain that many laws that do now exist could be made to go a long way toward ameliorating some bad phases of the system were those laws strictly observed. But it has been demonstrated that laws in advance of their times must wait until public sentiment calls for them. . Education is needed again. But that education, to be most effective in this particular, should be of a practical nature. Perhaps it is true that in the search for knowledge in general, too little attention has been paid to the study of the economic side. Such knowledge should not be superficial. It
should form one of the fundamentals. Every young mind before leaving school should be started in a course of practical and philosophical thinking in regard to the position of every consumer and producer as affecting all others,, collectively and individually.

Political campaigns and speeches have their value as educating influences, but when facts and theories are distorted to suit party or personal whims, the results on economic thought and economic intellectual advancement must be very questionable. Partisan views make it much harder for practical, unbiased views to obtain, and such must predominate before progress in the right direction can be made. So much of economic theory should not be left to be determined and developed in such a doubtful manner.

Professor Gunton expresses fear lest the legislative arm, directed perhaps by ideas and opinions thus warped, in endeavoring to promote the best economic interests will jeopardize the very cause it seeks to aid. He says: "The hand of the public is now raised against the freedom of industrial enterprise, and we are in great danger in the aext ten years of experiencing a class of legislation which may give our industrial progress a setback, the consequences of which nobody can anticipate."

In speaking of "competition and custom," John Stuart Mill touches upon a very important element not yet considered. He maintains that economists in general have been wont to lay too great stress upon competition as the great determining fact in prices, rents, profits and wages. Custom, says Mr. Mill, is a great agent here that is too much overlooked: "Custom is the most powerful protector of the weak against the strong; their sole protector where there are no laws or government adequate to the purpose. Custom is a barrier which, even in the most oppressed condition of mankind, tyranny is forced in some degree to respect."

It is true that "custom" is an ever present element in determining prices, wages, rent and profits. In the industrial history of England there was a stage when custom was such a predominant element that it is said to have been practically the only one in determining rents and wages. For generations
men held lands at certain rentals simply because their ancestors had done so, regardless of the value of that in which payment was made. Some of the gravest industrial disturbances of that country found their source largely in differences arising over "customary" rents and wages.

And what is custom? Custom is public opinion developed into common usage. It is possible that custom and public opinion may be quite directly opposed at some given time. The opposition of those forces may be so great as to cause revolution. But, given a certain custom and a certain public opinion concerning that custom at a given time, and the process of development from that time forth will be that of making the custom conform to the opinion. Custom of today may not be public opinion of today-it rarely is. Custom of today more likely conforms to the public opinion of yesterday. Neither is it at a standstill. They progress correspondingly, but with public opinion taking the lead.

The higher degree of average intelligence today causes ordinary custom to give way more readily than formerly before innovations; but that same intelligence should make possible the establishing of customs based upon sound principles, which should build all the more strongly the great barrier that industrial tyranny-whether it be tyranny of employer or employe, producer or consumer-should be forced to respect.

It is evident that the consumer has within him the latent force which is capable of almost unlimited possibilities in directing economic activities. The great problem is, how should he set about to accomplish his task? Which of the "multitude of agencies for good" does the consumer control? Certain it is that he should not go blindly at his task, trusting to impulse or "natural evolution" to put him on the right track if he desires to accomplish the greatest possible amount with a given amount of force. Says Professor Ely: "We are beginning to hear of a science of charity; and it is sorely needed, for old-fashioned alms giving is a curse." One kind of charity would confer a temporary benefit upon the object of that charity, but economically would result in nothing. There is another kind of char-ity-that which places within the power of the needy the
economic means of producing that which they need. The difference between those two systems of charity is the difference between the millionaire that spends his substance in giving free soup to all comers and the one that hires the same ones to produce utilities. Except for a very temporary relief, the money of one, so far as society-and even the particular members temporarily relieved-is concerned, might almost as well be poured into a fathomless sea; that of the other is reproduced in new form, in greater bulk and will in turn serve again its charitable purpose in an even greater degree. "It is extensive use that justifies great expenditures."

Scientific charity may be merely scientific consumption. And were scientific consumption practiced with altruistic motives by society entire there would need be, for those physically able, no such a word as charity. This might seem to revert to the question simply of prodigality or prudence in spending, but it goes deeper than that. One may have all the prudence of a most cautious character, yet his good intentions might go entirely amiss. His consumption should be scientific. It should be based upon a thorough study and knowledge of economic conditions, and especially of production.

It is evident, first: That the great mass of consumers and producers have need of some system that will assure them an equitable distribution of a proper share of society's wealth; second, that those needful ones themselves possess the latent. power to rectify matters, but third, that they have not solved the problem. of so directing that power that it may accomplish that result.

There have been numerous associations organized for the purpose of attaining this object. These have usuaily been more or less local, either through design or force of circumstances; some have aimed to be of universal benefit, some of benefit to members alone. In the next chapter will be discussed the work of one that is of recent organization and which seeks to exert, to the extent of its ability, universal influence-The National Consumers' League.

## The National consumers' league.

The National Consumers' League defines itself as "an association of persons who strive to do their buying in such ways as to further the welfare of those who make or distribute the things bought." By judicious consumption and discriminative buying the members of the League seek to bring about an amelioration of the condition of the employes in factories and mercantile establishments, or of any persons connected directly with the production and sale of goods. For example, one of the first great and specific tasks undertaken by the League was the abolishment of the sweat-shop system of manufacture.

The National Consumers' League was organized May 1, 1899. Four state Leagues ${ }^{1}$ joined to form this new organization, the object of which centralization is to promote intelligent and effective co-operation among purchasers in the various states. Within less than three years the number of affiliating state Leagues has been increased to eleven. ${ }^{2}$

All of these Leagues are of recent organization, with the exception of the New York City League. The ștarting of the movement in that city is due to Mrs. Charles Russell Lowell and Mrs. Frederick Nathan. In 1889-90 the "Working Women's Society" of New York made an investigation of the condition under which girls worked in that city. A mass meeting was called to make public the results of this investigation. The women attending this meeting were "amazed and horrified" at the revelations. A committee was at once appointed to make further investigations and prepare a list of shop-keepers that dealt justly with their employès. A "white list" of eight stores was soon established as a nucleus, and the society set out to correct some of the evils existing in stores not on the list. Among bad features aimed at were: The lack of seats for girl ensployes, no holidays, poor sanitation, etc.

In pursuing its aim to better the condition of factory elllployes, the League devoted its efforts during the first year to -

[^39]factories producing white muslin underwear. As an inđucement to those manufacturers that would comply with the requirements of the League, the latter offered to broadly advertise such facts. Success was most rapid in Massachusetts, which state was already equipped with strong factory legislation. All the underwear factories in that state soon complied with the required conditions. Many factories in other states, however, held out, often requiring but one concession that the League was unwilling to make. For example, one firm wanted permission to run six weeks overtime every autumn; another worked its cutters from 7 to 8 o'clock p. m. four months in the year. Such requests usually came from states having inferior factory laws or else deficient enforcement.

The League does not rely on rigid rules or pledges to hold its members in line, depending rather on "moral 'suasion." Each local league makes its own regulations as to membership. The influence of the Consumers' League is not, however, confined merely to these members. There are large numbers of correspondents, one to a city or town, who canvass the stores, address meetings and report regularly once a month to the New York office. In many places, also, the League furthers its ends by means of women's. clubs that have standing committees which, on a larger scale, carry on this work of the correspondents.

The machinery of the League is not, therefore, intricate. The essential parts are the national secretary in New York, the various state and local leagues, the correspondents and the committees of inspection. The latter are necessarily an important factor, for upon their findings in the various cases investigated depends in large measure the position of the league toward those cases.

The League has been steadily increasing the number of factories on the so-called "white list." On Sept. 8, 1901, such factories numbered 29, they being located not only in the East, but in the Middle West and Northwest as well. Three months later the number had been increased to 33, some of the additions being considered very important ones.

The only material weapon used by the League is the "white label." This is the official registered badge, the right to use which is conferred only upon those manufacturers that comply with all the conditions prescribed by the League. In the center of the badge is stamped the name of the League, and just under this the license number of the firm in question. On one side is printed: "Made under clean and healthful conditions;" on the other: "Use of label authorized after investigation."

The purpose of the label is primarily to serve as a guarantee to purchasers that the goods they are purchasing are made under conditions that the Consumers' League is willing to indorse. The four general demands made upon manufacturers in any state by the investigating committees are as follows:
"1. That the state factory law is obeyed.
"2. All the goods are made on the premises.
" 3 . Overtime is not worked.
"4. Children under sixteen years of.age are not employed."
The local leagues have been more or less active in securing legislation in the various states, which would aid in bringing the factories up to their requirements. These requirements vary with the different Leagues in matters of detail. In general the National Consumers' League does not enter into the matter of wages, confining its efforts principally to bettering the physical surroundings of the wage earners, improving the mental and moral atmosphere and restricting the hours of labor. Some local Leagues, however, attempt to cover a broader field. The New York City League, for instance, among other things prescribes a minimum of wages that shall be paid to employes in houses that are placed on the white list. ${ }^{1}$

[^40]Concerning the need for remedying the evils that brought the Consumers' League into existence there is no difference of opinion. Repeated investigations have served only to emphasize that fact. The conditions under which many men and especially women and children work in factories and mercantile houses are not, however, so fully realized by the consuming public as might be expected. The cvils of the sweatshop and the drudgery and depressing influences of the condition of employment in many retail stores are read of or perhaps witnessed by many that directly or indirectly patronize such establishments; yet few of these realize to what extent these circumstances are fruitful of human misery.

The sweatshop system proper is confined to a few of the larger cities of the country. The system is not a result of evolution following the development of the factory system. It ante-dates that. It is a relic-and much abused one-of the domestic system. In that system the home is the factory as well, and as it exists in the populous tenement districts today the queer combination of parents, children, household paraphernalia, invalids, disease germs and clothing being made for people in all walks of life is found all huddled perhaps into a space large enough for one fair-sized room. The light, ventilation and surroundings withal are often such as to unfit these habitations for any kind of life that does not thrive on filth. Yet in these places strenuous work is done, continuing often

[^41]In which no children under fourteen years of age are employed.
for 15 or 18 hours out of the 24 , and prices paid for the work are inversely, rather than directly proportional. ${ }^{1}$

Much of this life is hidden from the public, but many circumstances almost as deplorable, surrounding employes in innumerable department stores and large mercantile establishments, although more apparent, seem to excite but little more practical sympathy. $\Lambda$ student at the University of Chicago undertook through actual experience to gain a knowledge of the conditions under which employes work in some of the larger, although not most reputable, department stores of that city. She spent one week each at two such establishments during the holiday season. Among her strongest impressions of those two weeks were: Great physical strain from standing, abuse from overseers if seated, great rush during meal times, filthy and gloomy cloak, toilet and lunch rooms, ill treatment of exhausted and sickly employes, inadequate pay ${ }^{2}$ and the consequent moral degradation. ${ }^{3}$

It will be seen that both economic and ethical causes had bearing upon the organization of the Consumers' League; and it aims to accomplish resùlts along both lines. Through economic improvement the League hopes to effect ethical advancement and to bring about economic improvement through the consumer, ethical motives are required.

The necessity for two branches of work thus becomes appar-ent-the one to develop the ethical sense in the consumer, the other to provide the necessary economic weapons in order that

[^42]the developed ethical sense may also become a physical fact. The consumer must be made to recognize his moral responsibility for all conditions under which goods are made and sold; then he must be given some means of rectifying the evils existing therein.
"The League," says its president, Mr. John Graham Brooks, "has two invaluable services: (1) To everyone that cares, it can through its label offer a definite opportunity to buy goods in such way as to create and enlarge the area on which the toilers do their work in hope and not in entire despair. The beginnings must take the form of voluntary associations working slowly and patiently to arouse and direct a body of public opinion, without which the law can neither begin nor be effectively enforced when it has begun."

At first thought it may appear far-fetched to tell the consumer that if the coat he buys is made under conditions hurtful to the producer, the purchaser is to be blamed. He naturally turns the blame upon the man that employs these producers and this man in turn refers you to the competitive system which is forcing him. You say that you are not responsible for that system, which is true. It is a result of evolution. But the fact remains that what you buy you help make. To the extent of youir purchases at least you are helping to maintain the competitive system, and to maintain it unrestricted.

The Consumers' league does not demand that competition be eradicated. It demands that a limit be set upon it. It demands that each factor in the competitive system assume in his calculations a respectable living for even the humblest producer in that system. It now attempts to discover which of the factors do caluclate this, and to encourage them by providing for them a considerable and steady demand for their goods. ${ }^{1}$

[^43]State laws bearing upon such points are not uniform. Hence standards differ in different localities. A consumer can neither be expected to have knowledge of the laws of all the states in which the goods he purchases are made. He does not know whether the laws there are efficiently enforced and if they are he does not know whether those laws comply with the standard he wished to see maintained. The Consumers' league attempts to impose practically the same conditions on producers and distributors of all parts of the country and thus enable wellmeaning purchasers to buy as they desire.

And some mark is necessary to designate the goods properly produced. Even the highest priced goods may be made under conditions as bad as those surrounding the manufacture of the cheapest. The germ-infected sweatshop of a large city may be the producer of a valuable "tailor made" garment ordered from measure at some city hundreds of miles away. ${ }^{1}$

One of the first objections naturally arising in regard to the use of goods rightly made was the inability of the purchaser to get attractive wares. At first white label goods were of a lower class but it is maintained at present that the label goods are as good as any in the market with the exception of some of the French hand made articles.

But perhaps the greatest problem would be to overcome price competition. In the manufacture of white label goods more is done for the employe-producer than in most other instances. That would necessarily mean a greater aggregate outlay in that direction. If the resulting price is to compete with that of goods made under conditions less favorable to the employe, who must stand the loss? Will the capitalist be willing to have his profits reduced by that amount? In some cases, no doubt he would, but the basis for such an improvement would then be purely ethical. . To accomplish permanent results and in the

[^44]least possible time, there must be an economic basis. What applies to one must apply to all.

We have taken for granted that there would be a permanent loss, but that presumption may be superficial. The Consumers' league maintains that it is sc; that by means of fine machinery, complete organization and intelligent labor and administration a factory may compete successfully with producers that lower prices by holding down labor and through the sweating system saving the expense of heat, light, and machinery maintenance for employes.

As a matter of fact, it is claimed that factories using the label do not sell their products at prices correspondingly higher than those not using the label. Articles of a cheap as well as of a high grade are to be found bearing that guarantee; indeed an investigation of the price question has showed that goods of very moderate price are now made under better conditions than the costliest articles on the market. The statement is made by Mrs. Kelley that more of the label goods, as a rule, are worn by poorer girls than by women who demand the more costly qualities.

In many cases where extensive manufacturers have objected to the League's rigid rules, there has been merely some slight point of difference, having perhaps no effect upon the cost of production. One of the large middle western underwear manufacturing concerns, for instance, stood out for a long time against the label. Only one thing prevented the coinpany from obtaining it, and that was the fact that the factory worked overtime when rushed. 'This firm has recently taken the label, however. ${ }^{1}$

The reason for overtime work during winter was the necessity for supplying goods to merchants for their January special sales. These sales have become customary and the purchaser would attach the blame for them upon the merchant. But that

[^45]is a matter wholly within the power of the consumer to rectify. If sales were not heavier at that season, there would not be such a sudden heavy demand on the manufacturers. One season would suffice to break up that custom.

As to manufacturers in general and their position toward the white label, they "constitute the least of our difficulties and one of our greatest helps."

As to the willingness of merchants to handle white label goods, it would seem that there should be no trouble providing profits are not disturbed. It would be very poor business for a merchant to refuse to handle goods his customers demanded for merely whimsical reasons. But the merchants themselves are consumers as viewed from the manufacturers' standpoint, and as such it seems that they are in need of something to $\mathrm{guar}^{2}$ antee them in their turn, properly made goods. Unless they have some substantial backing when making demands upon maiiufacturers, and some economic incentive to make the demands, they could hardly be expected to be very persistent. To show the merchants' position Mr. Brooks quotes the manager of one of New York's most prominent stores as follows: "If there is any way of inducing a goodly number of buyers to study the question and act as if they cared, we could find out about a great many of our goods of which we are now ignorant, but they never seem to care in the least."

Mrs. Kelley states that retailers are very willing to carry label goods, sometimes even ordering them without waiting to be urged by the League ; and of course buyers are always anxious to build up their departments by ordering any class of goods for which there is demand.

- One of the declared purposes of the League is to co-operate with officials in the various states, in order to assist in the enforcement of the laws beneficial to the employe-producers. It seems, however, that thus far such a general co-operation has not been accomplished, ${ }^{1}$ although in some cases the League and state officials have been of considerable assistance to one another.

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## THE CONSUMERS' LEAGUE IN WISCONSIN.

The Consumers' league in Wisconsin is in the third year of its existence. It was instituted in this state through the efforts of the State Federation of Women's Clubs which first became interested in the movement in 1899. At the convention that year the Federation appointed a committee to co-operate with the Consumers' league. The National Federation of Women's Clubs met in Milwaukee in June that same year, and in the session that was given to the discussion of the Consumers' league was aroused the interest which prompted the organization of the Wisconsin league on the following day.

The membership of the state league is composed of women from various cities in the state, and there are also in the state some local leagues of importance, Milwaukee and Oshkosh being most prominent in this respect. As for the state league, its idea was to commence the extension of its influence through the medium of the club women, churches and educational forces. Among other things the league undertook to give support to certain proposed legislation affecting factory inspection and the licensing of home workers, which measures were enacted. The only very large local League in the state is that at Milwaukee where almost from the beginning the membership was 300 and the tributary shopping list, 200. These 500 women were pledged to further the League's interests in general, but the first important and specific effort was to be to ston Saturday afternoon shopping in order to give employes of the large retail establishments a weekly half holiday. A systematic canvass of these stores was made and 62 were eventually put upon the list of those that agreed to close as requested. A few needed no urging, but considerable personal work was necessary to persuade many others to comply. One store held out at first but the women made the street "so lonesome Saturday afternoons" that that one very soon surrendered.

The Milwaukee League adopted a method of increasing its membership and still more increasing its influence, which accomplished considerable in this line. The annual-membership dues are $\$ 1$, but the League voted to give one membership
vote to ten women who should pay ten cents each. Such members would naturally take more interest than if they were mere members of the shopping list auxiliary to the League.

The Oshkosh League was the second one organized. This League made a strong effort to get merchants to handle label goods as well as to manage their stores in accordance with League regulations. The Oshkosh League attempts to guarantee in a way a market for label goods. ${ }^{1}$

These two leagues serve as examples of the trend of the work in Wisconsin. Comparatively speaking, as to membership throughout the state, merely a start has been made although in a few places the League has memberships which should give it considerable influence.

In order to ascertain concerning the effect of the efforts already made by the League in this state as well as concerning the nature of the field here open to the League, inquiry blanks were sent out to prominent merchants and manufacturers in the largest cities. Many and diverse answers were received. It is among the merchants that most of the work has been done, but considering the state as a whole, it seems evident that the unworked field is not only large but quite susceptible also.

The merchants who responded to the inquiries were quite evenly divided as to acquaintance with the white label through use. Most of those that have never used it profess entire ignorance concerning it. A prominent department store manager in one of the largest cities says: "I can only say that after thorough inquiry, I never heard of the Consumers' League or their label and I cannot find anybody who has. It is of no possible earthly interest to us in any way."

One merchant states as his reason for not carrying a stock of white label goods that there are not enough lines on the market to keep up such-a stock. Another merchant says that he handles the white label goods when he can get them and has done so for three years.

[^47]As to the demand for white label goods being sufficient to furnish merchants any substantial backing in handling them, even those that make a practice of carrying the goods regularly appear to agree that as yet there has not been enough persistent demand to be notably appreciable from a business standpoint. A merchant in one of the cities where one of the older Leagues is located, however, says that there is such a demand there, while in another city a merchant who has handled white label goods for several years says that the only substantial backing he gets is from a conscience satisfied. That same merchant is the only one that says he has tried advertising label goods sufficiently, in his judgment, to test the matter. He agrees with all others answering that question, that the advertising done by the League itself has not been of special benefit to those handling the approved wares.

The merchants in general appear to agree upon the advisability and justice of many of the general regulations prescribed by the League. For example, most of them advocate giving employes an annual vacation and also a half holiday per week. One natural objection to the latter rule is that all competing merchants often cannot be persuaded to do likewise. Still another objection is made, however. One merchant finds that most employes abuse the holiday privilege so as not to deserve it. They overdo themselves during the intermission from work, he says, so that they are unfit for duty when they report on Monday morning. Another merchant says the holiday rule is impracticable for him on account of the class of customers he serves.

The following quotations from various replies received from merchants in different parts of the state will serve to show how men in the business that is, or would be, affected look upon League requirements as they know them:
"On account of depriving the consumers of the convenience of trading where they most wish, it is detrimental."
"It has not membership enough here. It should be useful, and intelligently handled would be a power for good."
"We consider agitation of this kind beneficial if correct business principles are used in its application."
"I do not think the League's influence is strong enough to accomplish permanent results because the majority of League members when buying anything for themselves look for the best value regardless of label, while urging their neighbors to insist upon the white label regardless of price. Anything the League can do to relieve the horrid condition of the unfortunate poor who work in the sweat-shops of the large cities is a noble work and should receive the support of all merchants and others; but when they attempt to extend their influence to small places where such conditions do not exist, and where employer and employes are friends and neighbors, they are a disturbing element and work harm to all parties concerned and good to none."
"I think the League's influense is sufficient to bring permanent improvement. The general results of the League's work are, I believe, beneficial, in that attention is given matters that are often wrong."
"There is too much talk and too little real merit in the movement."
"The League's work could be beneficial with the assistance of the public and enforcement of the laws where evils exist. Get the great army of consumers with you in your efforts to suppress the sweat-shops, and your success is assured."
"The sentiment of our best customers is strongly in sympathy with the movement. We hope that the League is strong enough to accomplish permanent results."

As to the manufacturers in the state, their condition in respect to the League and its label is comparatively one of almost unalloyed ignorance. Inquiries were sent out to manufacturers of underwear, knit goods, cloth, etc., these inquiries including all manufacturers in the state making goods of a class similar to those manufactured by firms elsewhere, which have been granted the use of the label. Of all these manufacturers but one reported that it uses the label. That one had used it for about two months. The other firms seemed, with a few exceptions, to be ignorant even of the fact that there is a Consumers' League in existence.

One knitting firm replied: "We have had no experience whatever regarding the use of the Consumers' League label."

A manufacturer of ribbed underwear says: "We do not know the Consumers' League, their methods nor anything about them ; our ignorance is dense."

A hosiery company writes: "We know nothing other than hearsay regarding the Consumers' League."

One cotton cloth manufacturer says: "We have not interest enough in this to look into the subject and so long as they do not interfere with our business we shall not with theirs."

Another says: "We are entirely ignorant of the existence of any Consumers' League label. We cannot be many way affected locally."

A woolen manufacturer writes: "We may not be up to the times, and probably are not, when we have to acknowledge our ignorance in stating that we know nothing whatever of this matter."

Another says: "We never had it presented to us. Please advise us fully regarding this League. Who furnishes these labels, etc.?"

A manufacturer of knit goods who says that complying with League regulations would not increase the cost of high grade knit goods, adds: "The use of the label is not granted to manufacturers of knit goods who are anxious to use it. We have made application twice. We want to use it but cannot secure it." This manufacturer maintains that the League does advertise enough to make the label desirable to manufacturers.

A linen manufacturer says: "We have no call to use the label. It would not be practicable on our goods." As to increasing cost of production, however, he adds that there should not be much difference.
"We have never used the label," says a woolen manufacturer, "because it has never been called to our attention. Have heard of it only in a general way. It has never been presented to us as applicable to our line."

Says another knitting firm: "Our attention has not been called to it. Would probably use the label if we were asked to do so." The same firm expresses the opinion that compliance with regulations would not increase the cost of production in its factory, although it would make it impossible to keep up with orders at all seasons of the year.

Most of the manufacturers that expressed an opinion upon the annual vacation and summer weekly half holiday rule of the League appeared favorable to it. One objected on the ground that his help did not ask it. Another, whose employes are out every Saturday at $4: 30 \mathrm{p}$. m., states that the rule would be very undesirable to him.

The following statements come from two manufacturers that have had experience in this line:
"We consider it practicable. We close our mill on Saturdays at $5 \mathrm{p} . \mathrm{m}$. the year round ; also close it up for two or three weeks for mid-summer vacation."
"We tried it one summer. It worked all right. We shortened the nooning 15 minutes. The next year the help did not care for it."

The only manufacturing firm in the state which reported that it does use the label speaks from an experience of only a few months. Judging from that experience, the manager states that he believes the League's influence is valuable, its aid in the advertising line desirable, and that the label serves as a guarantee of goods. In regard to the holiday and vacation rule, however, he believes it impracticable unless universally observed, which is the only criticism he offers.

## CONCLUSIONS.

An analysis of economic conditions has shown that some additional economic force is needed. Something in the interdependent mechanisms of production, distribution and consumption is out of order. Whatever the difficulty, it seems not unreasonable to assume that the most thorough-going reform would begin with consumption itself, inasmuch as the necessity or desire of consumption seems at bottom the cause of all economic activity. The question that concerns us is simply this: Is the Consumers' League, as judged by its experience thus far, the proper force to apply at this point?

To answer this question must be considered: The composition of the League, its membership, its hold upon members, its method of work, whether it is sufficiently energetic to keep
enough label goods on the market, whether its inducements to manufacturers and merchants are sufficient, and whether its efforts are bent in the direction which is calculated to give them the best results.

With the exception of a few honorary positions, the Consumers' League is a movement confined to one sex so far as membership is concerned. But confining the movement to women does not in the least hamper the League in the line of work it has undertaken. Its great effort is to better the conditions surrounding the men, women and children who work on goods made to be sold to women, and as women do the great share of the buying of goods for household and personal use, the sphere in this respect is as yet practically unlimited. There are no restrictions that from their nature prevent the movement from being a universal one. The fact that the active membership is entirely of women should indeed make it the easier for the League to do its work, as it permits uniformity both as to Leagues in general and as to methods of procedure in any local League.

The League by appealing both to the economic and ethical sides has succeeded in interesting many influential and extensive buyers; many that through their positions alone are able to accomplish things that would be impossible to persons of less importance as judged from the standpoint of the manufacturer or merchant. And the influence of many of these consumers could not be brought to bear through any means other than those employed by the League. If the League's program is carried through logically and thoroughly the consumers may have the satisfaction of quieting their aroused consciences while experiencing little or no material inconvenience or loss. For this function the League seems peculiarly well qualified.

There are two directions in which the League must be very active in order to be most effective-interest among members must be maintained, and it must be rendered possible for these consumers to procure the goods they desire. The danger in this direction is illustrated in the remark of the Wisconsin merchant concerning the attitude of League members. He thought members were inconsistent in that they urged their
friends to buy only label goods while they themselves persisted in hunting out the best bargains and taking advantage of them regardless of the label.

Of course, from the ethical standpoint a person would not be justified in patronizing the firm that did not treat properly its employes, providing there is some practical way out of the difficulty. If forced to answer the question whether she cares to obtain cheapness at the expense of increasing the misery of the wage-earner, the consumer would no doubt reply negatively. It is for the League through its educational system to bring this question sharply home to the consumer.

Another objection from a Wisconsin merchant is that the freedom of the purchaser is taken away. Economically and morally that objection should stand on the same footing as would an argument for license as opposed to simple liberty. But even granting the force of the objection, it would not be a valid one, were the League sufficiently well organized and active enough in educating producers and conferring the label. If there are enough firms using the label there would be latitude enough for the buyer without going outside the ranks. And because this extension cannot be accomplished in a day is no valid argument from any standpoint for justifying a purchaser who has the means in deliberately refusing assistance to such a worthy cause. Yet it is perhaps easier to defeat the argument by getting rid of the condition which suggests it.

Success with the League has been most rapid in the state of Massachusetts. The system of factory inspection, backed by competent legislation, has made that state an exceptionally favorable field for the League's operations. The fact that public sentiment there upholds such laws would indicate also that the people there are quite in a condition to accept and aid in the promulgation of the League's doctrines.

We have seen that the great question of remedying evils through the law arises out of the difficulty of enforcing them; that in order that they may be efficiently enforced there must be back of the executive power a positive and predominating public opinion favoring such laws. Given that backing, the great stumbling block in the way of remedy through the law is
removed. And it is by working up such a sentiment, by assistins the state officers in this manner, that the League can do perhaps its greatest good. The legislature may pass laws, the judiciary may pronounce them constitutional, the executive may try to enforce them, but none of those three powers can force into existence the public sentiment that is so vitally important. But a great body of organized consumers adds the element without which the law is powerless-that enormous indirect pressure, which not only assists the law but gives direction and definiteness to the reform movement of which the law is merely the formal expression:

In another way, alsó, the organized movement is enabled to supplement the work of the executive arm, by rewarding those who fulfill requirements, and not only rewarding them pecuniarily, but by rewarding their better natures, by giving them the satisfaction of knowing that their efforts are appreciated. Illustrative of this fact is the incident related by Mrs. Kelley at Madison, December 6, concerning a certain eastern manufacturer who had just built a new factory which he had fitted out in the most approved manner. Immediately after he moved into these fine quarters, his employes went out on a strike. The employer regarded this demonstration as an evidence of ingratitude, but he was piqued even more by the attitude of the consumers in his vicinity, who showed not the slightest appreciation of the effort that had been made to improve the comfort and surroundings of the employes. The League women undertook to show their appreciation and the result was a much better feeling on the part of the manufacturer toward the cause.

Although Wisconsin conditions should not be taken as a criterion of the efficiency and persistency of the League, the condition of this field will serve to indicate in what line the League is likely to accomplish most. No state offers more striking evidence of the fact that enlightenment and co-operation are necessary elements of success in the work. One merchant says the League should not meddle where its influence is not needed; a manufacturer says he knows nothing about the League but would probably use the label if asked to; another says he is anxious to get it, yet cannot. It seems that the manufacturers as a class are
ready to consider the matter of using the label and that the merchants would interpose no objection ; certainly the consumers should have none to make if their purses are not affected. As individuals, most manufacturers and merchants appear to agree on the questions of principle involved, but they are of necessity compelled to take into account competition and customers; and if there is no portion of the latter ready to give consistent support, the producers, acting in reality as agents, cannot but submit.

It is, then, as an educative force that the Consumers' League would appear to have widest scope. It has the power to reach and develop public opinion in a way that legislators and officers are unable to do. Both the producer and the consumer are brought to think of the disease and not stop at symptoms. Although laws can do much, laws cannot long precede public opinion; in the end they must follow it. The Wisconsin bureau recently had an illustration of this fact. A manufacturer that had several times been reprimanded on account of infringement of factory laws, and who persisted nevertheless, was finally brought into public notice through proceedings started by the bureau. He soon admitted himself beaten and ascribed his defeat to the fact that the publicity was threatening to take away many of his best buyers. In this case no organized League was back of the movement, but its outcome indicates clearly that when a producer finds that he must deal with people who are doing hard thinking regarding his methods and the methods of every producer in competition with him, that fact does influence him and influences him strongly. The Consumers' League in working through women's clubs, committees and correspondents, can reach great numbers and can bring pressure to bear in almost every quarter.

But in any such cause tangible results are needed to keep up interest. People want to see that their efforts have really accomplished something. The League must through thorough advertising and by persistent educational work keep its present members interested while making efforts to get new ones. Working consistently in this direction, this organization would seem to have the qualifications for filling a place that no other factor in the economic world has been able thus far to fill.

## PART IV.

## A Study in the Population of Racine, Richland, and Crawford Counties.

## INTRODUCTION.

The compilation and publication of state and local records is one of the most important services that can be rendered in the field of historical research. Wisconsin has much unpublished manuscript material which has lain unused for many years and which it is the purpose of the present theses to bring to light and render available to every one. The papers published at this time represent some careful detailed work with the copies of the original U. S. census returns for 1850-70, in the office of the Secretary of State. Some of the results of this investigation are soon to appear in the current volume of the report of the Wisconsin Academy of Sciences and Arts. The purpose in this work has been to make use of the requirement of senior theses in compiling and using the material given in the above mentioned census reports for the various counties and towns of the state. Altogether the towns in the counties of Dane, Racine, Kenosha, Dodge, Iowa, Richland, Columbia, Crawford and St. Croix have'. been studied and the statistics worked ever into tables and charts and maps so as to be available for the use of those interested in local history. The soil and topography have in each case been worked out by towns to form a physical basis for the discussion of the population. The people of the towns have been classified as to nationality, wealth and occupation. The rise and decline
of the various nationalities in each town has been found, and the connection between the economic condition and politics has in some cases been stated. Two theses of the current year have dealt more fully with the question of the settlement and spread of Germans in the state. The Germans in the counties of Dodge, Jefferson, Fond du Lac, Ozaukee and Washington were grouped according to the portion of Germany from which they came, and the location of these groups was pointed out by towns.

In general the studies so far have shown the possibilities in such original investigation and prove how valuable co-operative thesis work can be made when properly directed upon subjects of intrinsic importance. The movement of population across Wisconsin from east to west, the changes in predominant nationality that take place in the total population of the counties and towns from 1850 to 1870 clearly indicate that in such studies must be sought the real foundations for generalization regarding the westward movement of population in the entire northwest. The time has past for the crude guesses and startling half truths with which many of the earlier writers have astonished and delighted their readers. There is left for us to work out carefully and scientifically the slow and steady transformations that produced the Wisconsin of 1890 from the Wisconsin of 1850 or 1870. The laboratory method alone can be trusted in so important a task as this. The last problem upon which two students are at present at work may be stated thus: By what routes did the different nationalities and the natives from the several states enter the counties of Wisconsin, and second, what part of the actual population left the towns and counties from decade to decade? With the answers to these two questions, the first rough sketch of the study of immigration into Wisconsin may be considered as fairly complete. The published theses give little hint of the magnitude of the labor involved in producing the tables of totals and percentages that form so large a part of each paper. The students who have taken part in this seminary work showed the genuine scientific spirit and persisted with admirable determination to the ond of their laborious tasks.

I desire to acknowledge the courtesy of Secretary of State Froelich in loaning to the State Historical Society the volumes
of the census reports, 1850-1870. The material was thus rendered easily accessible to each member of the seminary and the very best results were thereby secured.

O. G. Libby.

University of Wisconsin, June 2.4, 1922.

## RACINE COUNTY. ${ }^{1}$

## organization.

The present county of Racine is a portion of the territory ceded to the United States by the treaty of 1833 with the Pottawatomie and other tribes of Indians. When the territory of Wisconsin was organized it was embraced within the boundaries of Milwaukee county, of which it remained a part until 1837. The legislature of 1836-the so-called "Belmont" legislature ${ }^{2}$ by an act approved Dec. 7 , 1836, divided the original Milwaukee county and provided for a new county as follows: "Sec. 2. Townships No. 1, 2, 3 and 4 north, of ranges 19, 20, 21, 22 and 23 east, of said 4th principal meridian, shall be and the same are hereby constituted a separate county, and be called Racine, and the seat of justice of said county is. hereby established at the town of Racine. The County of Racine shall be organized from and after the passage of this act, and the inhabitants thereof be entitled to all the rights and privileges to which by law the inhabitants of the other organized counties of this territory are entitled; and the said county shall continue to be a part of the Third Judicial District, and a District Court shall be held therein, at the said seat of justice, at the Court House or such other place as may be provided. Two terms of the said Districi Court shall be held annually after the organization of said county, on the first Monday in July and third Monday in November; and the several acts concerning the District Courts in

[^48]the Territory of Wisconsin shall be and they are hereby made applicable to the District Court of the county of Racine; and the counties of Walworth and Rock shall be and are hereby attached to the county of Racine for judicial purposes." ${ }^{1}$

Up to 1850 Racine county included the present county of Kenosha. By an act approved January 30, 1850, it was enacted that all of Racine county within the following boundaries should be erected into a separate county, called Kenosha. ."Commencing at the S. W. corner and running thence east on the state line to center of Lake Michigan and S. E. corner of said county; thence northerly to line between townships 2 and 3 ; thence westerly on said line to eastern line of present town of Burlington; thence southerly on said line to S. E. corner thereof; thence westerly on south line of said town to the east line of the county of Walworth.; thence south on said line to place of beginning." ${ }^{2}$

## GEOLOGY AND SOIL.

Racine county lies entirely within the belt of land along Lake Michigan, which is underlaid by the Niagara limestone formation and has the rich soils which such regions generally possess. Map I shows the distribution of the soils. ${ }^{3}$ In the extreme eastern part of the county, along the lake, is a narrow strip of sandy loam. The central and eastern part of the county has a large area of prairie loams. This needed little clearing, hence was eagerly seized by the first settlers. In the northeastern and northwestern parts of the county, covering about one-third of Caledonia, one-half of Norway, one-third of Waterford and a part of Rochester are found the clayey loams of the medium and heavier varieties. Along the Des Plaines river in the central part of the county, and in Norway township around Wind Lake, covering about one-third of the township of Norway, and in various other low and swampy places are found humus soils, mainly muck and peat. The balance of the county has a soil on which oaks flourish-clayey loams of the lighter varieties. The county was affected by glacial action and this is particularly apparent in

[^49]its western part, which has an arm of the Kettle range extending up into it from the south.

Racine county is a rolling prairie, and its vegetation is about evenly divided between the "Oak group" and "Prairie grasses," with scatterings of "grass and sedge" corresponding to the low places. There is also a "Maple" area in the northeastern part of the county. Three rivers-the Root, which flows southeast into Lake Michigan, the Des Plaines, which flows directly south through the central part of the county and which discharges into the Illinois, and the Fox, in the western part, the largest and most important and which also empties into the Illinois, furnish excellent drainage, and considerable water power for the county. The water shed between the St. Lawrence system and the Mississippi system in Racine county, is in the eastern part of the county and has an elevation of from 100 to 200 feet above the level of Lake Michigan. The topography of the county as a whole is that of a gentle rise from an elevation of a few feet above Lake Michigan in the extreme east to a height of 300 to 400 feet in the western part of the county. ${ }^{1}$

## EARLY SETTLEMENT.

The first visit ever made by white men to the region of Racine county, of which we have any record, is that of Vincennes and a party of Frenchmen who were on their way to the Miamis in 1699. A part of his band were missionaries under the conduct of Henri de Touty; Vincennes continued his course but Touty and the missionaries remained in the vicinity seeking the most accessible route to the Illinois river. They had been informed by Indians that by ascending the Root river and making a portage of nine leagues they would reach another river (Fox of Illinois), by which they could reach the Illinois. ${ }^{2}$

The first white settler of Racine county was a trader, a Frenchman, Jak Jambeau by name, who had his trading post at Skunk Grove, where there was an Indian settlement. He,

[^50]however, cannot be considered a pioneer because, following the example of so many of his countrymen, he married a squaw and became an Indian.

Very different were the men who came later to found enlightened institutions of society and government and who are worthy of the name of pioneers. In November, 1834, Capt. Gilbert Knapp, ${ }^{1}$ a .native of Massachusetts, accompanied by two men in his employ came from Chicago along the Indian trail to Skunk Grove. From here an Indian piloted him to the mouth of Root river, where Knapp decided to locate, and here built a cabin on the present site of Racine.

Tho founding of Racine was the initial step towards the settlement of Southeastern Wisconsin. Immigration began actively in 1835, and throughout 1836 increased and continued beyond expectation. Within a year from the time when Knapp made his claim, settlers found their way into nearly every township of the present county of Racine. Mt. Pleasant was settled in January, 1835; Caledonia, close of 1834 or beginning of 1835 ; Yorkville, summer, 1835 ; Raymond, by September, 1835 ; Rochester, fall of 1835 ; Burlington, December, 1835 ; Waterford and Dover, 1836; Norway, 1838, though it was not until early in 1840 that the first company of Norwegian immigrants arrived and located in the vicinity of Wind Lake, from the predominance of which nationality the township takes its name.

From this time on the growth of the county was very rapid. According to the census of 1842 there were 3,524 persons within the boundaries of the present county of Racine. In 1850 it had, by a marvelous development and increase, reached the comparatively large population of 14,968 , while in $1860,21,361$ persons claimed the county as their home.

## NATIVITY.

Taking as a basis the data given in the census enumerator's returns for the years 1850 and 1860 , we shall now attempt to point out some of the most salient facts in regard to the nativity

[^51]of the people who settled and lived in Racine county in its earlier years: ${ }^{1}$ their location in said county by townships and, where possible to assign, a reason for so locating; lastly, what changes took place during the period from 1850 to 1860 , as evidenced by a comparison of the percentages of each nationality, in. each township for the years 1850 and 1860 .

To aid in this effort Table I has been prepared. For convenience the nativities have been grouped by sections and percentages used instead of totals. The table gives the percentage of native and foreign born in the county for the years 1850 and 1860 ; the percentage of each nativity group in the whole county; the percentage of every nativity group in every city or township:

If we glance at Table I we find as a capital fact that in 1850, $23.6 \%$ of the population of the county were natives of New York and that by far the larger part of these lived in the eastern townships of the county. ${ }^{2}$ The city of Racine was $25.3 \%$ New York people ; town of Racine, 23\%; Caledonia, 22\%; Raymond, 24\%; Yorkville, 24\%; Mt. Pleasant, 42\%. The only western township having above the county average of New Yorkers is Rochester, which has $25 \%$. The reasons for their locating thus may possibly be, that these townships possessed advantages, natural or accidental, which caused them to be especially attractive to the pio-neer-for the New Yorkers and New Englanders were the pioneers of Racine county-and being among the first on the ground they were able to secure these advantages by reason of their priority of claim. Racine City was the natural gateway to the county. From here the new arrivals stàrted out to look for lands.

[^52]Table 1．－N．JTIVITY OF POPULATION OT RACINE COUNTY BY fEROENTAGES．

| Born in | Year． | Township． |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | $\begin{aligned} & \text { 品 } \\ & \text { 出 } \\ & \text { : } \end{aligned}$ |  | $\begin{aligned} & \dot{\Phi} \\ & \stackrel{\Delta}{\circ} \\ & \stackrel{\circ}{\circ} \end{aligned}$ |  |  | 药 | $\begin{aligned} & \text { O} \\ & 0 \\ & 0 \\ & \vdots \\ & \stackrel{\rightharpoonup}{0} \\ & 0 \end{aligned}$ |
| Wisconsin ．．．．．．．．． | 1850 | 131 | 15．＋ |  |  |  |  |  |  |  |  | $19+$ | 17.5 |
|  | 1830 | 29.8 |  |  | $33 .+$ | 31 | $33 .+$ |  | 41．－ | 379 | 34.2 | 35.7 | 334 |
| New York．．．．．．．．．． | 1850 | 25.3 |  |  |  |  |  |  |  |  |  | $17+$ | 236 |
|  | 1830 | 14.2 |  |  | $9+$ | $14+$ | $17+$ | $2+$ | $9 .+$ | 19. |  | 8.8 | 13.2 |
| New England States | 1830 | 11.8 | 9．＋ |  |  |  |  |  | $5+$ |  | 18. | $6 .+$ | 105 |
|  | 1860 | 7.3 |  |  | $5 .+$ | － 5.9 | 5. | ． 4 | 3.2 | 9.8 | 12.2 | 3.4 | 6.3 |
| Middle dtlantic （exc．of N．Y．）．．． | 1850 | 2.5 | $3 .+$ |  |  | 1．＋ | 1．＋ |  |  |  |  |  | 1.8 |
|  | 1860 | 1.5 |  | ． 9 | $2 .+$ | 1.9 | 1．+ | ． 6 | 1.7 | 1.1 | 2 | 1.6 | 14 |
| Squ thern | $\begin{aligned} & 1850 \\ & 1860 \end{aligned}$ | ． 7 | $4 .+$ | ${ }_{5}^{+}$ | .9 .3 | ． 3 |  |  |  |  | ． 1 |  | ． 6 |
| North West | 1850 | 64 | 3．＋ |  |  |  |  |  |  |  |  |  | $4 . t$ |
|  | 1860 | 5. |  |  | $3 .+$ | 1.3 | $2 .+$ | 1.2 | 1.5 | 2.7 | 3.7 | 24 | 3.4 |
| British America．．． | 1850 | 2.3 | $3 .+$ |  |  |  | 1．＋ |  |  |  | 2. |  | 2.3 |
|  | 1860 | 1.7 |  |  | ． 5 | 3.3 | 2. | ． 2 | 1.3 | 1.4 | 1.1 | ． 7 | 14 |
| Briti－h I－les．．． | 18.50 | 21.3 | 17．＋ |  |  |  |  |  |  |  |  |  | 21. |
|  | 1860 | 20.2 |  | $21 .+$ | $10 .+$ | $-165$ | $29 .+$ | 67 | 32. | 84 | 16.8 | 10.1 | 17.5 |
| German States． | 1850 | 13. | $15 .+$ |  |  |  |  |  | 4. |  |  |  | 12.1 |
|  | 1860 | 13.4 |  |  | 19．＋ | 81 |  | 9.7 | 6. | 14. |  | 33.4 | 14.4 |
| Scandinavian Countries．． | 1850 |  | ． 8 |  |  | 6 ＋ |  |  |  |  |  |  |  |
|  | 1850 | 17 |  | .8 | ． 1 | 106 |  | 40. | 13 | 34 | ． 2 |  | 35 |
| Rest of Europo．．． | 1850 1860 | 2.7 | 2. | ． 2 | .7 $16 .+$ | $2.7+$ | .4 14 | 4.2 | 1.8 | 1.6 | 6.3 | 2.7 | 4.5 |
| Not Given | 1850 1860 | .6 1.2 |  |  |  |  |  |  | ． 2 |  | .2 <br> . |  | ． 3 |
| Native Born Total | 1850 | 30. | 58.8 | 752 | 63.3 |  | 592 | 21.2 | 45.6 |  | 712 | 48.8 | 59.6 |
|  | 1860 | 58．6 |  | 66.3 | 53.2 | 583 | 605 | 35.9 | 57. | 70.9 | 66.8 | 52.8 | 58.3 |
| Foreign Born Total | 1850 | 40. | 41.1 | 248 | 367 | 38.3 | 10.8 | 78.8 | 51.4 |  | 23.8 | 51.2 | 41.4 |
|  | 1860 | 41.4 |  | 33.7 | 46.8 | 41.7 | 39.5 | 61.1 | 43. | 29.1 | 33.2 | 47.2 | 41.7 |

Hence it is natural that the eastern part of the county should be settled and occupied by the first settlers．Then again the soils in the eastern and central part of the county were prairie loams， requiring little if any clearing，and thus more valuable in the cyes of a pioneer．${ }^{1}$ The reason why Rochester，an extreme west－ ern township，should show a predominance of New Yorkers is due，no doubt，to its favorable situation on the Fox river，its waterpower being the best in the county．In fact，it was the waterpower which attracted the first settlers to select the present

[^53]sites of the villages of Rochester and Waterford, and the New Yorkers, together with the New Englanders, being the first on the ground, naturally took possession of this great advantage. ${ }^{1}$

The group of the next highest percentage, $21 \%$, for the whole county in 1850 , is that of the natives of the British Isles. They arrived in the county somewhat later than the natives of the castern states, and as a consequence had to take such lands as were left. They showed the clannish instinct to a marked degree and clung together. Thus we have existing even to this day sections which are known as the English, Irish, Scotch and Welsh settlements. By Table I we see that in 1850 Dover has $46 \%$ of British born inhabitants, while Yorkville, the next township to the east, is $31 \%$ British; Racine City, $21.3 \%$, and Raymond, $21 \%$. The reason they located in these places, in greatest numbers, seems to be because here was the best lands then unoccupied. Another reason why they seem to have massed in Dover and Yorkville townships is the fact, which I mentioned above, of their tendency to form groups. After the first settlers had located in'a certain township the later comers of that nationality would make this a nucleus and thus form a settlement. Thus in Dover township we have an English and an Irish sectlement. In Yorkville there is a Scotch settlement, while the largest num-- ber of British found in Racine are Welsh. This seems to be quite an influential factor in determining the choice of a new settler, especially one of foreign birth, as to the locality in which he shall reside.

The Germans were the next most important element. In 1850, they comprised $12.1 \%$ of the total population of the county. Of the townships, Burlington had the largest German element, or $29 \%$ of its entire population ; Caledonia was $20 \%$ German ; Racine township $15 \%$, and Racine city $13 \%$; the rest of the townships of the county all had a well marked German element. The Germans did not seem to mass in one locality so distinctly as did the other foreigners. Perhaps this was due, in a measure, to the decentralization of the mother country, the natives of the several German states calling themselves not Germans but by the name

[^54]of the state they came from. One sees this most forcibly if he will glance over a page of the original census returns for 1850 .

The New England men, though they comprised only $10.5 \%$ of the entire population of the county in 1850, were among the first settlers of the county. Indeed, it was a Massachusetts man who made the first settlement. Rochester, we see, has the largest percentage of New England people of any of the townships or 18\% of its total population. The greater part of these were Vermonters. Other townships having above the average number of New England people were: Raymond, with 11\%; Caledonia $13 \%$, and Racine city $11.8 \%$.

In 1850 the only other foreign group which was at all numerous, and this is only one township, was the Scandinavians, who made up $4.9 \%$ of the total population of the county. The most of these were found in the township of Norway of which they were $57 \%$ of the total population. Rochester and Raymond had $6 \%$ Scandinavian. It may perhaps be mentioned here that Norway was first settled by the Norwegians in 1840 and soon became the center of Scandinavian emigration to this state, and the settlement itself is regarded as the first permanent Scandinavian colony in Wisconsin. ${ }^{1}$ As to the rest of the groups none are of sufficient importance to merit special notice.

In $1850,17.5 \%$ of the total population of the county were natives of Wisconsin and the only fact specially interesting about the distribution of these is that the percentage of those born in Wisconsin for Racine city and Racine township is less than the average for the county. Racine city is $13.1 \%$, and Racine township $15 \%$, while in the more western and less thickly populated townships those born in Wisconsin were above the county aveiage, except Norway, which was the last township settled and which had only $17 \%$ born in Wisconsin. This may show one of two things, either that the families were larger in the western and agricultural townships or that the younger generation "struck out" for itself into the newer and less densely populated localities.

[^55]Taking the county as a whole, the population in 1850 was $58.6 \%$ native born. Those townships which had a larger foreign population than native were Burlington, $51.2 \%$; Dover, $54.4 \%$, and Norway, $78.8 \%$. These we have seen were peopled mainly by Germans, British and Scandinavians, respectively.

Such being the situation in 1850, let us now examine the condition of things as revealed by the census returns of 1860 . Turning to our Table I we see that a great change has taken place generally, although the percentage of native and foreign born residents for the whole county remains practically the same as in. 1850.

New York is no longer the predominating group, but this is not surprising, for we should expect to find, as we do here, that those born in Wisconsin are most numerous. New York, however, has decreased almost one-half-from $23.6 \%$ of total population in 1850 to $13.2 \%$ in 1860. Almost the same thing happens in the case of the New England population. It decreases from $10.5 \%$ to $6.3 \%$. All the rest of the native born groups decrease in their percentage of the total population of the county, except, of course, the Wisconsin born, while on the other hand the foreign born hold their own and even increase their percentage in some cases. The population of the whole county increased $42.7 \%$ in the ten years from 1850 to 1860 . This fact must always be.taken into consideration if we make any comparison between the percentages given in the table.

For the New York group, in 1860 those townships having above the county average of New York people are: City of Racine, $14.2 \%$;Mt. Pleasant, $18 \%$;Raymond, $14 \%$; Yorkville, $17 \%$; Rochester, $16 \%$. These are the same townships having the largest percentage of New Yorkers in 1850. The decrease in the percentage of New York to the whole county is too great to be explained simply as a result of the falling off of immigration from that state. It means something more. It means that there are actually less people in the county who were born in New York than there were in 1850. Making due allowance for the deaths which may have occurred during ten years, we are forced to the conclusion that there was a shifting of population between 1850 and 1860. That some of the people who were in the
county in 1850 had moved on with the westward movement. Some, undoubtedly, had gone to California; others to more recently opened territory.

The same holds good for the New England population. In 1860 there are some 200 less New Englanders in the county than in 1850 . The percentage for the whole county was only $6.3 \%$ in 1860. Of the townships Rochester was 12.2\% New England; Waterford, $9.8 \%$; Racine city, $3.9 \%$; all the rest had below the average percentage for the county, although in 1850 Raymond and Caledonia were above the average, thus showing an even more marked decline.

The Middle Atlantic, Southern and Northwestern states also show a decline from their percentages in 1850 . We see, then, that there was a very marked diminution in the native born elements, exclusive of those born in the county or state itself.

On the other hand, to compensate for this loss in the native born population, we find that the foreign born made a gain of $.3 \%$ for the whole county, and their loss in percentage by groups is not nearly so great as in the case of the native born groups.

British America did actually lose some of its members by emigration from the county. The.percentage for the whole county in 1850 for British America was $2.3 \%$; in $1860,1.4 \%$. Of the townships Raymond shows the greatest loss, or a decrease from $6 \%$ in 1850 to $3.3 \%$ in 1860 .

The British Isles group for 1860 shows a decrease in percentage for the whole county from $21 \%$ in 1850 to $17.5 \%$. This is not a loss at all in the actual number of people of British nativity in the county, for it must be remembered that there, is the $42 \%$ gain in population for the county to be overcome. It only means that the immigration from the British Isles was not large enough to overcome the increase in population for the county. The townships having the largest percentage of British born peoples are practically the same as in 1850. Racine city has $20 \%$; Yorkville, $29 \%$; Dover, $32 \%$; Mt. Pleasant, which only had $19 \%$ British in 1850 , in 1860 had $21 \%$ British. Those showing. largest decrease are Raymond from $21 \%$ to $16.5 \%$; Burlington, $19 \%$ to $10.1 \%$. The decrease in the last two townships can be ascribed to a shifting of population.

The German group shows the only increase of any importance outside the Wisconsin born. Here there is an increase from $12.1 \%$ to $14.4 \%$ during the period from 1850 to 1860. This serves to fix the nationality of the majority of people coming into the county between 1850 and 1860 as Germains. These Germans located as a rule where they found the most of their fellow countrymen. Thus Burlington, which in 1850 was $29 \%$ German, in 1860 had $334 \%$ of that nationality; Racine city $13 \%$ in 1850 , had $13.4 \%$ in 1860 ; Caledonia remains about the same, having $20 \%$ German in $1850,19 \%$ in 1860 . All the townships increased their percentage of German born population very noticeably.

The Scandinavians fell off from $4.9 \%$ of the total population in 1850 to $3.5 \%$ in 1860 . The most marked decrease is in the township of Norway, which fell off from $57 \%$ in 1850 to $40 \%$ in 1860 . The greatest increase in Raymond, which lies just to the east of Norway, from $6 \%$ in 1850 to $10.6 \%$ in 1860. The other township which increased noticeably was Yorkville, which in 1850 was only $3 \%$ Scandinavian, in 1860 was $6 \%$.

Peoples from the "Rest of Europe" increased from $.5 \%$ of the total population of the county in 1850 to $4.1 \%$ in 1860 . The greatest increase was in Caledonia township, which, from a percentage of $.7 \%$ in 1850 jumped to $16 \%$ in 1860. Rochester also increased from $.2 \%$ to $6.3 \%$. The abrupt rise in both these townships was caused by in influx of Bohemians during the period. 1850-1860. ${ }^{1}$

The only other group to be taken account of is the natives of Wisconsin. This shows the largest increase of any group. In 1850 it was $17.5 \%$ of the total population, while in 1860 it is $33.4 \%$. The same peculiarity in the distribution of those born in Wisconsin among the townships is shown for 1860 , as in 1850. The city of Racine has a lower percentage of Wisconsin born people than the county average, it having only $29.8 \%$, and the same reason may be assigned for it as in 1850 .

To sum up for the county: In 1850 we find that there are three important elements in the county-

1. The New York; 23.6\%, and New England, 10.5\% population.

[^56]2. The natives of the British Isles, 21\%.
3. The natives of the German States, $12.1 \%$.

These, in their location, show that they came in three distinct waves of immigration: 1st. Those from New York and New England, who settled most generally in the eastern townships of the county and in whatever place there were the greater natural advantages. 2d. The natives of the British Isles, who chose the best lands which were left and who tended to make settlements in groups according to their nationality. 3d. The Germans, who came last and who did not attain their maximum strength until 1860. They filled up the gaps and were more evenly distributed over the whole county. The Scandinavians, who came contemporaneously with the British, settled in the township of Norway and became the center of early Scandinavian immigration to the state.

By 1860 the relative importance of the nativities had changed. The people from the British Isles were the most important element. Next came the Germans, who had increased their percentage since 1850. The New York element was now third in numerical importance ; though combined with New England, it gave•a Yankee predominance. Those born in Wisconsin have been left out in this final consideration.

The most striking fact from 1850 to 1860 is that foreign immigration was able to increase the percentage of foreign born in the county $.3 \%$.

## DENSITY OF POPULATION AND WEALTH PER CAPITA

Having examined the nativity of the people of the county for the years 1850 and 1860, let us now investigate the economic conditions for those same years, showing, if possible, the influence nationality had upon the density of population and wealth per capita:

Table II-POPULATION PER SQUARE MILE.

|  | 1850 | 1860 | 1870 | 1880 | 1890 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Mt. Pleasant | 30. | 35.7 | 69.9 | 42.5 | 43. |
| Town of Racine | 27. |  |  | 53. | 54.6 |
| Caledonia Raymond | 30.2 28.3 | 38.3 | 44.6 | 46.3 | 49.5 |
| Yorkville (with village of Union Grove) | 27.6 | 35.6 | 44. | 42.5 | 38.6 |
| Yorkville (without Union Grove)... |  |  |  | 31.1 | 23.3 |
| Norway | 20.8 23.3 | 26.9 30.7 | 29.8 | $\stackrel{27.2}{25.7}$ | 23.6 |
| Wover Waterford (with vililage) | 23.3 | 30.7 40.2 | 43.8 | 40.3 | 43. |
| Waterford (without village) |  | 28.6 | 28.7 |  |  |
| Rochester (with village) .... | 34.8 | 51.8 | 48.6 | 43. | 38.8 |
| Rochester (without village) |  | 34.8 53.8 | 26.8 65.7 | $\stackrel{27.2}{ } 6$ |  |
| Burlington (with village) ${ }^{\text {Burlington }}$ (without village) | 33.9 | 53.8 30.2 | 65.7 27.9 | 65.1 26.8 | 74.1 |
| Burlington (without vidage) ... | 43.9 | 32.6 | 78:4 | 90.7 | 106. |
| Racine Co. (without Racine)........ | 28.9 | 39.7 | 49.4 | 43.6 | 44.7 |

Table II shows the population per square mile for the years 1850, 1860, 1870, 1880 and 1890 of each township, with and without villages, and of the entire county, with and without the city of Racine, for those same years.

The township of Raymond is the only one in the county which shows a steady increase in population during the entire period from 1850 to 1890. Mt: Pleasant, Caledonia and Waterford show a fluctuating population. They increased very rapidly until they reached their maximum density in 1870 . The census of 1880 showed a great loss, from which they are again recovering in 1890. They are colored green on Map II, and their rate of increase and density of population is shown in Table II. Yorkville, Norway and Dover likewise increased until 1870, from which time they have steadily declined. Rochester reached its maximum density in 1860 , since when it has continued to decline. Burlington, including the village, shows an almost continuous increase, although from 1870 to 1880 there was a slight decrease. However, the township itself, exclusive of the village, shows a constant falling off in density of population and must be considered a declining area. The county as a whole, including Racine city, has shown a large increase. Exclusive of the city, it increased until 1870, when there was a falling off shown in 1880, and from that time on it has gained very slowly.

The table as a whole seems to show that the county, leaving out the city of Racine, had its greatest density of population in
the year 1870. From 1870 to 1880 there was a great decrease, a result, perhaps, of the leaving of the younger generation for the great West. In 1890 most of the townships which are declining, and which have the smallest population per square mile are those which were occupied largely by foreigners, in 1860, and whose per capita valuations for that same year were below the average for the county. Rochester is the exception. ${ }^{1}$

Let us now examine into the wealth of Racine county for the years 1850 and 1860. Table III shows the per capita valuation of the city of Racine of the three eastern towns in a group, of cach of the four middle townships, and of the three western townships in a group, for those two years. It also shows the per capita valuation of the entire county, both with and without the city of Racine for the years 1850 and 1860 , respectively.

Table III-PER CAPITA VALUATION.


In 1850 the valuations given are only for real property, while in 1860 it includes both real and personal. By our Table III

[^57]we sec that the city of Racine in 1850 had a per capita valuation of only $\$ 202$, or less than the per capita for the whole county, which was $\$ 219$. The group of eastern townships-Racine, Mt. Pleasant and Caledonia, had a valuation of $\$ 317$. Of the middle townships, Yorkville has a valuation of $\$ 317$. Of the middle townships, Yorkville has a valuation per capita of \$257, Raymond $\$ 246$, Norway $\$ 111$, Dover $\$ 182$. The group of western townships, Waterford, Rochester and Burlington, had a valuation of $\$ 171$, which is below the valuation per capita of the wholo county, both including Racine city and excluding it.

The difference in per capita valuations of the several sections of the county is most probably due to the difference in value of the land in those regions. In 1850 it could not have been a result of the difference in density of population in those regions, for by Table II we see that there is about the same density of population for the eastern group of townships as for the western, and yet the former has a per capita valuation of $\$ 317$ and the latter only $\$ 171$.

In 1860 we have the valuation for both real and personal property and thus can obtain a much fairer estimate of the wealth per capita of the inhabitants of the county for that year. By table III we see Racine city has just tripled its per capita valuation and now has $\$ 606$ for each inhabitant. The group of eastern townships shows a consistent rise, in advancing from $\$ 317$ to $\$ 516$ per capita. The four central townships do not show the rise one might expect from their valuation in 1850 . Raymond advances from $\$ 246$ to $\$ 360$; Yorkville from. $\$ 257$ to $\$ 399$; Norway, $\$ 111$ to $\$ 256$; Dover, $\$ 182$ to $\$ 426$. These are valuations below the average per capita for the county in 1860, both inclusive and exclusive of Racine city. The western group of townships, on the contrary, increase their per capita wealth more than one would expect from the figure for 1850 . They rise from $\$ 171$ to $\$ 438$ per capita, or from below the county average in 1850 to an equality with it in 1860 . What is the reason for the increase in wealth in some parts of the county to a. greater extent than in others?

In these central townships where there was the least gain in wealth there was the largest per cent. of foreign born people in
1860. ${ }^{\text {. }}$ We see from Table I that Dover was $43 \%$ foreign, Nor$61.1 \%$ and Raymond $41.7 \%$. These three townships combined had a per capita of $\$ 187$ in 1850 ; and in 1860 only $\$ 352$, which was a very small comparative gain. If we can demonstrate that those townships which have the smallest native born population have also the least wealth per capita, can we not conclude that the small rise in wealth in the central townships was due to the fact of its large foreign population?

Table IV has been prepared showing the average wealth per capita of those towns having the largest native born population and likewise the average of those townships having smallest native population. Group I includes all townships having above the county average per cent. of native born; Group II townships having below the county average of native born population. ${ }^{2}$ From Table IV we see that Group I has a per capita wealth of $\$ 225$ in 1850, increasing in 1860 to $\$ 534$; Group II has a per capita of $\$ 163$ in 1850 , while in 1860 it has only $\$ 374$. The former having much the larger per capita in 1850 , increases its per capita by $\$ 309$ in 10 years, while the latter, having a much smaller per capita to start with, and thus a greater opportunity for gain, only increases its per capita by $\$ 211$ during the same period. This seems to show that a township which has a large foreign population increases in wealth more slowly than one made up largely of native born. Hence we may conclude that the reason why the central townships showed such a small gain in per capita wealth from 1850 to 1860 was because of their large foreign population.

## OCCUPATION.

In studying the population of a county, some attention should be given to the occupation of its inhabitants. With this end in view Table V has been prepared, showing the occupation of all males above 15 years of age, who were inhabitants of the county for the years 1850 and 1860. For convenience the occupations have been grouped, according to their nature, into several general heads and percentages have been used instead of totals.

[^58]Table V.-OCCUPATION.

| Occupation. | Year. | Township. |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  | $\begin{aligned} & \dot{\phi} \\ & \stackrel{\Delta}{\circ} \\ & \stackrel{O}{\circ} \end{aligned}$ |  | 世 \$ 0 0 0 0 0 0 |  |  |
| Farmer .. ........ | 1850 | 6.6 | 42.5 | 86.5 | 88.9 | 78.9 | 79.1 | 95.1 | \&2.9 |  | 46.7 | 35.5 | 46.7 |
|  | 1860 | $2 .+$ | ... | 46.5 | 42. | 62. | 65.7 | 58.8 | 74.7 | 35.1 | 32.7 | 32.6 | 30.3 |
| Laborers........... | 18.50 | 15.6 | 26.8 |  |  |  | 3.7 |  | 8.9 |  | 15.1 | 13.3 | 10.4 |
|  | 1860 | 18. |  | 44.9 | $\dddot{47.7}$ | 24. | 17.6 | 25.1 | 203 | 32.6 | 31.2 | 29.2 | 27.3 |
| $\begin{gathered} \text { Artisans and Me- } \\ \text { chanics.. } . . . . . \end{gathered}$ | 1850 | 333 | 10.4 |  |  |  | 4. | 2.2 | 5.2 |  | 16.9 | 13.4 | 18.6 |
|  | 1860 | 29 |  | 3.4 | 3.9 | 6.7 | 6. | 5.7 | 11 | 12.3 | 15. | 13.9 | 13.6 |
| Smaller trades and professions | 1850 | (15.1 | 6.7 |  |  |  |  |  | .4 |  | 4.7 | 3.8 | 71 |
|  | 1860 | 15.8 |  | . 9 | 1. | 1.4 | 1.6 | 2. | .3 | 4.8 | 5.2 | 6.6 | 7.6 |
| Merchants and capitalists. | 1850 | 67 | 1.4 |  |  |  | 2 |  | . 4 |  | 2.5 | 32 | 3.5 |
|  | 1860 | 4.9 |  | , |  | 5 | 2.2 | 1.2 |  | . 9 | 3.3 | 26 | 2.5 |
| Professional....... | 1850 | 3.8 | 2.2 | 1.2 | . 8 | 2.7 | 2. | .4 | . 4 |  | 1.7 | 3.4 | 2.5 |
| Professional....... | 1860 | 3.6 |  | , | . 9 | 1.9 | 13 | . 8 | 1.1 | 2.9 | 2.6 | 3.4 | 2.3 |
| Petty tradesmen... | 1850 | 6.2 | 2.2 | . 6 |  | 1. |  |  |  |  | 2.5 | 2.3 | 3.1 |
|  | 1860 | 5.9 |  | 6 |  |  |  | 1.2 |  | 2.5 | 7 | 2.9 | 2.9 |
| Teamsters......... | 1850 | 2.4 |  |  |  | 3 |  |  |  |  | 9 |  | 1.+ |
|  | 1860 | 2.5 |  | . 2 |  |  |  |  |  | 4 |  | 1. | 1.1 |
| Officials........... | 18.50 | . 5 |  |  |  |  |  |  |  |  |  |  | . $1+$ |
|  | 1860 | . 9 |  |  | . 3 |  | . 2 |  | . 3 |  | . 3 | . 1 | . 4 |
| Sailors. | 1850 | 4.6 | - |  | . 2 | . 6 |  |  |  |  |  | . 6 | 1.9 |
|  | 1860 | 4.3 |  |  |  | 2 | 1.1 | 2.4 |  |  |  | . 1 | 1.9 |
| None and not given | 1850 | 36 | 6.7 | 2.5 | 1.4 | 3.7 | 6.3 | 1.7 | 1.2 |  | 8.1 |  | 3.8 |
|  | 1860 | 9.1 |  | 2. | 2.8 | 2.8 | 3. | 2.4 | 1.8 | 4.1 | 4.5 | $4 .+$ | 5.3 |
| Miscellaneous. - ... | 1850 | 1 | 7 | . 3 | 1.9 |  |  |  | 4 | 4.6 | 4.1 | 1. ${ }^{1}$ | 2.1 |
|  | 1860 | 3.3 |  |  |  |  | 2 |  |  |  | 4.1 |  |  |

The most striking fact, perhaps, in the whole table is the decrease in the percentage of farmers from 1850 to 1860, and the corresponding increase in the "laborer" class during the same period. This was undoubtedly due to the increase of population, especially foreign, and the rise in value of land, thus compelling many to hire out their services, whereas in 1850 they were able to secure land for themselves and be their own masters. ${ }^{1}$

ERRORS IN U. S. CENSUS.
In going over the census returns for 1850 and 1860 as they appear in the original records, one is struck with the many inaccuracies which occur and which are more often attributable to

[^59]the carelessness or negligence of the enumerators than to any other reason. For example, some pages of the census returns have the wrong sex placed opposite the names. Sometimes the entire page would be wrong in this respect, showing that it had been copied and that the copyist had started wrong and thus made the same mistake throughout that entire page. Another common error was to put down the occupation of persons under 15 years of age, or to leave out those over 15 years of age, the former being uncalled for, the latter required. Sometimes the nativity of an entire page of names would be omitted. Then again there would be four or five names crowded on two or three lines, and when the nativity for those extra names was left out the number of persons on the page might easily be counted wrong, the extra names being overlooked.

The material used in this thesis for the nativity, density, wealth and occupation of the population of Racine county for the years 1850 and 1860 is taken from the original records in the office of the Secretary of State, and it is believed the compilation is so careful and accurate as to warrant us in pointing out some errors made in the official compilation. Table VI shows the correct population of the several townships for the years 1850 and 1860, and the difference between this and the population as given in the U. S. census reports.

Table VI-LRRRORS IN U. S. CENSUS FOR RACINE COUNTY IN 1850, 1860.

|  | Correct Population. |  | Inaccuraci ss in U. S. Census. |  | Inaccuracios ia Wis. Blue Books. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1850 | 1830 | 1830 | 1860 | 1850 | 1860 |
| Rac'ne city | 5,108 | 7,822 |  |  |  |  |
| Racine town | ,778 | 7,82 | -1 | -... |  | +9 |
| Mit. Pleasant | 1,081 | 1,819 | +5 | $\cdots 1$ |  | -1 |
| Caledonia | 1,090 | 2,438 | , | 1 |  | 1 |
| Yorkmond | 1,021 | 1,274 | - |  |  |  |
| Norway . | $\stackrel{97}{751}$ | 1,283 | $\pm 1$ | - | , .... | +2 |
| Dorer | 839 | 1,108 | - |  |  | 2 |
| Rochester | 1,674 | 1933 | -2 |  |  | $\pm$ |
| Burlington | 1,629 | 2,263 | 2 | - |  | -39 |
| Waterford |  | 1,450 |  | - |  | +6 |
| Total | 14,968 | 21,261 | 11 | 1 |  | 59 |

The amount of variation is indicated for each town ; the plus sign stands before the number when it is larger than the correct population, and the minus sign when it is smaller. When the population is correct, a dash occurs. The difference between the correct population and that given in the Wisconsin Blue Booki (years 1864 and 1865) is likewise indicated for the census of 1860 . From this table we see that there was a total of eleven errors in the United States census for 1850 and one error in 1860. The Blue Books (years 1864 and 1865) show a total number of errors of fifty-nine.

## APPENDIX．

1850. 

| ， |  |  |  |  | 家 | 号 |  | 位 | 品 | ¢ $\stackrel{0}{\circ}$ 0 | Total for County |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Maine ．．．．．． | 46 |  | 31 |  |  | 76 |  | － 8 | 112 | 48 | 1，580 |
| New Hampshire | 54 |  | 3 | 7 | 11 | 4 |  | ${ }_{301}$ | $\stackrel{9}{8}$ | 1 | 79 118 |
| Vermont ．．．． | 211 | 49 | 21. | 47 | 24 | 10 | 1 | 199 | 53 | 10 | 615 |
| Massachusetts＇ | 179 | 11 | 32 | 42 | 59 | 46 | 1 | 361 | － 8 | 25 | 463 |
| Connecticut | 105 | 21 | 81 | 43 | 20 | 16 | 1 | 33 | 12 | 7 | 294 |
|  | 8 |  |  |  |  |  |  |  |  | 5 | 14 |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| New Jersey | 1， 47 | 181 | 462 | 248 | 12 | 244 | 21 | 424 | 286 | 121 | 3，528 |
| Pennsylyania | 77 | 16 | 9 | －11 | 12 | 5 <br> 7 |  | 4 | 1 | 18 | 109 |
| Delaware ． | 7 | 16 |  |  | 6 | 7 |  | 12 | 2 | 5 | 1.5 |
| Maryland |  |  |  | 4 |  |  |  | i |  |  | $\stackrel{2}{12}$ |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| North Carolina | 10 | $\stackrel{3}{2}$ |  | 1 |  | ．．．． | 2 |  |  |  | 23 |
| South Carolina | 10 | 2 | $\ldots$ | 1 |  |  |  | 1. |  |  | 14 |
| Georgia ． | 2 | 30 |  |  | ， |  |  |  |  |  | 2 |
| Kentucky | i1 | 30 | 1 |  | 2 |  |  | 1 | ．．． |  | 23 |
| Louisiana | 1 |  |  | 3 |  | ．．． |  |  |  |  | 15 |
| Tennessee | 1 | ． | ．．． | 1 | ） |  |  | 1. |  |  | 3 |
| Missouri ． | 2 |  |  |  | 2 |  |  |  | 1 |  | 3 |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Mich＇gan | 79 <br> 1 | 1 | 205 | 220 | 214 | 215 | 132 | 357 | 313 | 174 | 2，621 |
| Illinois ． | 68 | 8 |  | 9 |  | 4 |  | 9 | 14 | 3 | 118 |
| Indiana | 22 | 11 |  | 9 | 4 | 4 |  | 4 | 19 | 4 | 120 |
| Ohio． | 155 | 12 |  | 18 |  | 15 |  | 12 | 5 | 1 | 51 |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |

FOREIGN BORN．

1860.

| - |  |  |  |  |  | $\left\|\begin{array}{c} \dot{\tilde{j}} \\ \tilde{e} \\ \tilde{0} \\ \dot{z} \end{array}\right\|$ | 安 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| New England States | 572 | 135 | 123 | 74 | 76 | 4 | 36 | 114 | 143\| | \&7 | 1,364 |
| Maine . ..... | 34 |  | 10 |  |  |  |  | 6 | 1 | 4 | 6 |
| New Hampshire | 64 | 31 | 11 | 5 | 3 | - 1 | 2 | 18 | 6 | 18 | 159 |
| Vermont . ${ }^{\text {a }}$. | 151 | 40 | 49 | 11 | 20 | 1. | 5 | 55 | 97 | 31 | $46)$ |
| Massachusetts | 170 | 36 | 35 | 44 | 29 | 1 | 23 | 21 | 24 | 22 | 405 |
| Connecticut. | 142 | 24 | 17 | 14 | 20 | 1 | 5 | 14 | 14 | 10 | 261 |
| Rhode ${ }^{\text {'sland }}$ | 11 |  | 1 |  | 1 |  | 1 |  | 1 | 2 | 17 |
| Middle Atlantic States | 1,235 | 278 | 349 | 241 | 208 | 27 | 127 | 153 | 295 | 237 | 3,149 |
| New York | 1,114 | 221\| | 332 | 224 | 183 | 21 | 108 | 150 | 277 | 200 | 2.830 |
| New Jersey | 46 | 1? | 5 | 6 | 11 | 6 | 14 |  | 2 | 12 | 115 |
| Pennsylvania | 59 | 37 | 11 | 11 | 14 |  | 4 | 3 | 13 | 21 | 173 |
| Delaware | 1 |  |  |  |  |  |  |  |  |  |  |
| Maryland | 15 | 7 |  |  |  |  | 1 |  | 1 | 4 | 23 |
| Southern States | 58 | 10 | 11 |  |  | 2 | 1 | 1 | 1 | 3 | 93 |
| Virginia . ... | 17 | 1 | 1 | 31 |  | , | 1 |  | 1 | 1 | 27 |
| North Carolina | 1 |  |  |  |  |  |  |  |  |  |  |
| South Carolina | 2 | 2 |  |  |  |  |  | 1 |  |  | 5 |
| Georgia -- | 5 |  |  |  |  |  |  |  |  |  |  |
| Kentucky | 91 | 1 | 7 | 1 |  |  |  |  |  | 1 | 19 |
| Louisiana | 4 |  |  |  |  |  |  |  |  | 1) | 5 |
| Teunessee | 8 | 5 | 1 |  |  |  |  |  |  |  | 1.4 |
| Missouri | 12 | $1)$ | 2 | 21 |  |  |  |  |  |  | 17 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Northwestern States |  | 876 | 724 | 456 | 462 | 345 | 468 | 35. | 490 | 861 | 7858 |
| Wisconsin | 2,326 | $81{ }^{1}$ | 658 | 425 | 4431 | 3331 | \| 451 | 320 | 550\| | 8101 | 7.13c |
| Michigan | 69 | 81 |  |  |  | 31 | $1!$ | 51 | \| 91 | 1 | 111 |
| Illinois | 120 | 11 | 14 | 81 | 8 | 4 | 5 | 11 | 1 | 191 | 2 m |
| Indiana | 20 | 181 | 101 |  | 1 | 1 | $1)$ | 5 | ? ? | 11 | $6)$ |
| Ohio | 168 | 291 | 31 | 21 | 41 | d) | 10 | 14 | 24 | 26! | $3 ¢ 1$ |
|  | 4 |  | 31 | 2 | 6 |  |  |  | I | 11 | 16 |
| States West of Mississippi; |  |  |  |  |  |  |  |  |  | 1 |  |

FOREIGN BORN.


## CRAWFORD AND RICHLAND COUNTIES. ${ }^{1}$

GEOLOGY, SOILS AND TOPOGRAPHY. ${ }^{2}$

The surface features of Crawford and Richland counties are high rolling ridges of land which are intersected in all directions by deep ravines. These ridges are high; in the town of Ithaca the summits of the ridges attain an average elevation of 500 feet above Lake Michigan, and in Crawford county there are places where the elevation of the ridges is between 300 to 500 feet above the valleys.

The counties are well watered by numerous small streams. Crawford county is the river county of the state, it has the Mississippi and Wisconsin as its boundaries and its interior drained by the Kickapoo.

An editorial in the Richland County Observer of November 27 th, 1855 , says: "There is sufficient water-power to be found in the streams (of Richland county) to propel a vast amount of machinery. The streams are rapid, and hence, great inducement is extended to the capitalist and machinist."

The prevailing geolegical formations of these counties are the Potsdam sandstone and the Lower Magnesian limestone, the latter generally overlying the former.

When once the streams had cut through the hard, resisting limestone they easily eroded the sandstone to a great depth.

The Potsdam sandstone is found in the river valleys, and the Lower Magnesian limestone is found as a surface work on a greater part of the ridges and in most of the valleys about the heads of the small streams and ravines. The Lower Magnesian is an important formation, not only on account of the large territory which it covers, which is about equal to that of the Potsdam, but because by its decomposition it produces a rich and fertile soil on the ridges which becomes washed down into the val-

[^60]leys, thereby fertilizing the otherwise barren sand which has been derived from the Potsdam.

The soil of this region is fertile. In general, it is a clay soil mixed with vegetable mould and is more or less sandy. in the valleys.

The land upon the hill-sides is generally too steep for cultivation, but as the whole country was originally covered with timber, there is a very little waste land. The timber consists of elm, maple, white, black, and burr oak, basswood, pine and butternut.

This section of the state, owing to its contour, soils and streams, has for its principal industries farming, stock-raising, butter and cheese-making, lumbering (principally in the fine, hard woods), milling and manufacturing of various kinds.

The ridges and streams afford protection and water for stock, and the soil is especially well adapted to the growing of tame grasses.

Winter wheat grows well on the ridges, and corn, potatoes, et cetera, thrive in the sandy loam of the valleys. Fruit trees do well, particularly the peach.

The economic value of the geological formations of this region is not great. There are some iron, copper, lead, good buildingstone, lime and mineral water.

A very good building-stone is obtained from the dolomitic layers of the Potsdam ; it is quite hard, dresses easily, and when finished makes a handsome building and withstands the action of the weather.

## PEOPLING OF THE COUNTIES.

Crawford county, in 1850, had a population of 2,499. Of this number $76.29 \%$ were native bcrn Americans. At this time Richland county had a population of 903 , nearly all of whom were native born. The foreign element was only $6 \%$ of the whole.

In 1860 the population of Crawford county was 8,069 , and there was a percentage of $72.6 \%$ native born.

The census of 1860 shows Richland county to have had a
population of 9,733 . The percentage of foreign born at this time was $10.4 \%$.

In both 1850 and 1860 each county had a large percentage of native born.

The larger foreign population is in the western half of the county. The town of Lynxville is a notable exception. This town and the town of Scott have the smallest percentage of foreign born population in the county, 11.44 and $12.37 \%$, respectively.

The towns of Prairie du Chien, Wauzeka, Eastman, Seneca, and Freeman are those which have a percentage of native born below that of the county. The following table shows the leading foreign nationalities in these towns:

| Towns. | Nationality. | Per Cent. |
| :---: | :---: | :---: |
| Fastman .... |  | 12.39 |
| $\underset{\text { Praeman }}{\text { Praie du ciolion. }}$ | Norwegian | 24.10 |
| Sraireca | English | 12.72 |
| Wauzeka | Germau | 17.28 |

In Richland county the smallest percentages of foreign born population are found in the towns of Bloom, Sylvan, Forest, Richland, Eagle, Buena Vista, Rockbridge, and Willow ; in the towns of Richmond, Richwood, and Dayton the percentages of native born are about the same as that of the county, and in the towns of Akan, Westford, Ithaca, Henrietta, and Marshall the percentages of native born are below that of the county.

In Westford 15.64\% of the population are Prussians; in 4 kan 11.72\% are from England, Ireland, Scotland and Wales; in Henrietta 11.83\% are Irish, and in Marshall 13.24\% are from the British Isles.
$28.85 \%$ of the population of Crawford county in 1850 were born in Wisconsin.

In Richland county those who were born in the state constitute $16.72 \%$.

In 1860, $30.3 \%$ of the people in Crawford county were born in Wisconsin, and in Richland county, $27.82 \%$.

In both Crawford and Richland counties there were more people born in the state of New York than in any other state or
country, excepting the state of Wisconsin. This is true for 1860 , as well as for 1850 .
In Crawford county in 1850 those born in New York reached $15 \%$, only $2 \%$ less than the percentage of those born in Wisconsin.

Those born in New York and living in Crawford county in 1860 constituted $10.94 \%$ of the county's population. No town in the county has a much larger or much smaller percentage, although the percentages for the town of Freeman and Marietta are somewhat smaller.

There is more variation in the town percentages of the New York population in Richland county in 1860. The entire county average is $12: 45 \%$.

The large percentages of the county populations native to the north-western states, including Wisconsin, are noticeable:

| County. | Year. | Percentage. |
| :---: | :---: | :---: |
| Crawford | 1850 1850 | 49.73 49.8 |
| Richland . . ............. | 1880 1860 1800 | 47:20 |
| Richland .... .......... | 1860 | 59.00 |

All of the tables on nativity are to be found in the appendix. a correction of the united states and the state census.

The population which was obtained from the original records is placed in the first column of the following tables. From the original records the assistant marshal sends the totals from each town ; these are found in the seventh census of the United States population. Column two shows the variations from the printed turns of the United States census, and column three shows the variations from the returns as given in the Wisconsin blue book.

The star indicates that the returns exceed the correct number ; the minus sign that they are less than the correct sum, and a blank indicates that there was no variation.

| County. | Year. | (1) | (2) | (3) |
| :---: | :---: | :---: | :---: | :---: |
| Crawford....... | 18501 |  |  |  |
| Richland.... ... | 1850 | 2, $903{ }^{2}$ |  | ${ }_{*} 60$ |
| Richland.. | 1860 | 8,069 9,733 | -1 -1 | -1 -1 |

POPULATION-1860.
Crawford County.


Richland County.

| Towns. | (1) | (2) | (3) |
| :---: | :---: | :---: | :---: |
| Akan | 341 |  |  |
| Buena Vista. |  | - ${ }^{\text {a }}$ | ${ }_{*}^{*}$ |
| Dayton. ... | 963 494 |  | *1 |
| ${ }_{\text {Eagrest }}$ Eagle | 719 | . |  |
| Henrietta | 565 | $\cdots$ |  |
| Ithaca. | ${ }_{951}^{432}$ | * 1 | * |
| Marshall | 529 |  |  |
| Richmond | 1,075 |  |  |
| Richmond. | 597 |  | i |
| Rockbridge | 546 |  |  |
| Sylvan | 361 |  |  |
| Willow | 409 |  |  |
|  | 448 |  |  |

${ }^{1}$ The marshals failed to hand in the statistics for Crawford and Richland counties in 1850.
${ }^{2}$ John W. Hunt of this city (Madison) compiled a table from the official returns, which were published in the Richland County Observer of November 27, 1855, and found the aggregate population of Richland county in 1850 to be 903. The error in the Wisconsin Blue Book seems to be a typographical one.

## APPENDIX.*

Table I-NATIVITY OF POPULATION OF CRAWFORD COUN'TY-1850.


[^61]Table I.-Continued.

| States. | Number. | Percentage. |
| :---: | :---: | :---: |
| British Isles: |  |  |
| Ireland. | 8 | . 32 |
| Scotland | 77 | 3.08 |
| Wales . | 172 | . 68 |
| Total | 104 | 4.16 |
| German States: |  |  |
| Bavaria . . |  |  |
| Germany | 1 | . 04 |
| Hanovei . | 126 | 5.04 |
| Prussia. | . 1 | . 04 |
| Total . | 129 | 5.16 |
| Continental Europe (Excluding German States) : |  |  |
| $\underset{\text { lrance }}{\text { Relgium }}$. | 1. | . 04 |
| Holland . | 26 | 1.04 |
| Norway | 164 | . 04 |
| Poland S (itzeriand | + | 6.56 12 |
| Switzerland | 18 | - .72 |
| Total | 213 | 8.52 |
| Nativity not given |  | 2 |
| Unknown . .. ............. |  | 1 |

Table II-N'ATIVITY OF POPULATION OF RICHLAND COUNTY-1850.

| States. | Numbsr. | Percentage. |
| :---: | :---: | :---: |
| New England States: |  |  |
| Connect:cut . | ${ }_{6}^{13}$ | 1.43 |
| Massachusetts. | 11 | 1.21 |
| New Hampshire | 6 | . 66 |
| Rhode Island . . | 2 | . 22 |
| Vermont . . |  | 2.20 |
| Total | 58 | 6.38 |
| Middle States: |  |  |
| Delaware . | ${ }_{10}^{2}$ | 1.10 |
| New Jersey | 10 | $\begin{array}{r}\text { 1.44 } \\ \hline 14\end{array}$ |
| New York. | 136 | 14.96 |
| Pennsylvanza | 3 i | 3.41 |
| Total | 183 | 20.13 |
| Southern States: |  |  |
| Alabama . .... | 45 | 4.95 |
| North Carolina | 11 | 1.21 |
| South Carolina |  | 1.22 |
| Tennessee . | 14 50 | 1.54 |
| Total . | 123 | 13.53 |
| Southwestern States: |  |  |
| Arkansas . Míssouri. | 17 | 1.87 |
| Total | 18 | 1.98 |
| Northwestern States:* Illinois . ......... | 84 | 9.24 |
| Indiana... | 103 | 11.33 |
| Iowa. | 5 | . 55 |
| Michigan Oh:o... | 10 97 | 1.10 10.67 |
|  |  |  |
| Total . | 299 | 32.89 |
| Wisconsin | 150 | 16.61 |
| Nativity not known | . 15 | 1.65 |
| British America: Canada | 1 | . 11 |
| Lower Canada | 1 | . 11 |
| Nova Scotia .. | $\stackrel{1}{3}$ | . 11 |
| Upper Canada |  | . 33 |
| Total | 6 | . 66 |
| Europe: | 18 | 1.99 |
| $\underset{\text { Germany }}{\text { Lengland }}$. | 18 | 1.93 |
| Treland. | 4 | . 44 |
| Norway ${ }_{\text {Switzerland }}$ | 9 | . 11 |
| Switzerland |  |  |
| Total | 50 | 5.50 |

*Txclud ng Wisconsin.
Note.-Enumeration included 15 of unknown nativity.

Table III-COMPARISON OF PERCENTAGES OF NATIVITX OF THE POPULATION OF CRAWFORD COUNTY, ASI SHOWN BY THE UNITED STATES CENSUS OF 1860.

| County and Towns. | Wisconsin. | North Western States Wisconsin | Total North Western States. | New York. | Middle States New York | Total Middle States. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Crawford county.. | 30.3 | 16.9 | 46.9 | 10.9 | 6.5 | 17.6 |
| Clayton . ........... | 24.7 | 17.8 | 42.5 | 12.3 | 6.5 | 18.9 |
| Erastman | 30.1 | 10.2 | 40.3 | 13.6 | 5.3 | 19.0 |
| Hreeman | 20.5 27.0 | ${ }_{31}^{16.8}$ | 37.3 | 6.4 | 7.4 | 13.8 |
| Lynxvilie | 27.8 | 31.6 | 58.3 59.4 | 11.0 | 8.0 | 19.0 |
| Marietta | 32.6 | 23.9 | 56.5 | 74.8 | 11.6 | 23.9 18.8 |
| Prairie du Chien.. | 34.3 | 8.7 | 43.0 | 12.0 | 4.0 | 16.0 |
| Scott . | 27.4 | 27.7 | 55.1 | 9.0 | 12.0 | 21.0 |
| Seneca | 24.7 | 17.8 | 42.5 | 12.3 | 6.5 | 18.8 |
| Wauzeka | 32.3 | 19.6 | 51.9 | 11.0 | 7.8 | 18.8 |
| Wauzeka | 32.8 | 9.3 | 42.3 | 10.7 | 4.5 | 15.2 |

Table III-Continued.

| County and Towns. | New England States. | Southern States. | South <br> Western <br> States. | Unknnwn <br> Illegible. | Miscellaneou: |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Crawford county .... | 5.4 | 1.5 | . 40 | . 16 | . 03 |
| Clayton. .......... | 4.1 | 1.4 | . 24 |  |  |
| Ereeman | 2.8 | . 6 | . 60 | . 75 |  |
| Haney. | 5.8 | 3.2 | . 21 |  | . 21 |
| Lynxville | 3.8 | . 7 | . 21 | . $03 \times$ |  |
| Marietta. | 5.6 | 4.4 | . 14 |  |  |
| Prairie du Chien | 5.1 | 1.3 | . 8 | . 6 | \% 04 |
| Seneca. | 6.6 4.0 | $\begin{array}{r}\text { 4. } \\ \hline\end{array}$ | . 6 | . 3 |  |
| Utica | 10.4 | 1.7 | 1.6 |  |  |
| Wauzeka | 4.0 | . 01 |  | 1.6 | . 01 |

Table III-Continued.

| County and Town. |  |  |  |  | - |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Clawford county | 3.7 | 11.6 | 4.4 | 5.1 | . 63 | 1.5 | 27.4 | . 18 |
| Eastman | 6.0 | 9.5 17.0 | 7.4 | 5.7 |  | . 2.6 | ${ }^{20.7}$ | 12 |
| Freeman | 1.5 | 10.7 | 24.2 | 2.0 |  | $\stackrel{2.6}{.77}$ | ${ }^{35.6}$ |  |
| Haney | . 8 | 8.0 | 2.1 | 1.9 | .... | . 86 | 13.8 |  |
| l ynxville | 3.4 | 64 |  | 1.1 |  | . 03 | 11.4 |  |
| Marietta | 3.3 | 7.9 | . 14 | 2.8 |  | . 14 | 14.4 |  |
| Prairie du Chien | 6.6 | 13.0 | . 33 | 8.1 | 1.3 | 3.0 | 32.8 | . 33 |
| Scott. | . 6 | 11.1 |  | . 3 |  |  | 12.3 | . 3 |
| Seneca | .4 | 25.8 |  | 3.1 | 1.3 | 2.1 | 32.8 |  |
| Whauzeka | .3 3.1 | 7.5 11.1 | 8.0 1.0 | 17.6 |  | . 82 | 16.8 |  |
| Wauzeka | 3.1 | 11.1 | 1.0 | 17.3 | 2.2 | 1.7 | 36.7 | . 14 |

Table IV-COMPARISON OF PERCENTAGES OF NATIVITY OF POPULATION OF R..HLAND COUNTY, AS SHOWN BY THE, UNITED STATES CENSUS OF 1860.

| County and Tuwns. | Wisconsin. | North Western States Wisconsin | Total North Western <br> States | New York. | Middle <br> States - <br> New York | Total Middle States. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Richland county | 27.8 | 31.1 31.0 | 58.3 62.9 | 12.4 | 7.7 | 20.1 11.1 |
| Akan . ........... | 31.9 21.7 | 31.0 66.8 | 62.9 88.5 | 3.2 3.0 | 7.9 2.2 | 11.1 |
| Buena vista | 24.1 | 18.6 | 43.7 | 25.9 | 9.7 | 35.6 |
| Dayton | 23.3 | 36.6 | 59.9 | 5.9 | 15.6 | 21.5 |
| Eagle. | 33.3 | 41.4 | 74.7 | 3.1 | 5.6 | 8.7 |
| Forest | 22.8 | 31.9 | 54.7 | 12.2 | 23.2 | 35.4 |
| Henrietta | 30.9 | 26.6 | 57.5 | 11.8 | 3.7 | 15.5 |
| Ithaca. | 27.4 | 10.8 | 38.2 | 30.5 | 2.1 | 32.6 |
| Marshall | 21.7 | 47.1 | 68.8 | 3.0 | 7.2 | 10.2 |
| Richland | 26.4 | 34.0 | 60.4 | 12.6 | 6.5 | 19.1 |
| Richmond. | 31.2 | 30.7 | 61.9 | 6.2 | 12.9 | 19.1 |
| Richwood | 37.2 | 30.9 | 68.1 | 5.8 | 4.9 | 10.7 |
| Rockbridge | 27.5 | 21.8 | 49.3 | 14.7 | 5.5 | 20.2 |
| Sylvan... | 22.7 | 49.9 | 72.6 | 6.9 | 16.0 | 22.9 |
| Westford | 32.3 308 | 19.1 |  |  |  | 11.2 28.6 |
| Willow | 30.8 | 23.5 | 54.3 | 23.7 | 4.9 | 28.6 |

Table IV-Continued.

| County and Towns. | New England States. | Southern States. | South Western States. | Unknown Illegible. | Miscellaneous. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Richland county | 5.4 | 4.4 | 3.40 | . 1 | . 04 |
| Akan. .......... | 1.5 | 2.6 4.4 | . 30 | $\xrightarrow{.} 8$ |  |
| Buena Vista | 11.4 | 1.1 |  | . 3 | . 30 |
| Dayton | 2.4 | 3.8 |  |  |  |
| Eagle | 0.8 | 8.1 | . 80 |  |  |
| Forest | 1.2 | $\begin{array}{r}\text { 4.8 } \\ \hline\end{array}$ |  |  |  |
| Ithaca . | 10.1 | 3.2 | . 30 | . 10 |  |
| Marshall | 1.5 | 2.5 | . 40 |  |  |
| Richland | 10.8 | 3.6 | . 20 | . 09 | . 08 |
| Richmond | 0.5 | 4.7 | .17 |  |  |
| Richwood | 2.9 | 7.2 | . 64 | . 24 | . |
| Rockbridge | 15.0 | 6.8 |  |  |  |
| Sylvan | ${ }_{1}^{2.9}$ | 1.4 | . 24 |  | ....... |
| Westford Willow | 1.9 4.7 | 9.5 3.6 | . 24 |  |  |

Table IV-Continued.

| County and Towns. |  |  | . |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Richland county | 1.60 | 4.90 | . 85 | 2.70 | . 40 | 10.40 | . 01 |
| Akan . ............ | 1.20 | 11.70 | 4.70 | 3.50 |  | 22.28 |  |
| Bloom Xio.. | 2.79 | 1.30 3.10 | . 10 | 1.90 | . 50 | 88.60 | . 10 |
| Buena, Vista | 2.79 .40 | 3.10 7.50 | . 10 | 4.04 | . 5 | 11.90 |  |
| Eagle. | . 13 | 2.20 | 3.40 | . 55 | . 40 | 6.70 |  |
| Forest | 1.06 | 2.10 |  | . 71 |  | 3.90 |  |
| Henrietta | 3.99 | 14.12 |  |  | . 23 | 18.30 |  |
| Ithaca | 4.20 3.02 | 2.90 13.20 |  | 7.80 .4 | 16.60 | 15.45 16.70 |  |
| Marshall | 3.83 | 13.40 3.40 |  | 1.02 | . 40 | 5.70 |  |
| Richmond | 2.01 | 1.50 |  | 6.80 | 1.30 | 11.70 |  |
| Richwood | 1.80 | 3.60 | 4.30 | . 40 |  | 10.10 |  |
| Rockbridge | . 36 | 8.06 |  | . 40 | 3.05 | 8.80 3.10 |  |
| Sylvan . <br> Westford | . 48 | 2.20 7.30 | 2.20 | 15.60 | 3.05 | 35.10 250 |  |
| Willow . | . 89 | 4.6 |  | . 70 | 2.70 | 8.90 |  |

Table V-NATIVITY OF CRAWFORD COUNTY BY TOWNS AS SHOWN BY CENSUS OF 1860.


Table V-Continued.

| County and Towns. | Wisconsin. | Northwest States Wisconsin. | Total Northwest States. | New York. | Middle States New York | Totap Middle States. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Crawford county | 2,443 | 1,363 | 3,806 | 381 93 | 531 | 1,412 |
| Eastman . ${ }_{\text {co....... }}$ | 226 | 230 82 | 3,456 |  | 59 | 152 |
| Freeman | 160 | 131 | ${ }_{221} 29$ | 109 | 48 | 152 |
| Haney | 125 | 145 | 270 | 51 | ${ }_{37}$ | 108 |
| Cynxville | 73 | 83 | 156 | ¢9 | $\stackrel{24}{ }$ | 63 |
| Marletta | 222 | 163 | 385 | 49 | 79 | 128 |
| Prairie du Chien . | 823 | 210 | 1,033 | 289 | 96 | 385 |
| Scott. | 91 | 92 | 183 | 30 | 40 | 70 |
| Seneca | 58 | 41 | 99 | 29 | 15 | 44 |
| Utica | 202 | 123 | 325 | 69 | 49 | 118 |
| Wauzeka | 222 | 63 | 285 | 73 | 31 | 104 |

Table V-Continued.

| 'Towns. |  | 宽 |  |  |  |  | gi ¢ ¢ Ón |  | 舭 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Clayton | 6 | 6 |  | 2 |  | 12 |  |  |  |
| Eastman | 7 | 7 | 2 | 1 |  | 6 |  |  |  |
| Freeman | 3 | 9 | 52 | 2 | 1 | 1 |  |  |  |
| Inaney ${ }^{\text {l }}$, | 5 |  | 16 | 3 |  | 9 |  |  |  |
| Marietta. | 2 | 5 | 19 | 1 | 1 | 8 |  |  |  |
| Prairie du Chien | 25 | 10 | 35 | 12 | 2 | 38 |  |  | 1 |
| Scott. | 4 | 4 | 8 | 1. |  | 5 |  |  |  |
| Seneca | 1 |  | $\begin{array}{r}8 \\ 3 \\ \hline\end{array}$ | 2 |  | 3 |  |  |  |
| Wtica | 9 | 3 | 11 | 3 |  | 30 |  |  |  |
| Wanzeka |  |  | 3 | 7 | 1 | 16 |  | 1 |  |
| Totals | 63 | 45 | 147 | 36 | 5 | 145 |  | 1 |  |

[^62]Table V-Continued.

| County and Towns. | New England States. | Southern States. | Southwest States. | Unknown Ille ible. | $\begin{aligned} & \text { Miscellan- } \\ & \text { ous.* } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Crawford county | 441 | 127 | 34 | 14 | 16 |
| Clayton . . . . . | 34 | 12 | 2 |  | 1 |
| Freeman. | 68 | 4 | ${ }_{2}^{5}$ |  |  |
| Hariey | 23 | 15 | 1 |  | 1 |
| Lynxville | 10 | 2 |  | 1 |  |
|  | $\begin{array}{r}38 \\ 122 \\ \hline\end{array}$ | $\stackrel{30}{33}$ | 19 | 13 |  |
| Prairie du Chien | 122 | 13 | 19 | 13 | 1 |
| Seneca | 9 | 2 |  |  |  |
| Utica | 65 27 | 11 | 1. | 3 | 1 |
| Wauzeka | 27 | 1 |  |  |  |

Total New England, Southern, Southwestern States, Unknown, Illegible and Miscellaneous

Table V-Continued.


Total Southern and Southwestern States
*Miscellaneous includes tive born in Mexico; four, at sea; two, British Pos sessions (unclassified) ; one each in Java, Victory, Beroes, Jerustac, $\dagger$ and Rocky Mountains (not specified).
$\dagger$ This word while not absolutely illegible was nct plain enough to enable the writer to locate the place.

Table V－Continued．

| County and Towns． |  |  |  |  | \％ | 荡 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Crawford county Clayton | 188 | ． | 13 | 57 | 27 | 8 | 6 | 1 |
| lastman．． | 5 | ．．．．． |  | 12 | 12 | 1 |  |  |
| Freeman | 5 | ．． |  |  |  | 7 | ． |  |
| Haney | 4 |  |  |  |  |  |  |  |
| Lynxville | 9 |  |  |  |  | ． | ． | ， |
| Marietta－．．．．．．．． | 22 |  |  | $\ddot{1}$ |  |  |  |  |
| Prairle du Chien ． | 88 | ．．． | 13 | 38 | ${ }^{15}$ |  | － |  |
| Scott ． <br> Seneca | 2 | ．．． |  |  |  |  |  |  |
| Utica | 2 | ．． |  |  |  |  |  |  |
| Wauzeka | 15 | ． |  | 5 |  |  |  | － 1 |

Total，British America
300

Table V－Continued．

| Towns． | $\begin{aligned} & \text { 品 } \\ & \text { 菏 } \\ & \text { B0 } \\ & \text { 品 } \end{aligned}$ | $\dot{0}$ 0 0 0 0 d | 宫 |  | ＋ |  | 这 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Clayton． | 14 |  | 66 |  |  | 61 |  |  |
| Eastman ． | 29 | $\cdots$ | 99 | $\cdots$ |  | 32 |  |  |
| Freeman | 24 | － 3 | 59 | 1 | ．．．．．．．．．． | 188 | …… | $\cdots$ |
| Haney ．． | 19 |  | 18 | $\cdots{ }^{1} \cdot{ }^{1}$ |  | 10 | ．．． |  |
| Lynxville． Marietta | 5 |  | 11 | － $\begin{array}{r}1 \\ 6\end{array}$ | $\cdots$ | ．．．．．．．． | $\cdots$ | ． |
| Mrairie du chie | 10 37 |  | 37 253 | 6 19 | 1 4 | ．．．${ }_{8}$ | 1 | ．． |
| Scott ．．．．．． | 9 |  | －27 | 1 |  |  | ．．．．．．． | ．．．．．．．． |
| Seneca | 30 |  | 25 | 4 | ．．．．．．．．．． | ．．．．．．．．．． | …．．．．．．． |  |
| Utica | 6 |  | 41 | 4 | ．．．．． | $\cdots{ }^{18}$ | $\cdots \cdots$ | $\xrightarrow{\square} \mathrm{Cl}$ ． |
| Wauzeka | 6 |  | 63 | 6 | ． | 7 |  |  |
| Totals | 189 | 3 | 699 | 47 | 5 | 354 | 3 | 1 |



Table V－Continued．

| Towns． |
| :--- |

Total for Prussia，Germany，Wurtemburg，Bavaria， Mecklenberg，Baden，and Saxony

Table V－Continued．

| Towns． |  |  | （ |  | ＊${ }_{\text {＊}}^{\text {¢ }}$ | 句 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Clayton |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Prairie du čulen |  |  |  |  |  |  |  |
| Seneca |  |  |  |  |  |  |  |
| Utica． |  |  |  |  |  |  | 4 |
| Wauzeka | 1 |  |  | 2 | 1 |  |  |
| Totals | 14 | 3 | 2 | 9 | 2 | 1 | 11 |

Total，
Leipsic，and
Darmstadt Cassel．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 42
Table V－Continued．

| －Towns． |  |  |  | \％ |  | \％ \％ \％ z |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Clayton |  |  |  |  |  |  |
| Freeman |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Haney |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Prairie du ChienScott |  |  |  |  |  |  |
| Scott ． <br> Senéca |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Seneca <br> Utica |  |  |  |  |  |  |
| Totals | 5 | 5 | 4 | 4 | 3 | 3 |


Table V－Continued．

| Towns． |  |  | ＊ |  | 第 | ． | 宫 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Clayton |  | 3 |  |  |  |  |  |  |
| Eastman |  | 5 | 17 | ．．．．． | 4 | ．．．． | 1 | $\cdots$ |
| Freeman |  | 1 | 3 | ．． | 2 |  | ．．．．．．． | ． |
| Haney |  |  | 4 |  |  |  | ．．．．．． | ．．．．．． |
| Lynxville |  | 1 |  |  | ．．．．．．．． |  | ．．．．． | ．．．．．． |
| Marietta ${ }_{\text {Prair }}$ |  |  | 1 | $3{ }^{3}$ |  |  | $\ldots . .$. | $\ddot{3}$ |
| Prairie du Chien |  | 44 | 20 | 33 | 3 |  | 2 | 3 |
| Scott ．，．． |  |  |  |  |  |  |  |  |
| Seneca ． |  | 1 | 4 | 3 | ．．．．．．．．． | ．．．．${ }^{\text {－}}$ | ．．．．．${ }^{\text {a }}$ | ． |
| Utica． |  |  | $\frac{1}{5}$ | $\cdots$ | ．．．．．．．．． | 1 |  | ．．．．．． |
| Wauzeka－ |  | 4 | 5 | 15 | ， | 4 | 1 | ．．．．．．．． |
| Totals |  | 59 | 55 | 51 | 9 | 5 | 4 | 3 |

Total，Continental Europe，excluding Scandinavia and the German States

[^63]Table VI-NATIVITY OF RICHLAND COUNTY BY TOWNS, AS SHOWN BY CENSUS OF 1860.


Table VI-Cont:nued.

| County and Towns.* | Wisconsin. | Northwest States Wisconsin | Total Northwest States. | New York. | Middle States New York | Total Middle States. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Richland county | 2,710 | 3,034 | 5,744 | 1,213 | 753 | 1,966 |
| Akan | 109 | 106 | 215 | 11 | 27 | 58 |
| Bloom | 115 | 352 | 467 | 16 | 12 | 29 |
| Buena Vista | 232 | 179 | 411 | 249 | 93 | 342 |
| Dayton | 115 | 181 | 296 | 29 | 77 | 106 |
| Lagle . | 240 | 298 | 538 | 22 | 41 | 63 |
| Forest | 129 | 180 | 309 | 69 | 131 | 200 |
| Henrietta | 133 | 115 | 248 | 51 | 16 | 67 |
| Ithaca. | 261 | 103 | 364 | 290 | 20 | 310 |
| Marshall | 115 | 249 | 364 | 16 | 38 | 54 |
| Richland | 284 | 366 | 650 | 135 | 30 | 235 |
| Richmond | 186 | 183 | 369 | 37 | 77 | 114 |
| Richwood | 289 | 240 | 529 | 45 | 38 | 80 |
| Rockbridge . ....... | 150 | 119 | 269 | 80 | 20 | 110 |
| Sylvan . .......... | 82 | 180 | 262 | 25 | 47 | 72 |
| Westford . ......... | 132 138 | 105 | ${ }_{243}^{210}$ | +32 | 14 22 | +46 |
| Willow . . . . . . . . . | 138 | 105 | 243 | 106 |  | 128 |

Table VI－Continued．

| Towns． |  | 离 |  |  |  |  | 兌 |  | 䈀 | 8080 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Richland county | 35 | 43 | 75 | 51 | 26 | 244 | 34 | 2 | 1 | 3 |
| Akan ．．．．．．．．．．．． | 1 |  |  |  | 2 | 2 |  |  |  |  |
| Bloom Vista |  |  |  | 9 | 7 | 31 |  |  |  |  |
| Buena Vista <br> Dayton． | 25 2 | 13 | 2 1 | 9 | 7 | $\stackrel{3}{2}$ | 1 | 1 |  |  |
| Eagle． |  |  | 2 |  |  | 4 | 6 |  |  |  |
| Horest | 1 |  | 2 |  | 2 | 2 |  |  |  |  |
| Henrietta | 11 | 1 | 1 | 11 |  | 14 |  |  |  |  |
| Ithaca | 30 | 6 | 13 | 11 | 5 | 41 5 | ${ }_{2}^{2}$ | 1 |  |  |
| Marshall | 2 20 |  | 12 | 22 | 5 | 5 47 | $\stackrel{2}{2}$ | 1 | 1 |  |
| Richmond |  |  | 2 |  |  | 1 | 13 |  |  |  |
| Richwood | 3 | 2 | 2 | 2 |  | 14 | 5 |  |  |  |
| Rockbridge | 2 | 11 | 1 | 4 | 2 | 62 |  |  |  |  |
| Sylvan |  | 1 | 2 |  |  | 5 | 1 |  |  |  |
| Westford | 4 |  |  | 1 | ${ }_{1}^{2}$ |  | 1 |  |  |  |
| Willow ．．．．．． | 4 | 2 | 1 | 1 | 1 | 12 |  |  |  |  |
| Total，New England StatesTotal，Southwestern StatesTotal，Western States |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |

Table VI－Continued．

| County and Towns． | New England States． | Southern States． | Southwest States． | Unknown Illegible． | Miscellan－ eous． |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Richland county | 524 | 430 | 36 | 11 | 4. |
| Akan | 5 | ${ }^{9}$ | 1 | 1 |  |
| Bloom ${ }^{\text {Buena }}$ Vista | ${ }_{110}^{1}$ | 11 |  | ${ }_{3}^{1}$ | 3 |
| Buena Vista | 110 12 | 19 | 2 | 3 |  |
| Eagle． | 6 | 58 | 6 |  |  |
| Forest | 7 | 27 |  |  |  |
| Henrietta | 18 | 20 |  |  |  |
| Ithaca | ${ }_{8}^{96}$ | 30 | 3 | 1 |  |
| Marshall | ${ }_{116}^{8}$ | $\stackrel{19}{29}$ | 2 | 1 | 1 |
| Richmond | 3 | 28 | 13 |  |  |
| Richwood | 23 | 56 | 5 | 2 |  |
| Rockbridge | 8 | 37 5 |  |  |  |
| Svlvan | 8 | 5 39 | 1 | 2 |  |
| Willow ． | 21 | 16 |  |  |  |
|  |  |  |  |  |  |

Total，New England States，Snuthern States，Southwestern States，Unknown and Illegible，and Miscellaneons States 1,005

Table VI－Continued．


Table VI－Continued．

| County and Towns． |  |  |  |  | － |  | $\begin{aligned} & \text { 毕 } \\ & \text { 苟 } \\ & \text { 花 } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Richland county | 3 | 52 | 46 | 22 | 21 | 2 | 10 |
| Akan ．．．．．．．．．．． |  | 1 | 3 |  |  |  |  |
| Buema Vista | 2 | 21 | 3 |  |  |  | 1 |
| Dayton ．．．． | 2 | 2 | 3 |  |  |  |  |
| iagle． |  |  | i |  |  |  |  |
| Forest |  |  |  |  | 3 |  | 3 |
| Henrietta |  |  |  |  |  |  | 3 |
| Ithaca |  | 12 |  | 10 |  |  |  |
| Marshall Richland | 1 | i | 1 1 | 9 1 | 5 1 | 1 | 3 |
| Richmond ． |  |  |  | 1 | 11 |  | 3 |
| Rkehwood． |  |  | 13 | 1 |  |  |  |
| Rockbridge |  |  | 2 |  |  |  |  |
| Sylvan |  |  |  |  |  |  |  |
| Westford |  |  | 2 |  |  |  |  |
| Willow |  | 1 | 2 |  | 1 |  |  |

[^64]Table VI－Continued．

| County and Towns． |  |  |  | $\stackrel{ \pm}{ \pm}$ | 芴 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Richland county | 176 | 254 | 43 | 5 | 78 | 5 |
| Akan．．．．．．．．．．．．． | 4 | 24 | 9 | 3 | 16 |  |
| Bloom ${ }^{\text {Buone．．．}}$ | 4 | ${ }_{7}^{2}$ |  | 1 | 1 |  |
| Buena Vista Dayton ． | 15 | ${ }_{10}^{7}$ | 8 |  | ${ }^{1}$ |  |
| Eagle．． | 13 | 2 | 1 |  |  |  |
| Forest | 8 | 4 |  |  |  |  |
| Henrietta | 9 | 51 | 1 |  |  |  |
| Ithaca | 13 | 13 | ${ }_{10}^{2}$ |  |  |  |
| Marshall ． | 29 | 31 | 10 |  |  |  |
| Richland． | 21 | 16 |  |  |  |  |
| Richmond ． Richwood | 13 | 3 | 3 | 1 | 33 |  |
| Rockbridge | 19 | 20 | 5 |  | 3 |  |
| Sylvan ．．． |  |  | 2 |  |  |  |
| Westford | 5 | 23 | 2 |  | 4 | 5 |
| Willow | 3 | 18 | ．．．．．．．．． |  |  |  |

Total，British Isles
478
Scandinavia 83

Table VI－Continued．

| County and Towns． |  |  | $\begin{aligned} & \dot{c} \\ & \text { i0 } \\ & 0 . \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ | 第 |  | 号 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Richland county ．．．．． | 198 | 1 | 12 | 9 | 4 | 8 |
| Akan ．．．．．． | 3 | ．．．．．．．．． | 1 |  |  |  |
| Buena Vista | 9 |  | 4 |  |  | 2 |
| Dayton ．．．． | 10 |  | 5 | 1 |  | 1 |
| Eagle ． | 2 |  |  | 2 |  |  |
| Forest | 3 | 1 |  |  |  |  |
| Henrietta | 71 |  |  | 1 |  | 1 |
| Marshall | 2 |  |  |  |  |  |
| Richland． | 3 | ．．．．．．．．． |  |  | 4 |  |
| Richmond． | 28 |  | 2 | 1 |  |  |
| Richwood．． |  |  |  | 1 |  |  |
| Rockbridge ． | 1 |  |  |  |  |  |
| Westford ． | 64 |  |  |  |  |  |
| Willow ． |  |  |  | 3 |  |  |

Total，Prussia，Germā̄̄y，Wurtemberg，Bavaria，Meckien－ berg，and Baden

Table VI-Continued.



Table VI-Continued.

'Lctal, Miscellaneous and Continental Lurope, excluding Scandinavia and the German States

Table VI-Continued.

| County and Towns. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Richland county | 156 | 478 | 83 | 260 | 40 | 1,018 |
| Akan . ............ | 4 | 40 | 16 | 12 |  | 76 |
| Bloom |  | 7 |  |  |  | 7 |
| Buena Vista | 27 | 30 | 1 | 19 | 5 | 83 |
| Daẏton . | 2 | 37 |  | 20 4 |  | 48 |
| Eagle. | 1 | 16 | 24 | 4 |  | 48 |
| Forest Henrietta | ${ }_{17}^{6}$ | 61 |  | 4 | i | 79 |
| Ithaca. | 40 | 28 |  | 75 | 5 | 147 |
| Marshall. | 16 | 70 |  | 2 |  | 88 |
| Richland | 9 | 37 |  | 11 | 4 | 61 |
| Richmond . | 12 | 9 |  | 41 | 8 | 70 |
| Richwood. | 14 | 28 | 33 | 2 | ........... | 48 |
| Rockbridge | 2 | 44 8 | ........... | 1 | $\cdots \cdots \cdots$ | 11 |
| Sylvan ${ }_{\text {Westford }}$ | 2 | 30 | 9 | 64 | 2 | 105 |
| Willow . | 4 | 21 |  | 3 |  | 28 |

## OCCUPATIONS.

The following is the classification which was followed in grouping the occupations as they are given in the United States Census Reports, which apply to both Crawford and Richland counties. ${ }^{1}$
I. Laborers.-Servants, wood-choppers, sawyers, railroad hands, loggers, and lumbermen (with no capital).
II. Capitalists and Merchants.-Hotel-keepers, inn-keepers, leather dealers, wheat buyers, bankers, warehouse-men, jewelers, and if possessed of large enough capital, druggists, millers, lumbermen, brewers and land agents.
III. Artisans and Mechanics.-Gun-smiths, wood-turners, harness-makers, iron moulders, blacksmith, tanners, carpenters, stone cutters, mill wrights, brick makers, wagon-makers, coopers, shoe-makers, shingle-makers, tin-smiths, master masons, wheelwrights, and saddlers.
IV. Professional Men.-Surveyors, artists, editors, printers and publishers, dentists, city engineers, school teachers, ministers, lawyers, physicians, music teachers.

[^65]V. Smaller Trades and Professions.-Cooks, saloon-keepers, hostlers, teamsters, and all others who handle horses, express drivers, engineers (civil, steamboat, railway or stationary), peddlers, barbers, steamboat agents, auctioneers, telegraph agents, tobacconists, house-movers, waiters, millers, undertakers, apprentices, clerks, hat-colorers, chandlers, brewers, bar-tenders, weavers, tailors, watch-makers, painters, printers, nurserymen, plasterers, fiddlers, tinkers, book-keepers, well-diggers, whiskey dealers, silver-smiths, umbrella makers, firemen on railway, managers of news depots, cashiers, ticket agents, porters.
VI. Petty Tradésmen.-Ice dealers, butchers, bakers, grocers, traders, milkmen.
VII. Miscellaneous.-Sailors, raftsmén, stage drivers, students, gentlemen, gamblers, hunters and trappers, miners, pilots, steamboat hands, firemen on steamboats and railways.
VIII. Agriculturists.-Farmers, gardeners, stock owners and dealers in cattle, hogs, and horses.
IX. Officials.-County: Sheriffs, deputy sheriffs, registers of deeds, clerks in county offices. Town: Policemen and constables.
X. Unknown, not given or illegible.

Table VII-OCCUPATIONS FOR CRAWFORD COUNTY-1850.

| Occupation. | Number employed. | Value of real estate. |
| :---: | :---: | :---: |
| Farmers' | 520 | \$117,570 |
| Laborers . | 178 | 6,000 |
| Capitalists and merchants | 68 | 75,650 |
| Artisans and mechanics | 72 | 10,794 |
| Professional men | 14 | 7,800 |
| Smaller trades and professions | 18 | 3,800 |
| Petty tradesmen | 10 | 2,350 |
| Officials . ....... | 8 | $\stackrel{2,400}{2,550}$ |
| Miscellaneous | 13 | 2,550 |
| Not Given, Illegible | 12 |  |
| Totals | 913 | \$228,914 |

Table VIII-OCCUPATION'S FOR RICHLAND COUNTY-1850.

| Occupations. | Number employed. | Value of real estate. |
| :---: | :---: | :---: |
| Farmers | 200 | \$80,301 |
| Laborers. | 33 | , 440 |
| Capitalists and merchants | 7 | 5,700 |
| Artisans and mechanics | 27 | 1,850 |
| Professionai . ..... | 6 | 2,650 |
| Smaller trades and professions | 2 | 500 |
| Not Given, Unknown or Illegible | 5 | 300 |
| Miscellaneous . ..................... | , | 430 |
| Totals | 283 | \$92,171 |

Note-No personal estate is recorded for either Crawford or Richland county in 1850.

Table IX-OCCUPATIONS FOR CRAWFORD COUNTY-1860.

| Occupations. | No. | Real Estate. | Personal <br> Estate. |
| :---: | :---: | :---: | :---: |
| County: |  |  |  |
| Artisans and mechanics | 131 | \$76,810 | \$34,662 |
| Capitalists and merchants | 105 | 328,535 | 178,669 |
| Farmers | 1,014 | 696,339 | 145,934 |
| Illegible | ${ }_{2}^{2}$ | 200 | 112000 |
| Laborers | 403 | 16,525 | 11,989 |
| Mot giveellaneous | 54 | 53,800 | 28,420 |
| Not given Petty trades | 8 | 20,500 | 13,575 |
| Petty trades | 14 | 4,900 | 3,975 |
| Professional . ............. | 38 | 189,000 | 19,585 |
| Small trades, U. S. officials | 123 | 29,550 | 10,775 |
| U. S. officials . | 8 | 20,500 | 13,575 |
| Clayton: ${ }^{\text {a }}$, 10 ende |  |  |  |
| Artisans and mechanics | 10 | \$3,400 | \$1,085 |
| Capitalists and merchants | 6 | 18,975 | 5,177 |
| Farmers. | 114 | 75,130 | 19,474 |
| Laborers | 33 | 500 | 669 |
| Not given Officials. | 25 | 400 | 1010 |
| Professionais | 1 |  |  |
| Smaller trades and professions |  |  |  |
| Eastman: |  |  |  |
| Artisans and mechanics | 11 | \$2,250 | \$430 |
| Capitalists and merchants | 4 | 6,300 | 1,550 |
| Farmers . .................. | 157 | 166,891 | 20,368 |
| Laborers. | 24 | 500 | 380 |
| Not given Officials | 21 |  |  |
| Officials | 1 |  |  |
| $\underset{\text { Professional }}{\text { Smaller trades and }}$ a ${ }^{\text {a }}$ professions | 2 | 700 | 225 |
| Smaller trades and professions | 3 | 2,000 | 275 |
| Freeman: |  |  |  |
| Artisans' and mechanics | 17 | 6,100 | 1,765 |
| Capitalists and merchants | 4 | 43,500 | 27,065 |
| Farmers | 119 | 76,128 | 15,465 |
| Laborers | 55 | 1,200 | 1,719 |
| Not given | 27 | 2,700 | 50 |
| Professional | ${ }_{2}^{2}$ | 5,300 | 400 |
| Smaller trades and professions | 2 | 400 | 200 |
| Haney: |  |  |  |
| Artisans and mechanics |  | 400 3,000 |  |
| Capitalists and merchants Farmers . ................. | $\stackrel{2}{8}$ | 3,000 52,680 | 475 11,240 |
| Laborers | 25 | 1,350 | 770 |
| Not given | 7 |  |  |
| Professional ${ }_{\text {Smaller }}$ trades and professions | 1 | 1,000 | 80 75 |

Table IX - Continued.

| Occupations. | No. | Real Estate. | Personal Estate. |
| :---: | :---: | :---: | :---: |
| Lynxville: |  |  |  |
| Artisans and mechanics | 11 | \$8,250 | \$1,100 |
| Cap talists and merchants | 6 | 7,100 | 3,100 |
| Farmers. | 25 | 16,195 | 5,395 |
| Miscellaneous | 29 4 | 2,300 | 1.155 575 |
| Not given. |  |  |  |
| Professional . ..... | 2 | 100 | 165 |
| Smaller trades and professions. | 1 |  |  |
| Marietta : |  |  |  |
| Artisans and mechanics | 15 | 5,600 | 2,215 |
| Capitalists and merchants | 2 | 8,000 | , 750 |
| Farmers . | 95 | 52,550 | 13,555 |
| Miscorers . | 45 | ${ }^{425}$ | 685 |
| Not given | 19 | 1,200 | 445 |
| Professtonal | ${ }_{2}$ | 700 | 190 |
| Smaller trades and professions | 2 |  | 50 |
| scott: |  |  |  |
| Artisans and mechanics | 2 | 700 | 250 |
| Capitalists and merchants | 56 |  |  |
| Laborers . | 16 | 30,850 300 | 7,967 |
| Not given | 5 |  |  |
| U. S. and other officials | 2 | 900 | 400 |
| Seneca: |  |  |  |
| Artisans and mechanics | 10 | 9,875 | 1,090 |
| Capitalists and merchants | 2 | 1,200 | 900 |
| Farmers | 45 | 38,315 | 5,975 |
| Not given |  |  |  |
| U. S. and other officalis | 1 | 3,000 | 100 |
| Prairie du Chien: |  |  |  |
| Artisans and mechanics | 103 | 34,610 | 22,405 |
| Capitalists and merchants | 67 | 206,670 | 131,950 |
| Farmers . | 79 | 47,100 | 19,255 |
| Laborers | 98 | 6,850 | 4,690 |
| Illegible | 2 | 200 | 200 |
| Miscellaneous | 43 | 52,600 | 27,400 |
| Not given | 25 | 600 | 500 |
| Petty trades | 13 | 4,900 | 3,900 |
| Professional | 25 | 180,400 | 16,925 |
| Smaller trades and professions | 108 | 25,350 | 9,800 |
| Wauzeka |  |  |  |
| Artisans and mechanics | 18 | 4,250 | 1,487 |
| Capltalists and merchants | 4 | 4,100 | 3,100 |
| Farmers | 106 | 53,500 |  |
| Laborers . | 54 | 1,300 | 1,400 |
| Illegible . .... |  |  |  |
| Not given . . | 12 |  |  |
| Petty trades | 12 |  |  |
| Professional | 2 | 800 | 1,600 |
| Smaller trades and professions |  | 600 | 125 |
| Utica: |  |  |  |
| Artisans and mecuanics | 20 | 5,375 | 1,860 |
| Capitalists and merchants | ${ }^{6}$ | 28.900 | 4,350 |
| Farmers | 102 | 87,000 | 12,885 |
| Jaborers . | 24 | 1,800 | 425 |
| Not given ${ }_{\text {Smaller }}$ trades and professions | 18 1 | 1,200 | 325 |

Table X-OCCUPATIONS FOR RICHLAND COUNTY-1860.

| Occupations. | No. | Real Estate. | Personal Estate. |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| Artisans and mechanics . | 154 67 | \$78,725 | \$27,275 |
|  | 1,434 | 1,400,560 | 568,307 |
| Laborers. | ${ }_{4} 495$ | 14,345 | 19,014 |
| Miscellaneous | 18 | 28,500 4,500 | 9,450 |
| Professional. | 69. | 103,075 | 22,100 |
| Smaller trades and professions | $\stackrel{44}{3}$ | 11,290 4,600 | 6,275 1,400 |
| Akan: |  |  |  |
|  |  |  |  |
| Capitalists and merchants |  | \$46,100 | \$19,950 |
| Laborers.. |  |  |  |
| Protwessional. |  | 1,000 | 500 |
| Bloom: $3_{5}{ }_{500}$ |  |  |  |
| $\xrightarrow{\text { Artisans and mechanics }}$ Capitalists and merchants | $\stackrel{3}{5}$ | 500 8,200 | 2,400 |
| Farmers . ................. |  | 78,350 | 27,710 |
| Laborers | ${ }_{3}^{18}$ | 200 150 | 700 350 |
| ena Vista: ${ }_{\text {Artisans }} \begin{aligned} & \text { and mechanics } \\ & \text { An }\end{aligned}$ |  |  |  |
|  |  |  |  |
| Capitalists and merchants | 18 | 33,600 | 11,900 |
| Farmers | ${ }_{41}^{129}$ | 138,325 1,950 | 49,591 |
| Laborers. ${ }_{\text {Miscellaneous }}$ | 1 |  |  |
| Professional. | 20 | 20,500 | 4,500 |
| Smaller trades and professions | 17 | 4,800 | 2,025 |
|  |  |  |  |
| Artisans and mechanics | 8 | ${ }_{3}^{5} .200$ | 1,500 |
| Farmers . .............. | 74 | 60,050 | 22,545 |
| Laborers | 23 | 350 | 530 |
| Mrofessional. | 1 | 2,000 | $600^{\circ}$ |
| Eagle:Artisans and mechanics $\ldots \ldots \ldots \ldots \ldots .$.c. |  |  |  |
|  |  |  |  |
| Farmers . ................. | 105 | 1i1,000 | 450,206 |
| Laborers. ... | ${ }_{3}^{33}$ | 975 | 1,595 |
| Mrscellaneous | 1 | 15,000 | 1,600. |
| Smaller trades and professions | 1 |  | 100 |
| Forest: |  |  |  |
| Artisans and mechanics. | ${ }_{2}^{2}$ | 700 5,000 | 700 2,100 |
| Farmers . ................. | 95 | 84,700 | 31,440 |
| Laborers | 27 | 250 | 685 |
| Miscellaneous . . . |  |  |  |
| $\underset{\text { Professional }}{\text { Pmaller trades }}$ and professions | 1 |  |  |
| Henrietta:    <br> Artisans and mechanics ............... 5 3,550 800 |  |  |  |
|  |  |  |  |
| Capitalists and merchants | ${ }_{9}^{4}$ | 5,500 | 1,150 |
| Farmers |  | 54,250 |  |
| Miscellaneous Professional |  |  |  |
|  |  |  |  |
| Smaller trades and professions |  |  |  |
|  |  |  |  |
| ${ }_{\text {Captisans and }}^{\text {Crists and mechanics }}$. | ${ }_{6} 6$ | 14,300 | 7,800 |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Smaller trades and professions | 1 |  | 100 |

Table X - Continued.


## Table XI-PER CAPITA WEALTH OF FARMERS.

1850
Crawford county ..... \$226 09
Bad Ax ..... 17702
Black River ..... 18443
Prairie du Chien ..... 26271
Richland county ..... 40150

1860

|  | Real Estate. | Personal Estate. |
| :---: | :---: | :---: |
| Crawford county | \$686 72 | \$143 91 |
| Clayton. ......... | 52173 | 13524 |
| Eastman | 1,063 00 | 12973 |
| Freeman | 63973 | 12995 |
| Haney | 61255 | 13069 |
| Lynxville | 64780 | 215 818 |
| Marietta . . ${ }_{\text {Pre.... }}$ | 55315 59620 | 142 243 73 |
| $\underset{\text { Prairte du Chien }}{\text { Prain }}$ | 59620 <br> 550 <br> 9 | 243 142 26 |
| Seneca | 85144 | 13277 |
| Utica | 85294 | 12632 |
| Wauzeka | 50471 | 13542 |
| Richland county | 97668 | 39630 |
| Akan . ........... | 755.73 | 32704 |
| Bloom | 95000 | 33385 |
| Buena Vista | 1,072 28 | 38442 |
| Dayton | , 81148 | 30466 43053 |
| Eorest | 1,05714 89157 | 43053 3309 |
| $\stackrel{\text { Forest }}{\text { Henrietta }}$ | $\begin{array}{r}891 \\ \\ \hline 86 \\ \hline\end{array}$ | 33579 |
| Ithaca | 1,326 49 | 34392 |
| Marshall | 85443 | 29819 |
| Richland | 1,028 44 | 39630 |
| Richmond | 1,088 63 | ${ }_{413} 727$ |
| Richwood |  | 41307 332 |
| Sylvan... | 67425 | 27447 |
| Westford | 95762 | 1,866 01 |
| Willow | 84935 | 28429 |

## Some of the characteristic occupations of this period have been grouped under the general head-of miscellaneous.

## Crawford County, 1850:

Prairie du Chien, three miners; pilot; ferryman; two hunters, one student. Bad Ax, $\qquad$
Black River, three hunters; one raftsman.

Richland County, 1850:
Ferryman; raftsman; hunter and trapper.

## Crawford County, 1860:

Lynxville, four boatmen.
Marietta, bee runter; two raftsmen; four ferrymen.
Prairie du Chien, one gentleman, seven. steamboat hands; two steamboat engineers; two steamboat firemen; four pilots; two boatmen; agent for stage and boat companies; steamboat captain; steamboat mate; sailor; runner for P. H. serving-man; draper; ten students; raillroad warehouseman; raıroad watchman; two miners; mail-man; agent Sunday School Union; section boss on railroad; steamboat hand.

Richland County, 1860:
Richland, stage drlver; miner; two gentlemen.
Buena Vista, student.
Eagle, two miners.
Ithaca, speculator; two gentlemen.
Richmond, two miners; ferryman; gentleman.
Richwood, ferryman; raftsman; gentleman.
Willow, gentleman.

## PART V.

## Laws Governing State Officers, Departments. Boards, Commissions, Institutions, Agents and Agencies.

The laws of the state not being readily available to the general public, it is hoped that the compilation of laws, which follow, will prove of service to those seeking information as to the business of the state and the legal relation of the various departments to each other. In presenting this information, the general object in view has been to exhibit in a condensed form the powers, duties and privileges of each of the various officers and agencies, departments, boards, commissions and institutions of the state, and also the expenses attending each for the fiscal year ending September 30, 1900, classified for ready comparison.

The synopsis has been máde from the Wisconsin Statutes of 1898 as amended by the. Session laws of 1899 and 1901. The references are to sections and pages of the Statutes and Session laws as indicated, which should be consulted if more definite or specific information is desired.

The relation existing between the Governor, Secretary of State and State Treasurer, and the other officers and departments makes it necessary to recite their duties and powers rather more specifically than is attempted in treating the other elective officers and employes of the state government. This is particularly true in the case of the Executive. It will be noticed that the various heads of state departments have many duties to perform in connection with each other, the act of one
being necessary to supplement or make valid the act of another. Because of this, under the laws relating to the Governor there is shown his special duty or power in connection with the several departments, institutions or branches of the government.

The expenses of each office, department, board or institution are compiled from the reports (for the year ending September 30,1900 ) of the Secretary of State, the Superintendent of Public Property and Commissioners of Public Printing, all of which are bound in one volume.

All branches of the state government, including boards, societies and institutions whose disbursements have not been recently treated as under the control of the state Auditor, are affected by the provisions of chapter 433 of the laws of 1901, which provides that all money collected by officers, agents or employees of the state or any of its institutions, departments, boards, societies and commissions, or for or on behalf of the state, shall be paid promptly into the state treasury and not paid out except on warrants of the Secretary of State in his capacity as Auditor on itemized vouchers in favor of the claimants. Provision is also made by the accounting system, which was adopted pursuant to chaper 133, of the laws of 1899, and provided to be established by chapter 433 , laws of 1901 , which will include in the records of the Auditor from day to day the itemized current expenses of state boards, societies, commissions and institutions that have heretofore drawn the amounts appropriated for their support in lump sums and have disbursed the money free from the control and supervision of the state authorities.

The anticipated effect of this law is that state officers who are called upon to pass upon public expenditures will be able to ascertain at all times the exact condition of each fund, the unused balance thereof available, the current receipts and disbursements of each and all of the departments of government including the charitable, reformatory, educational and penal institutions, the Board of Control, the Board of University Regents, the Board of Normal School Regents, the State Historical Society to the officers, agents, employes thereof and to every per-
son, officer, agent or employee who by virtue of his office receives and collects any money for or on behalf of the state or any of its agencies.

The act referred to, which is given in full below, provides that the Governor shall establish the proposed system and may make changes in order to adopt it to various departments, provided that certain fundamental requirements named in the act are observed.

The Wisconsin Supreme Court declared:
"The Secretary of State, being made Auditor by the constitution, his function as such can not be transferred wholly or partly to any other person or officer." (10 Wis., star page 525, and 82 Wis., 39.) But notwithstanding this, many laws have been enacted during recent years in which language has been used giving a color of authority for auditing to be done by officers or members of Boards in charge of state business. This has resulted in unbearable confusion.

The act adopting the proposed plan of accounting to be installed under the Governor's direction in effect abrogates all such provisions of law, many of which, however, are included in this compilation because of the uncertainty as to the final effect of certain provisions which may be modified by the Executive.

## CHAPTER 433.

AN ACT to provide a central system of accounting for all state officers and state institutions.

Governor to establish Central Accounting System. He may employ assistants.
Section 1. It shall be the duty of the governor to take such action, and to employ such assistants as in his discretion he may deem necessary to effectively establish in this state a central system of state accounting so that said system when established shall apply to all departments of the state and to all charitable, penal, reformatory and educational institutions of the state, and to the state board of control, the board of regents of the normal schools, the regents of the university of Wisconsin, the state historical society and to the officers, agents and employes of the same, and to each and every board, society, commission, association, and to every officer, agent or employe thereof or of the state who by virtue of his office receives, collects or disburses any money.

All State Departments, all Char. Ref., Penal and Educational Institutions, all Socleties, Boards, Commissions,' Branches and Agencies and all persons, officers, agents or employes thereof or of the state are included in the system and shall make such reports as the governor may require.

Section 2. All persons, boards, officers and agents mentioned in section one of this act shall make reports in such form and of such facts as may be required by the governor in order to put said system into practice.

System adopted under Ch. 133, L. 1899, to be established exsept as changed by governor to adapt it to various departments; provided, however, that it shall require that-

Section 3. The system provided and adopted under the provisions of chapter 133 of the laws of 1899, shall so far as practicable be carried into effect except in so far as it may be changed by the governor in order to adapt it to the several departments mentioned in section one, of this act; provided that the system adopted shall require:

All state money received by every person on behalf of state or any of the institutions. boards, commissions, departments, etc., etc., named above, shall be deposited with the treasurer every week or oftener if Governor requires, accompanied by explanatury statement as Governor may require.

1st. That all moneys collected or received by each and every person for or in behalf of the state, or in behalf of any of the boards, associations, commissions, societies or institutions mentioned in section one, of this act, shall be by him deposited with, or transmitted to the state treasury or to a state depository des-
ignated by the treasurer. Such deposit shall in every case be made at least once a week and oftener if required by the governor, and at the time of the transmission or deposit a statement in such form as the governor may designate showing the amount of such collection, from whom and for what purpose or on what account the same was received, shall be transmitted to the treasurer.

Treasurer to issue his receipt therefor, countersigned by Secretary of state.
2nd. The treasurer shall transmit to every person, depositing money with him a receipt therefor countersigned by the secretary of state.

Money shall be paid out only on warrants signed by Secretary of State on itemized vouchers showing for what purpose draft has been transacted.

3 rd. No money shall be paid out of the state treasury except on warrant drawn by the secretary of state, who shall require in all cases an itemized voucher showing for what purpose the debt has been contracted.

Official receipt blanks to be prescribed by Governer and prepared and issued by Secretary of State to all persons who receive money for state or its institutions, boards, commissions, societles, etc.; Secretary of state to charge such blanks to such persons and require an accounting therefor.

4th. The secretary of state shall prepare official blank receipts in such form as the governor shall prescribe, and furnish such official receipts to each person who collects or receives any money for or on behalf of the state, or for any of the boards, associations, commissions, societies or institutions mentioned in section one of this act, and such person shall issue such official receipts to each person from whom he shall receive any money. All such official receipts shall be numbered consecutively, and the secretary of state shall keep a true account of all such receipts furnished to any person and require of such person a true accounting for the same.

Certificates of proper officers or boards as to correctness of accounts to be evidence thereof.

Section 4. The certificate of the proper officers of the board of regents of the normal schools, the regents of the university of Wisconsin, the state board of control, or the proper officers of any other beard or commission organized or established by the state, shall in all cases be evidence of the correctness of any account which may be certified by them.

Those issuing official receipts, except in the manner provided, guilty of misdemeanor.

Section . 5 Any person who shall issue or deliver such official receipt or pass or utter the same except in the manner required by law shall be deemed guilty of a misdemeanor.

If any person, officer, agent, board, etc., etc., mentioned in Sec. 1 fails to comply with this act, all moneys due such person may be withheld by Secretary of State if Governor approves.

Section 6. In case any person, officer, agent, board or association mentioned in section one of this act shall neglect or refuse t'o make such deposits of money or to make such reports as shall be required of them by this act, the secretary of state shall with the approval of the governor, withhold all moneys due such person until the provisions of this act are complied with.

Appropriations of sums sufficient to carry out thls act.
Section 7. There is hereby appropriated out of any money in the treasury not otherwise appropriated, a sum sufficient to carry out the provisions of this act.

Section 8. This act shall take effect and be in force from and after its passage and publication.

Approved May 15, 1901.
Published May 22, 1901.

## LEGISLATURE.

Legislative power.
The legislative power is vested in a senate and an assembly.
The number of members of the assembly shall never be less than
54 nor more than 100 . The senate shall consist of a number
not more than 1-3 nor less than 1-4 of the number of assembly members.

Const., art. 4, sec. 1, p. 78; sec. 2, p. 83.
Election-Qualification.
This art. provides how members shall be chosen and what their qualifications shall be.

Const., art. 4, secs. 4, 5 and 6, pp. 84, 85.
Oaths of members, who may administer.
This sec. provides as to oaths of members, and who may administer the same.

Wis. Stats., sec. 100, p. 231.
Compensation and mileage of members.
Upon the issue of a certificate by the presiding officers of the senate and assembly and countersigned by the chief clerk, showing that such member has taken the official oath and the number of miles traveled by him in going to and from the place
of meeting of the legislature, the amount of mileage and salary to which each member is entitled shall be audited and paid out of the treasury.

Wis. Stats., sec. 110, p. 234.
At the close of each session of the leg. the Secretary of State shall publish in the state official state paper a full list of the accounts audited.

Wis. Stats., sec. 113, p. 236.
This act provides conditions under which the Secretary of State as Auditor may approve vouchers for transportation.

Ch. 426, L. 1901.
Sessions.
The regular session of the legislature shall commence at 12 o'clock on the second Wednesday of January of each odd numbered year, and no oftener unless the Governor shall convene a special session and when so convened no business except as shall be necessary shall be transacted.

Wis. Stats., sec. 99, p. 231.
Const., art. 4, sec. 11, p. 87.
Const., art. 5, sec. 4, p. 96.
Joint commiūtees.
At the commencement of every session of the legislature there shall be appointed by the respective houses two joint standing committees with duties as herein prescribed.

Wis. Stats., sec. 106, p. 233.

## Officers.

Each house shall choose its own officers and the senate shall choose
a temporary president when the Lieutenant Governor shall not attend as president or shall act as Governor.

Const., art. 4, sec. 9, p. 86.
This act limits the number, prescribes the duties and fixes the compensation of the officials and employees of the legislature.

$$
\text { Ch. 438, L. } 1901 .
$$

Note.-This act is so comprehensive and the provisions of such character that it can not intelligently be condensed to the limit of this pamphlet. For this reason it is considered wise to refer to the act itself for information under this head.

Rules.
Each house may determine the rules of its own proceedings. Const., art. 4 , sec. 8 , p. 86.

Immunity of members from arrest; contempt.
No officer of the senate or assembly, while in actual attendance upon the duties of his office, shall be liable to arrest on civil process.
Each house may punish as for a contempt.
Wis. Stats., secs. 101, 102, p. 231.
May confer powers.
The legislature may confer upon the boards of supervisors of the several counties of the state such powers of a local, legislative and administrative character as they shall from time to time prescribe.

Const., art. 4, sec. 22, p. 91.
Municipal corporations.
It shall be the duty of the legislature and they are hereby empowered to provide for the organization of cities and villages and to restrict their power of taxation, assessment, contracting debts and loaning their credit.

Const., art. 11, sec. 3, p. 122.
Legislature may restrict powers.
The legislature may at any time limit or restrict the powers of any corporation organized under any law, and for just cause annul the same and prescribe such mode as may be necessary for the settlement of its affairs. Wis. Stats., sec. 1768, p. 1275.

Witnesses, how subpoenaed.
All subpoenas issued for the purpose of procuring attendance of witnesses before any committee of the legislature or either house thereof, shall be signed by the presiding officer and chief clerk of the sẹnate or assembly.

Wis. Stats., sec. 122, p. 237.
Inspection of books.
The legislature or any committee thereof may at any time inspect the books, papers or transactions of the Treasurer.

Wis. Stats., secs. $157-5$, p. 250.

## Removal of judges.

Any judge of the supreme court or circuit court may be removed from office by address of both houses of the legislature if twothirds of all the members concur therein. But no judge may be removed unless a copy of the charges against him has been served.

Wis. Stats., sec. 13, p. 108.

## Stationery.

The legislature shall be supplied with all necessary stationery to be furnished by the Superintendent of Public Property.

Wis. Stats., sec. 114, p. 236.
Blue-book.
The Commissioner of Bureau of Labor and Industrial Statistics shall cause to be printed biennially for the use of the senate and assembly a book denominated the "blue book of Wiscon$\sin$," to contain matter as herein provided.

Wis. Stats., sec. 119, p. 236, amended by ch. 405, L. 1901.
Documents, laws.
Each member of the legislature shall receive from the Superintendent of Public Property one copy of the journals of the senate and assembly, of the public documents and one of the laws.

Wis. Stats., sec. 350 , p. 320.
Copies of reports of state officers.
There-shall be delivered to the legislature which convenes in regular session next after the close of the biennial fiscal term, for the use of the members, the number of copies of the reports of the state officers, boards and departments herein specified.
Wis. Stats., sec. 353, p. 321.

This act provides for submitting to the people a constitutional amendment giving the legislature power to pass general banking law.

Ch. 73, L. 1901.

## DISBURSEMENTS ON ACCOUNT OF THE LEGISLATURE.

For the year ending Sept. $30,1900$.
Printing jouirnals and enrolled acts of the Senate and Assembly, includ-
ing cost of paper and waste per report Commissioners of Printing..... $\$ 2,237$. 68
Printing Blue Book photographs .................................................... 5,331 55
Publishing laws of general interest 20000

Total
\$7,769 23

Pages 204 and 488 in the report of the Secretary of State for the year ending Sept. 30, 1900.

Note.-During the year ending Sept. 30, 1899, there was a session of the Legislature, and the expense, including 'publishing laws in newspapers, was $\$ 200,597.01$.

## GOVERNOR.

Executive power.
In the Governor is vested the executive power of the staie.
Const., art. 5, sec. 1, p. 96.

## Eligibility.

He must be a citizen of the United States and a qualified elector of this state.

Const., art. 5, sec. 2, p. 96.
Election.
He "shall be elected by the qualified electors of the state at the times and places of choosing members of legislature." He shall be chosen at the general election each even-numbered year and the term shall commence the first Monday of January succeeding.

Const., art. 5, sec. 3, p. 96.
Wis. Stats., sec. 128, p. $240^{\circ}$.
Duties as to laws and state business.
He shall see that the laws are faithfully executed, and transact necessary business with officers of the government.

Const., art. 5, sec. 4, p. 96.
State sovereignty and jurisdiction.
He shall defend the sovereignty and jurisdiction of the state as herein provided.

Wis. Stats., sec. 1, p. 136.
Compensation.
His compensation is $\$ 5,000$ annually in full for all expenses.
Const., art. 5 , sec. 5, p. 97.
Wis. Stats., sec. $170, \stackrel{\text { p. }}{ } 259$.
Contingent fund.
He shall render a statement to the legislature of all payments made from contingent fund appropriated. Wis. Stats., sec. 137, p. 243.
$\$ 2,000$ was appropriated annually for 1901 and 1902 to Governor's contingent fund.

Ch. 32, L. 1901.
Privaie secretary, executive clerk and other assistants and compensation therefor.

He may appoint a private secretary, who shall have charge of papers, documents and records.

Wis. Stats., sec. 129, p. 240.

He may appoint an executive clerk and fix his salary.
Private secretary's annual salary is $\$ 1,600$.
Wis. Stats., sec. 170, p. 259.
Note.-The person filling this office is usually appointed military secretary at $\$ 1,200$ salary, making total compensation $\$ 2,800$ annually.

The Governor may appoint a stenographer and a messenger and such help as he deems necessary in his office and fix compensation therefor.

Wis. Stats., sec. 169b, p. 258, amended by ch. 290, L. 1899, p. 511, amended by ch. 419, L. 1901.

Postage.
He may procure for his office at state expense necessary postage for his official correspondence.

Wis. Stats., sec. 169, p. 258.

## Stationery.

He or his private secretary may procure stationery for his office from the Superintendent of Public Property.

Wis. Stats., sec. 290, p. 301.
Executive seal.
The executive privy seal, a written description of which is in the possession of Secretary of State, shall be the seal of the private secretary of Governor, with which all of his official certificates shall be authenticated.

Wis. Stats., sec. 98, p. 230.
This act authorizes him to loan two Wisconsin battle flags to the Gen. Grant Monument Association in New York city.

Ch. 275, L. 1901.
This act makes an appropriation to enable the Governor to reengrave and restore the great and lesser seai.

Ch. 364, L. 1901.
His relation to the legislature.
The Governor shall communicate to the legislature the condition of the state and make recommendations.

Const., art. 5, sec. 10, p. 98.
Wis. Stats., sec. 137, p. 243.
He shall expedite measures resolved upon by the legislature.
He may convene the legislature on extraordinary occasions.
Const., art. 5, sec. 4, p. 96.

In case of resignation of Governor such resignation shall be made to the legislature.

Wis. Stats., sec. 961 , p. 763.
Whenever the Governor shall be authorized to make any appointment to office by and with the advice and consent of the senate, and the legislature shall not be in session at the time such office should be filled, he may fill such office and make appointment thereto, subject to the approval of the senate at the next succeeding session of the legislature, and all such appointments shall be as valid and effectual from the time when the same may be so made until twenty days after such meeting of the legislature as if he possessed the absolute power of appointment.

Wis. Stats., sec. 137a, p. 243.
When a vacancy occurs in an elective state office the Governor shall appoint a suitable person to perform duties thereof until vacancy is regularly filled.

Wis. Stats., sec. 965, p. 765.
When a vacancy occurs during recess of legislature in an office where confirmation of senate is necessary, the Governor may, as provided in this section, appoint a suitable person to perform the duties of such office.

Wis. Stats., sec. 966, p. 765.
He shall sign bills from the legislature if approved; if not, return them.

Const., art. 5, sec. 10 , p. 98.
He shall notify the proper house where bills originated when acts of the legislature become laws.

Wis. Stats., sec. 180, p. 240.
He shall deposit with the Secretary of State the acts and resolutions of the legislature that become laws.

Wis. Stats., sec. 130 , p. 240.
He shall transmit to the legislature the Normal School Regents' reports.

Wis. Stats., sec. 410, p. 341.
Two thousand copies of his message to the legislature shall be printed.

Wis. Stats., sec. 335c, p. 314.
He may have 125 copies of the Blue Book.
Wis. Stats., sec. 121, p. 236.

He shall report biennially to the legislature the condition of the state institutions.

Wis. Stats., sec. 137, p. 243.
He shall appoint a legislative visiting committee for institutions under the Board of Control before Dec. 1 after each general election, one from the senate elect and one from the assembly elect.

Wis. Stats., sec. 562b, p. 414.
He shall appoint three members of the legislature to confer with the legislature of Minnesota in regard to taxation.

Ch., 8, L. 1901.
Rewards.
He may offer rewards, not exceeding $\$ 500$, for the apprehension and delivery of persons committing crimes and shall certify his determination as to the same as herein provided.

Wis. Stats., sec. 132, p. 241.
Notaries Public.
He shall appoint for each county one or more notaries public, qualified electors or females 21 years old or over, for a term of four years as herein provided.

Wis. Stats., sec. 173, p. 263.
Each applicant for notary public shall give a bond of $\$ 500$ to the Governor as herein provided.

Wis. Stats., sec. 174, p. 264.
Commissioners of deeds.
The Governor may appoint one or more commissioners of deeds for Wisconsin in other states; term four years, unless sooner removed.

Wis. Stats., sec. 182, p. 267.
Pardons.
He may grant pardons, and communicate to the legislature each case of pardon granted, with reasons.

Const., art. 5, sec. 6, p. 97; sec. 4, p. 96.
He may make rules governing applications for pardons. Each application shall be accompanied by papers provided for by sec. 4857. See pages $2868,2669,2870$, of Wis. Stats.

Wis. Stats., sec. 4861, p. 2867.
Fees and expenses of proceeding to determine whether conditional pardons have been violated, must be approved by the Governor before being paid.

Wis. Stats., sec. 4863, p: 2870.

Lands.
He may convey lands that may be required by the United States government, as herein provided.

Wis. Stats., sec. 2, p. 136.
He may convey lands to the United States for lighthouse purposes. Wis. Stats., sec. 3, p. 137.

He may receive from the United States the $5 \%$ net proceeds of sales of Wisconsin lands as approved by act of congress of Aug. 6, 1846, and execute proper vouchers thereior.

Wis. Stats., sec. 133, p. 243.
He may issue land patents, and duplicate patents when originals are lost.

Wis. Stats., sec. 135, p. 242.
Land patents issued by the Governor are to be deposited with the Secretary of State.

Wis. Stats., sec. 135, p. 242.
Swamp-land and war-claim matters.
He is authorized hereby to do, or procure done, whatever he thinks necessary as to swamp-land and war-claim matters with the United States.

Chaps. 269, 295, L. 1899, pp. 457, 518.
Elections.
He shall procure presidential election returns as herein provided. Wis. Stats., sec. 94c, p. 218.

It is his duty to certify election of United States senator to president United States senate.

Wis. Stats., secs. 94v, 94aa, pp. 226, 227.

He shall issue writs of election to fill vacancies in either house of legislature.

Const., art. 5, sec. 14, p. 88.
He may direct special elections as herein provided.
Wis. Stats., sec. 94 m , p. 222.
Patents to railroads.
He shall sign patents to railroad companies in connection with the Secretary of State, under conditions provided for in this section.

Wis. Stats., sec. 1820, p. 1342.

He may issue new patent to railway corporation, giving the execution and delivery of preceding patent.
Wis. Stats., sec. 135a, p. 242.
Public instïtutions.
He is authorized to visit and inspect public institutions supported wholly or in part by state appropriations.
Wis. Stats., sec. 136, p. 243.
Approval of bonds.
To approve the amount of bond of corporations conducting private asylums receiving non-resident patients.

Wis. Stats., sec. 1786a, p. 1307.
He may approve of state building contractors' bonds as herein provided.

Chaps. 292, 296, L. 1899, pp. 515, 519.
Reports of officers and boards.
He shall receive annual reports of officers and heads of state departments, unless otherwise provided by law.

Wis. Stats., sec. 333, p. 313.
Military commission.
He may furnish a duplicate military commission to any officer of the Wisconsin regiments, upon satisfactory evidence of loss of original.

Wis. Stats., sec. 134a, p. 242.
Demanding fugitives.
He may demand fugitives from justice from other states. See also sec. 4844 , page 2885 , and sec. 484 á, page 2889.

Wis. Stats., sce. 4843, p. 2863.
Warrants.
He may issue warrants on demands of other states. See sec. 4848, page 2866.

Wis. Stats., sec. 4847, g. 2866.
Arbor and Labor days.
He may designate Arbor, Bird and Labor days.
Wis. Stats., sec. 137v, p. 243.
Examining unused property.
He, with the Secretary of State and State Treasurer, shall examine any chattel property not in use and direct sale thereof as herein provided.

Wis. Stats., sec. 294, p. 302.

All state officers, heads of departments, chiefs of bureaus and boards, shall on or before January 10 each odd-numbered year deliver to the Governor a concise and detailed report of all receipts and expenditures of their office, department or board for the biennial term ending the first Monday in January, and shall make a detailed statement for the corresponding years of the two preceding terms.

Ch. 97, L. 1901.

## HIS RELATION TO THE SECRETARY OF STATE.

Employing counsel.
He may, in connection with the Secretary of State, employ counsel to assist the Attorney General, and fix the compensation therefor.

Wis. Stats., sec. 131, p. 241.

## Apportioning funds.

He may, in connection with the Secretary of State and State Treasurer, apportion funds in the treasury.

Wis. Stats., sec. 1069a, p. 827.
Transferring funds.
His consent is necessary to the transferring of trust funds to the general fund of the Secretary of State, State Treasurer and Attorney General.

Ch. 147, L. 1899, p. 217.
Executing certificates of indebtedness.
He shall, in connection with the Secretary of State and State Treasurer, execute a certificate of indebtedness whenever commissioners of public lands purchase state bonds, as herein provided.

Wis. Stats., sec. 259, p. 294.
: his rilation to the state treasurer.

Proceeds, sales of land.
He shall pay into the state treasury moneys received from the United States, being $5 \%$ of the proceeds of public lands, for the benefit of the school fund.

Wis. Stats., sec. 133, p. 242.
Treasurer's reports.
He shall receive the report of the Treasurer quarterly or oftener if required, pertaining to the duties of the office and any information he shall require.

Wis. Stats., secs. 157-7, p. 251.

This act provides for an additional report to the Governor to be made before January 10 each odd-numbered year.

Ch. 97, L. 1901.
He shall receive from the Treasurer a full and detailed report of all moneys received and paid out during the preceding fiscal term within 10 days after September 30 each even-numbered year.

Wis. Stats., secs. 157-8, p. 251.

## Examining treasury.

He , with the Attorney General, shall once each quarter examine the books of the State Treasurer and see that all moneys are in the vaults of the treasury or in the several state depositories. In case of a deficiency he shall require the Treasurer to make it up. (See sec. 157-5, page 250, of Wis. Stats., 1898.)

Wis. Stats., sec. 159, p. 252.

## Treasurer's bond.

He shall approve of the bond of the Treasurer which bond shall be $\$ 100,000.00$, and shall be filed in executive office.

Wis. Stats., sec. 153, p. 249.
He may require an additional bond of the Treasurer not exceeding the funds in the treasury.

Wis. Stats., sec. 154, p. 249.
his relation to the attorney general.
Actions and proceedings.
He may instruct the Attorney General to appear for the state and prosecute or defend actions and proceedings.

Wis. Stats., sec. 163-1, p. 255.
He may direct the Attorney General to appear and prosecute actions against banks as herein provided.

Wis. Stats., sec. 3220, p. 2214.
May require examinations.
He may require the Attorney General to examine corporations as herein provided.

Wis. Stats., sec. 1766, p. 1275.
Bond.
The Attorney General's bond shall be in the sum of $\$ 10,000.00$ and subject to the Governor's approval.

Wis. Stats., sec. 161, p. 254.

## HIS RELATION TO THE INSURANCE COMMISSIONER

Must examine books and records.
He shall, in connection with the Secretary of State and State Treasurer examine and audit quarterly the books and records of the insurance department.

Wis. Stats., sec. 1972c, p. 1487.
Reporis.
He shall receive the annual report made by the Insurance Commissioner, to cover the general conduct and condition of companies doing business in this state arranged in tabular form or in abstracts, in classes, according to different kinds of insurance.

Wis. Stats., sec. 1972b, p. 1486.

This act provides for an additional report to be made to the Governor before January 10 each odd-numbered year.

Ch. 97, L. 1901.

On the first day of each month, he shall receive a detailed report of the receipts during the preceding month from the Insurance Commissioner.

Wis. Stats., sec. 1972c, p. 1487.
Bond.
The bond of the Insurance Commissioner, which shall be $\$ 20,000.00$, is subject to the Governor's approval.

Wis. Stats., sec. 1967, p. 1483.

## his relation to the railroad commissioner.

Report.
On or before the first Monday in December, each odd-numbered year, he shall receive the report of the Railroad Commissioner. Wis. Stats., sec. 1795, p. 1322.

This act provides for an additional report to be made to the Governor before January 10 each odd-numbered year. Ch. 97, 1901.

## Bond.

Bond of Railroad Commissioner to be approved by Governor. Wis. Stats., sec. 1793, p. 321.

## HIS RELATION TO THE STATE SUPERINTENDENT.

Report.
He shall receive the report of the State Superintendent, including in his report an account of all dictionaries sold, on or before the 10 th day of December, each even-numbered year.

Wis. Stats., secs. 166-8, p. 257.

This act-provides for an additional report to be made to the Governor each odd-numbered year. Ch. 97, L. 1901.
his relation to the dairy and rood commissioner.

## Appointments.

He shall, by the consent and advice of the senate, appoint a Dairy and Food Commissioner for a term of two years.

Wis. Stats., sec. 1410 , p. 1058.

His approval is necessary before the Dairy and Food Commissioner may appoint an assistant, a chemist, an agent and a special counsel.

Wis. Stats., sec. 1410 , p. 1058.

Farm Institutes.
He may authorize the Dairy and Food Commissioner to assist at "farm institutes."

Wis. Stats., sec. 1410d, p. 1060.

Report.
He shall receive the report of the Dairy and Food Commissioner after Sept. 30, each even-numbered year.

Wis. Stats., sec. 1410, p. 1058.

This act provides for an additional report to be made to the Governor before Jan. 10, each odd-numbered year.

Ch. 97, L. 1901.

Approval of accounts.
His approval is required of the accounts for making analysis (for which $\$ 600$ is provided) of dairy and food products.

Wis. Stats., sec. 1410c, p. 1060.

## HIS RELATION TO THE SUPERINTENDENT OF PUBLIC PROPERTY

## Appointment.

He shall appoint a suitable person as Superintendent of Public Property for a term of two years, term commencing at same time as elective state offices, until his successor qualifies, unless sooner removed by the Governor.

Wis. Stats., sec. 286, p. 299.
Report.
He shall receive the annual (Sept. 30) report of the Superintendent of Public Property in detail pertaining to the duties of his office.

Wis. Stats., sec. 291, p. 301.
This act provides for an additional report to be made to the Governor before Jan. 10, each odd-numbered year,

Ch. 97, L. 1901.
Bond.
His approval is required of the bond, which shall be for $\$ 15,000.00$, of the Superintendent of Public Property, and said bond shall be preserved in the executive office.

Wis. Stats., sec. 286, p. 299.
Improvements.
His advice and consent is required before the improvements herein provided for may be made by the Superintendent of Public Property.

Wis. Stats., sec. 288, p. 300.
His advice is necessary where appointments are made under this section.

Claims and accounts.
His approval is required on all claims for freight, labor or purchases, except stationery, properly certified to by the Superintendent of Public Property.

Wis. Stats., sec. 293, p. 302.

## "Additional help."

His approval is required in case of additional help and compensation therefor appointed and fixed by the Superintendent of Public Property. Limited to $\$ 6,000$ in any one year, as herein provided.

Ch. 29d, L. 1899, amended by ch. 419, L. 1901.

This act authorizes the Governor to put a new ventilation plant in the capitol at a cost not to exceed $\$ 25,000$.

Ch. 359, L. 1901.

HIS RELATION TO THE BANK EXAMINER.
Appointment and bond.
He shall approve of the appointment and bond of Bank Examiner. Bond shall be $\$ 25,000.00$.

Wis. Stats., sec. 2023 h , p. 1522.
Clerk and stenographer.
He shall approve of appointment of chief clerk and stenographer by the Bank Examiner.

Wis. Stats., sec. 2023 k , p. 1522.

Report.
He shall receive annual report of Bank Examiner on the second Monday in December.

Wis. Stats., sec. 2023r, p. 1524.
This act provides for an additional report to be made to the Governor before Jan. 10, each odd-numbered year.

Ch. 97, L. 1901.

HIS RELATION TO THE COMMISSIONER OF LABOR STATISTICS.
Appointment.
He shall, with consent of Senate, appoint a Commissioner of Labor Statistics for a term of two years, from the first Monday in February in year appointed.

Wis. Stats., sec. 1021c, p. 782.

Report.
He shall receive report of Commissioner of Labor Statistics within ten days after the expiration of the biennial fiscal term.

Wis. Stats., sec. 1021k, p. 785.

This act provides for an additional report to be made to the Governor before Jan. 10, each odd-numbered year.

Ch. 97, L. 1991.

IIS RELATION TO THE FISH AND GAME WARDEN.
Appointment.
He may appoint a Fish and Game Warden for a term of two years from date of appointment and until his successor qualifies.

Wis. Stats., sec. 1498, p. 1110.
Approving appointments and expenses of deputies.
His approval is required in case of appintment of thirty special deputies made by the Fish and Game Warden, and the fixed compensation therefor; their expenses to be paid on vouchers subject to his approval.

Wis Stats., sec. 1498a, p. 1110, amended by ch. 312, L. 1899.
Report.
He shall receive annual report of the Fish and Game Warden.
Wis. Stats., sac. 1498 l, p. 1118.

This act provides for an additional report to be made to the Governor before Jan. 10, each odd-numbered year.

Ch. 97, L. 1901.
his relation to the state treasury agent.
Appointment.
He shall appoint a State Treasury Agent, who shall hold his office during the governor's pleasure.

Wis. Stats., sec. 1578, p. 1158.
Bond.
His approval is required of bond of Treasury Agent, which bond shall be $\$ 5,000$ with sufficient sureties.

Wis. Stats., sec. 1578, p. 1158. ,
Report.
At the end of each fiscal year, he shall receive the report of the Treasury Agent, including therein a statement of all moneys received and disbursed by him and any other information required.

Wis. Stats., sec. 1579 , p. 1159.

This act provides for an additional report to be made to the Governor before January 10, each odd-numbered year.

Ch. 97, L. 1901.

HIS RELATION TO THE COMMISSIONERS OF PUBLIC LANDS.
Report.
Within 10 days after September 30th, of each even-numbered year, he shall receive the biennial report made by the Commissioners of Public Lands.

Wis. Stats., sec. 191, p. 270.
This act provides for an additional report to be made to the Governor before January 10, each odd-numbered year.

Ch. 97, L. 1901.
Approving investments.
His approval is required in case of investment of funds in bonds of the state or of the U. S. directed by the Commissioner of Public Lands.

Wis. Stats., sec. 160, p. 252.
Inter-state Park Commissioners.
This act empowers the Governor to carry on the work of acquiring the Iands for an Inter-State Park. Governor shall appoint a commission of three persons to carry out the provisions of this act.

Ch. 305, L. 1901.

HIS RELATION TO THE COMMISSIONERS OF PUBLIC PRINTING.
Reports to be transmitted to him.
He shall transmit the reports of the state officers and boards, or copies thereof, to the Commissioners of Public Printing.

Wis. Stats., sec. 333, p. 313.

Report of Commissioners.
Hə shall receive biennial report of Commissioners of Publit Printing, wherein shall be set forth the cost of public printing during the preceding fiscal year, with their recommendations as to any retrenchment that may be made.

Wis. Stats., sec. 335, p. 313.
This act provides for an additional report to be made to the Governor before January 10 each odd-numbered year.

Ch. 97, L. 1901.

HIS RELATION TO THE TAX COMMISSIONER AND ASSISTANTS.
Appointments.
He shall nominate, and by and with the consent of the Senate, appoint a Commissioner of Taxation with a first and second assistant, to serve for a term of 10 years from May 1, 1899.

Ch. 206, L. 1899,
Wis. Stats., sec. 1, p. 341.

HIS RELATION TO THE COMMISSIONERS OF FISHERIES.
Appointments.
He shall, with the consent of the Senate, appoint six members of the Board of Commissioners of Fisheries, for a term of six years. He shall be a member of and President of the Board.

Wis. Stats., sec. 1495, w. 1108.

HIS RELATIQN TO THE STATE BOARD OF CONTROL.

Appointments.
He shall appoint five members of the Board of control, with the consent of the senate, no two of which at the time of their appointment shall be residents of the same congressional district, and not all of whom shall belong to the same political party.

Wis. Stats., sec. 561a, d, pp. 406-7.

Hospital districts, Governor to act with Board of Control.
He and the Board of Control shall constitute a board to divide the state into hospital districts.

Wis. Stats., sec. 581, p. 427.
A.pproving acts and contracts.

He shall approve of contract made by the Board of Control for the support of insane convicts in the Milwaukee Hospital for the Insane.


Hịs approval is necessary in case of removal of insane convicts from state prison to Milwaukee County Insane Hospital,

Wis, Stats., sec. 561 jj , p. 411; sec. 4944, p. 2885 ,

He may discharge reformatory inmates without procedure upon recommendation of the Superintendent of the Reformatory and the Board of Control.

Wis. Stats., sec. 4944k, p. 2888.
His approval is necessary in order to effectuate transfers to Wisconsin Reformatory.

Ch. 28, L. 1899.
His consent in writing is necessary to enable the Board of Control to create indebtedness to establish manufacturing business or when appropriation is insufficient or great emergency exists.

Wis. Stats., sec. 561i, p. 409; sec. 563, p. 414.
Reports.
He shall receive biennially the report of the Board of Control in regard to the institutions under their care, on or before Dec. 1, in even-numbered years.

Wis. Stats., sec. 561d, p. 407.
This act provides for an additional report to be made to the Governor before Jan. 10, each odd-numbered year.

Ch. 97, L. 1901.
He shall receive twice a year the report of the Board of Control

- regarding the Veterans'Home.

Wis. Stats., sec. 567, p. 416.
Provides for an additional report to be made to the Governbr.
Ch. 97, L. 1901.
This act authorizes the Board of Control, with the approval of the Governor, to purchase land for reformatory not to exceed $\$ 150$ per acre.

Ch. 289, L. 1901.
his relation to agent to investigate state institutions or employes THEREOF.

Appointment and report.
He may appoint an agent, male or female, to make investigations of state institutions or employes thereof, who shall make a written report thereof; the appointee shall be a ssuitable person, male or female, whose compensation shall be $\$ 6.50$ per day for each day actually and necessarily required in performing duties, and be reimbursed for all expenses thereby incurred.

Wis. Stats, sec. 562a, p. 413, amended by ch. 403, L. 1901.

This act provides for an additional report to be made to the Governor before Jan, 10, each odd-numbered year.

Ch. 97, L. 1901.
his relation to committee for visining state institutions.
L-i-n 1. 1e:
He shall appoint a visiting committee for state institutions before December 1, after each general election, one from the senate elect and one from the assembly elect.

Wis. Stats., 562b, p. 414.

## his relation to the state board of agriculture.

Appointments.
He may appoint members of the State Board of Agriculture, one from each congressional district, two at large, for a term of three years, only two-thirds of the members to be from the same political party.

Wis. Stats., sec. 1456, p. 1087.

Report.
He shall receive the report of the Board of Agriculture on or before Dec. 1, each even-numbered year.

Wis. Stats., sec. 1458a, p. 1088.

This act provides for an additional report to be made to the Governor before Jan. 10, each odd-numbered year.

Ch. 97, L. 1901.

Assigning rooms in capitol.
He may assign rooms in the capitol to the Board of Agriculture. Wis. Stats., sec. 1458a, p. 1088.

His relation to the wisconsin national guard.
Commander-in-Chief.
He shall be commander-in-chief of the military forces of the state. Const., art. V, sec. 4, p. 96.

## Appointments.

He may appoint on his staff an adjutant general, quartermaster general and surgeon general, one inspector of small arms practice, five aides-de-camp, two paymasters, one commissary of subsistence, and such other officers as he may require.

He may fix pay of staff officers for special services.
He may appoint in connection with that officer assistants and clerks for the adjutant general.

Ch. 228, L. 1901.
Note.-For the details of the powers and duties of the Governor in connection with the Wisconsin National Guard, Ch. 228 of the laws of 1901 should be consulted.

Military reservation.
He may purchase property not exceeding $\$ 1,000$ for addition to Wisconsin Military Reservation.

Ch. 178, L. 1899.
This act authorizes the appointment by the Governor of a commission of three or more to ascertain the position of the Wisconsin troops in the campaign and siege of Vicksburg, the necessary traveling expenses to be paid out of the $\$ 1,000$ appropriated by this act. Ch. 281, L. 1901.

The said commission shall report to the Governor on or before Jan. 15, 1902.
Provides for an additional report to be made to the Governor. Ch. 97, L. 1901.
his relation to the board of regents of $u$. W. .

## Appointments.

He shall appoint members of Board of Regents of U. W. for a term of three years from the first Monday of February of the year appointed unless sooner removed. One member from each congressional district and two from state at large.

Wis. Stats., sec. 378, p. 330.

## Report.

He shall receive, at the close of each biennial fiscal term, a detailed report of the Board of Regents through their president and he shall direct the number of reports to be printed.

Wis. Stats., sec. 383, p. 331.
This act provides for an additional report to be made to the Governor.

Ch. 97, L. 1901.
his relation to the boakd of regents of the normal schools. Appointments.

He shall appoint ten members of the Board of Regents of Normal Schools for a term of five years, commencing the first Monday in February of year appointed. Members are divided into five classes so that the term of two regents shall expire each year.
Not more than one member shall reside in the same congressional district; provided that there are two normal schools in the same district, there may be two regents in said district.
He shall fill vacancies for residue of term only.
Wis. Stats., sec. §93, p. 336, amended by ch. 74, L. 1899.

Transferring trust funds.
His approval is necessary to transfer trust funds to the Normal School fund.

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\text { Ch. 202, L. } 1899, \text { p. } 336 .
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Report.
On Aug. 31 of the year the biennial term closes, he shall receive the report of the Board of Regents of the Normal Schools.

Wis. Stats., sec. 410, p. 341.
Provides for an additional report.
Ch. 97, L. 1901.
his relation to the supervisor of inspectors of illuminating oils.

## Appointment.

He shall appoint, with the advice and consent of the senate, a person as supervisor of inspectors of illuminating oils, who shall not be interested financially in the manufacture, refining or sale of oil, and who shall receive $\$ 1,500$ annually. His approval is necessary in case of appointment of deputy inspectors and shall define their duties. He shall fix their salary whïch, with actual and necessary traveling expenses, shall not exceed 8 cents per barrel for number of barrels of oil inspected during the month. Salary and expenses shall be paid out of special fund subject to the approval of the Governor. He may appoint three persons to act without compensation to decide and determine the illuminating qualities of oil.

Wis. Stats., sec. 1421a, p. 1068.
Ch. 466, L. 1901.

Report.
He shall receive the report of the supervisor on the first of October of each even-numbered year.
Wis. Stats., sec. 1421c, p. 1068.
Provides for an additional report to be made to the Governor. Ch. 97, L. 1901. his relation to the state veterinarian.

Appointment.
He shall appoint a competent veterinary surgeon to be state veterinarian for a term of two years.

Wis. Stats., sec. 1492a, p. 1101.
Approving accounts.
With his consent and approval the state veterinarian shall be allowed, for experimental purposes, a sum not exceeding $\$ 500$ annually, which shall be audited upon verified accounts and itemized statement as herein provided.
He shall receive biennially the report of such officer.
Wis. Stats., sec. 1492e, p. 1103.
His approval is required in case of veterinary surgeons called into consultation by the state veterinarian, and said surgeons shall be paid $\$ 7$ per day and necessary expenses.

Wis. Stats., sec. 1492e, p. 1103.
Proclamation as to animal diseases.
He shall issue a proclamation upon receipt of notice of disease among animals.

Wis. Stats., sec. 1492c, p. 1103.
his relation to the sta'te inspector of apiaries.

## Appointment.

He may appoint a state inspector of apiaries for a term of two years and said inspector shall report to him at the close of each calendar year.

Wis. Stats., sec. 1494f, p. 1107.

HIS RELATION TO THE LUMBER INSPECTORS.
Appointment.
He may appoint, for a term of two years, lumber inspectors, one for each lumber district. Each inspector is to be a citizen of the state and reside in the district to which appointed.

Wis. Stats., sec. 1731, p. 1252.
his relation to the geological and natural history survey.
Member of.
He is to be a member of the board of commissioners to govern the geological and natural history survey.

Chaps. 297, i63, L. 1899, pp. 637, 238.
his Relation to. the state historical society.
Member executive committee.
He , in connection with the Secretary of State and State Treasurer, shall be ex-officio member of the executive committee of the State Historical Society and take care that the interests of the state are protected, as is herein provided.

Wisconsin Stats., sec. 374, p. 327.

## Reporl.

He shall receive an annual report from the State Historical Society.

Wis. Stats., sec. 376, p. 327.

This act provides for an additional report to be made to the Governor before Jan. 10, each odd-numbered year.

Ch. 97, L. 1901.
his relation to the state board of medical examiners.
Appointment.
He shall appoint from lists furnished by three medical societies a State Board of Medical Examiners, which board shall consist of seven members. Three of the members shall be allopathic, two homeopathic and two eclectic, and their term shall be four years.

Wis. Stats., sec. 1435, p. 1075.
Report.
At the end of each biennial term he shall receive the report of the State Board of Medical Examiners.

Ch. 87, L. 1899, p. 122.
This act provides for an additional report to be made to the Governor each odd-numbered year before Jan. 10.

Ch. 97, L. 1901.

HIS RELATION TO THE STATE BOARD OF DENTAL EXAMINERS.

## Appointment.

He shall appoint, for a term of five years, a State Board of Dental Examiners, consisting of five dentists, three of whom shall be members of the Wisconsin Dental Society, as herein provided. Wis. Stats., sec. 1410e, p. 1061.

## Report.

He shall receive the report of the Board of Dental Examiners annually on the 30th of September. Report shall contain an account of receipts and disbursements.

Wis. Stats., sec. 1410j, p. 1062.
This act provides for an additional report to be made to the Governor before Jan. 10, each odd-numbered year. Ch. 97, L. 1901.

## HIS RELATION TO THE STATE BOARD OF HEALTH.

## Appointments.

He shall appoint seven members of the State Board of Health, subject to the approval of the senate, for terms of seven years, beginning the first Monday in February in the year appointed, so that the term of office of one member shall expire each year. Vacancies shall be filled for residue of term only.

Wis. Stats., sec. 1404, p. 1052.
Advice necessary as to expenditures from contingent fund.
He shall advise as to the expenditure of the contingent fund of the Board of Health.
Ch. 24, L. 1899, p. 29.
Report.
He shall receive biennially the report of the State Board of Health. . Wis. Stats., sec. 1407, p. 1053

This act provides for an additional report to be made to the Governor before Jan. 10, each odd-numbered year.

Ch. 97, L. 1901.

## HIS RELATION TO THE BOARD OF PHARMACY.

## Appointments.

He shall appoint five members of the State Board of Pharmacy for a term of five years, who shall be resident pharmacists. Vacan-
cies shall be filled for unexpired term only and by persons previously elected and certified by the Wisconsin Pharmacy association.

Wis. Stats., sec. 1409b, p. 1055.

## Report.

He shall receive the annual report of the Board of Pharmacy.
Wis. Stats., sec. 1409c, p. 1055.
This act provides for an additional report to be made to the Governor before January 10, each odd-numbered year.

Ch. 97, L. 1901.
his relation to the state horticulitural society.
Report.
In October of each even-numbered year, he shall receive an itemized account of all money expended from the State Horticultural society.

Wis. Stats., sec. 1459a, p. 1089.
An addifional report is provided by this act to be made to the Governor before January 10, each odd-numbered year. Ch. 97, L. 1901.

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                his relation to the board of arbitration.
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Appointments.
He shall appoint two members of the State Board of Arbitration \& Council, one to be an employer of labor and the other not. Wis. Stats., sec. 1729b, p. 1248.

Report.
At the end of each biennial term, he shall receive the report of the Board of Arbitration.

Wis. Stats., sec. 1721i, p. 1244.
An additional report is provided by this act to be made to the Governor before January 10, each odd-numbered year. Ch. 97, L. 1901.

HIS RELATION TO INTERSTATE PARK COMMISSION.
Appointment of Commissioners.
He may appoint three interstate park Commissioners to serve two years.

Ch. 305, L. 1901. (See ch. 315, L. 1895, and ch. 102, L. 1899.)

HIS RELATION TO THE COMMISSIONERS ON UNIFORMITY OF LEGISLATION. Appointments.

He may appoint for a term of three years a Board of Commissioners on Uniformity of Legislation consisting of three members, who shall report to him before time for meeting of legislature.
'Wis. Stats., sec. 127a, p. 239.
his relation to the milwaukee hospitals for insane.
Appointments.
He may appoint the Board of Trustees of Milwaukee Hospital for Insane, consisting of seven members, for a term of seven years.

Wis. Stats., sec. 604s, p. 444, amended by ch. 150, L. 1899.
He shall appoint a Board of Trustees of any county asyium in county of over 200,000 inhabitants, and said board shall consist of two trustees for a term of five years.

Ch. 263, L. 1899, p. 434.

HIS RELATION TO WISCONSIN INDUSTRIAL SCHOOLS FOR GIRLS.
Plans for improvements-Reports.
He and the Secretary of State shall approve of the plans for impròvements to be made to the Wisconsin Industrial Schools for Girls.
He shall receive the next annual and biennial reports, containing accounts of moneys expended.

Ch. 33, L. 1899, p. 49.

## HIS RELATION TO THE PAN-AMERICAN EXPOSITION.

Appointments-Approval of acts.
He shall appoint five members of the State Board of Commissioners of Managers for the Pan-American Exposition. He shall approve of bond of Treasurer of Board. He shall endorse his approval on estimate of money to be drawn, before payment.

Ch. 318, L. 1899, p. 585.
his relation to the st. Louis world's fair.
This act provides for a State Board Commission at St. Louis World's Fair to be appointed by the Governor. No compensation is provided but their actual expenses for transportation and subsistence when necessarily absent from their homes shall be paid from the appropriation herein provided.

Ch. 297, L. of 1901,

He may appoint a commission of five to select and erect a monument at Shiloh, Tenn. No compensation shall be received but necessary expenses to be paid out of the $\$ 10,000.00$ hereby appropriated.

Ch. 381, L. of 1901.

## MISCELLANEOUS.

He may appoint county judges for balance of term only, where vacancies occur.

Wis. Stats., sec. 2441, p. 1757, amended by ch. 7, L. 1899.
He may remove county officers, except. judicial, after giving them a hearing and a copy of the charges against them.

Const., art. 6, sec. 4, p. 100.
He may remove county officers as herein provided.
He may remove receivers of public money when duty is neglected, except those officers where the law makes other provision for removal.

Wis. Stats., sec. 968 , p. 765; sec. 969 , p. 766.
He shall issue proclamation on change of county seat.
Wis. Stats., sec. 655, p. 465.
He shall direct District Attorneys to prosecute for failure to report criminal convictions as herein provided.

Wis. Stats., sec. 1021, p. 782.
He may fill vacancy when it occurs in Milwaukee District Court Judgeship.

Ch. 218, L. 1899, p. 358.
He may appoint first Judge of second municipal court of Bayfield county and fill vacancies.

Ch. 286, L. 1899, sec. 12, p. 495.
He may appoint judges of supreme and circuit courts when a vacancy shall occur.

Const., art. 7, sec. 9, p. 107.

He is a member of the following boards:
Board of Deposits.
Wis. Stats., sec. 160a, p. 253.
Board to examine unused state chattel property and direct its disposition.

Wis. Stats., sec. 294, p. 302.

Ex-officio member of State Historical Society.
Wis. Stats., sec. 374, p. 327.
Board to divide state, by counties, into hospital districts.
Wis. Stats., sec. 581, p. 427.
Board of Commissioners of Fisheries.
Wis. Stats., sec. 1495, p. 1108.
Board to hear and try complaints against railroads.
Ch. 225, L. 1899, p. 376.
State Board of Immigration.
Ch. 279, L. 1899, p. 483.
Commission of Nelson Dewey Monument.
Ch. 93, L. 1899, p. 130.
Commission to adjust the claim of Robert S . Houstan.
Ch. 174, L. 1899, p. 255.
what the statutes provide shall be filed in the executive office.
Election returns by County Clerk.
Wis. Stats., sec. 87, p. 215.
All patents, statements of lists of lands or certified copies thereof. Wis. Stats., se?. 129, p. 240.

Satisfactory evidence of loss of original military commission before new one can be issued.

Wis. Stats., sec. 131a, p. 242.
Oath and bond of Secretary of State.
Wis. Stats., sec. 138, p. 243.
Patents, land statements, \&c., as herein provided.
Wis. Stats., sec. 141, p. 244.
Biennial report of the Secretary of State.
Wis. Stats., secs. 141-4, p. 244.
Biennial, annual and quarterly reports of the Auditor.
Wis. Stats., secs. 144-5, pp. 13, 246.
Oath and bond of the State Treasurer.
Wis. Stats., sec. 153. p. 249.

Annual and quarterly report of the State Treasurer. Wis. Stats., secs. 157-7, p. 250; secs. 161-8, p. 254.

Biennial report of the State Superintendent. Wis. Stats., secs. 166-8, p. 256.

Reports from retiring state officers of transactions from September 30 , to date of retirement.

Wis. Stats., sec. 168, p. 258.
Biennial report of Commissioners of Public Lands.
Wis. Stats., sec. 191, p. 270.
Oath and bond of the Superintendent of Public Property, and annual report.

Wis. Stats., sec. 286, p. 299; sec. 295, p. 302.
Annual reports of officers and heads of departments, unless otherwise provided by law.

Wis. Stats., sec. 333, p. 313.
Biennial report of Commissioners of Public Printing. Wis. Stats., sec. 335, p. 313.

Annual report of Free Library Commission. Wis. Stats., sec. 373a, p. 326.

Annual report of Executive Committee of State Historical Society. Wis. Stats., sec. 376, p. 327.

Biennial report of Regents of U. W. Wis. Stats., sec. 383, p. 331.

Biennial report of Regents of Normal Schools. Wis. Stats., sec. 410, p. 341.

Biennial report of Board of Control as to State Institutions. Wis. Stats., sec. 561d, p. 371.

Written report of Agent appointed to investigate State Institutions. Wis. Stats., sec. 562a, p. 373.

Report of Legislative Visiting Committee. Wik. Stats., sec. 562b, p. 374.

Semi-annual report of Board of Control as to Veterans' Home. Wis. Stats., sec. 567, p. 376.

Bonds of persons who make charges against officers. Wis. Stats., sec. 968 , p. 765.

Annual report of court clerks as to criminal convictions. Wis. Stats., sec. 1020 , p. 781.

Biennial report of Commissioner of Labor Statistics. Wis. stats, p. 1021k, p. 785.

Statement of the Secretary of State as to additional tax provided by chapter 48, W. S.

Wis. Stats., sec. 1072, p. 827.
Biennial report of Board of Health and Vital Statistics.
Wis. Stats., sec. 1407, p. 1053.
Annual report of the Board of Pharmacy. Wis. Stats., sec. 1409c, p. 1055.

Biennial report of the Dairy and Food Commissioner. Wis. Stats., sec. 1410, p. 1058.

Annual report of the State Board of Dental Examiners. Wis. Stats., sec. 1410j, p. 1062.

Biennial report of the Supervisor of Inspectors of Illuminating Oils. Wis. Stats., sec. 1421e, p. 1068.

Biennial report of the State Board of Agriculture.
Wis. Stats., sec. 1458a, p. 1088.
Biennial report of the State Horticultural Society. Wis. Stats., sec. 1459a, p. 1089.

Annual report of the Secretary of Cranberry Growers' Association. Wis. Stats., sec. 1479a, p. 1096.

## Biennial report of the State Veterinarian.

Wis. Stats., sec. 1492e, p. 1103.
Annual report of the Inspector of Apiaries.
Wis. Stats., sec. 1494, p. 1105.
Annual report of the Fish and Game Warden.
Wis. Stats., sec. 1498 1, p. 1113, amended by ch. 312, L. 1899.
Annual report of the State Treasury Agent. Wis. Stats., sec. 1579, p. 1158.

Ainnual report of the Forest Warden.
Wis. Stats., sec. 1636d, p. 1186.
Biennial report of State Board of Arbitration and Conciliation, and oaths of the members.
Wis. Stats., sec. 1721i, p. 1244; sec. 1729b, p. 1248.
Annual report of the Commissioner of Insurance. Monthly report of Commissioner of Insurance.

Wis. Stats. sec. 1729b, p. 1248; sec. 1729c, p. 1249.
Biennial report of the Railroad Commissioner.
Wik. Stats., sec. 1795, p. 1322.
Annual report of the Bank Examiner.
Wis. Stats., sec. 2023r, p. 1524.
Application in writing on which to base a demand on governors of other states for return of fugitives. Requisition papers from executives of other states.

Wis. Stats., sec. 4843, p. 2864; sec. 4847, p. 2866.
Applications for pardons, and papers provided by the statutes. Wis. Stats., sec. 4857, p. 2868.

Copies of all papers necessary upon application for requisition. Wis. Stats., sec. 4846, p. 2865.

Recommendation of superintendent of reformatory and Board of Control as a prerequisite to discharging reformatory inmates. Wis. Stats., sec. 4944, p. 2885.

Annual and biennial reports of Industrial School for Girls. Ch. 33, L. 1899, p. 49.

Biennial report of Board of Medical Examiners. Ch. 87, L. 1899, p. 322.

Report of Interstate Park Commissioners.
Ch. 102, L. 1899, p. 139.
Bonds and reports of Trustees of Veteran's Home. Ch. 122, L. 1899, p. 188.

Copy annual returns Adjutant General to President of U. S. Ch. 200, L. 1899, p. 309.

Bond and biennial report of Quartermaster General.
Ch. ${ }^{000}$, sec. 15, L. 1899.

## Bond of Treasurer of Pan-American Exposition.

Ch. 318, L. 1899, p. 585.
Reports of state officers, heads or chiefs of departments, boards, including the U. and Nor. School to be made on or before January 10, each odd-numbered year.
Ch. 97, L. 1901.
Expenditures of Industrial School for Girls.
Ch. 180, L. 1901.

## disbursements in connection witil the executive DEPARTMENT.



Pages 155, 488 and 500 in the report of the Secretary of State for the year ending Sept. 30, 1900.

## SECRETARY OF STATE.

The Secretary of State is also state Auditor by virtue of the consititutional provision.

His duties as Secretary of State are entirely different in character from those as Auditor.

In the former case he is at the head of the department of state, while as auditor he is charged with the duty of auditing all accounts and managing the fiscal affairs of the state and all of its officers, agencies, departments, boards, commissions and institutions.

This distinction should be clearly borne in mind in any investigation of the laws affecting this state officer.

The early acts were specific, precisely worded and definite as to the distinction, but as the statutes have been revised and amended, many sections do not clearly show the division of duty.

In this compilation the early session laws have been consulted to aid in determining the intent of the statutes in which the term "Secretary of State" only frequently appears where it is obvious that the words "as Auditor" should be added.

The laws governing the "Secretary of State as Auditor" follow immediately after those relating to the "Secretary of State."

## SECRETARY OF STATE.

How Chosen.
He shall be chosen by qualified electors, when members of the leg. islature are chosen. Term, two years. Const., art. 6, sec. 1, p. 100.

Duties generally.
He shall perform duties assigned to him by law.
Wis. Stats., sec. 2, p. 100.
Great seal.
He shall keep the great seal of the state.

When Secretary of state to be Governor.
He shall act as Governor in case of vacancy in office of Governor or Lieutenant-Governor.

Const., art. 5, sec. 8, p. 98.
Oath and bond.
Within twenty days after receiving notice of his election and before entering upon his duties, he shall take the constitutional oath of office and give a bond of $\$ 25,000$, as provided in this section, which shall be preserved in the executive office.

Wis. Stats., sec. 138, p. 243.

## Salary.

His salary is $\$ 5,000$ annually, in full for all services including those as Commissioner of Public Lands.

Wis. Stats., sec. 170, p. 259.
Assistant Secretary; his bond salary.
He may appoint an assistant, whose salary shall be $\$ 2,000$ annually and whose oath shall be filed in the executive office. Said assistant shall execute a bond to the Secretary. Such assistant may perform all duties of Secretary of State except as Commissioner of Public Lands.

Wis. Stats., sec. 139, p. 244; sec. 170, p. 259.

## Clerical help.

He may employ clerks, book-keepers and stenographers as follows:
A chief clerk, at $\$ 1,800$ annually.
A recording clerk, at $\$ 1,200$ annually.
A filing clerk, at $\$ 1,400$ annually.
A registration clerk, at $\$ 1,200$ annually.
A notarial clerk, $\$ 1,300$ annually.
An incorporation clerk, $\$ 1,400$ annually.
A warrant clerk, $\$ 1,200$ annually.
A shipping clerk, $\$ 1,200$ annually.
A printing clerk, $\$ 1,500$ annually.
Assistant printing clerk, $\$ 1,000$ annually.
A statistical clerk, $\$ 1,200$ annually.
A vault clerk, $\$ 1,200$ annually.
Four extra clerks, each $\$ 1,200$ annually.
A chief book-keeper, $\$ 1,800$ annually.
A first assistant book-keeper, at $\$ 1,600$ annually.
Second assistant book-keeper, $\$ 1,300$ annually.
A stenographer, $\$ 900$ annually.
Total salaries of office, $\$ 33,000$ annually, including salary of secretary and assistant secretary.

- Wis. Stats., sec. 140, p. 244, amended by ch. 351, L. 1899.

Secretary of State; duties (see also Secretary of State as Auditor).

1. He shall keep record of official executive acts, and when required lay all matters relative thereto before the Legislature.

Const., art. VI, sec. 2, p. 100.
2. He shall keep the Great Seal and affix the same to, and countersign commissions and other executive acts. Wis. Stats., sec. 141, p. 244.

He shall make a register of such commissions as herein provided. (See sec. 135.)
3. He shall have the custody of books, records, deeds, bonds, parch. ments, maps, papers and other state effects in his office and shall make provision for their preservation; and the same with all accounts and transactions shall be open to examination of the Governor or any Legislative committee. After recording he shall transfer to the executive office all patents, land statements certified by U. S. officers for aiding construction of rail or military wagon roads or for benefit of Fox and Wisconsin rivers improvement or Wisconsin railroad farm mortgage land company. (See ch. 258, L. 1899, sec. 160.)
4. He shall report within 10 days after Sept. 30 each even-numbered year to the Governor, any matters affecting office of Secretary not embraced in Auditor's report, and when required he shall furnish the Governor or Legislature any information relating to his office.
At the close of each odd-numbered year he shall make a condensed statement of state finances and print in the state paper and one other paper politically antagonistic thereto, as herein provided.
Wis. Stats., sec. 335a, p. 314.
5. When required, he shall make copies of laws, resolutions, deeds, bonds, records, doctrines, or other papers in his office attaching thereto his certificate with seal affixed. He shall receive 12 c per folio and 25 c for certificate.
Wis: Stats., sec. 141, p. 245.
6. He shall keep safely enrolled laws and resolutions and shall not allow them to be taken from his office unless by order of the Governor or legislature. (See section 130.)
Penalty for violation, $\$ 100$.
7. He shall deposit with Treasurer, immediately after passage, copies of laws providing for payment of money from treasury. He shall certify to the Treasurer the names of all persons, whose salaries are to be paid from Treasury, specifying office and term of each.

He shall certify vacancies in office immediately upon receiving official information.
8. He shall keep office in the capitol, which shall be open during business hours, except Sundays.
9. He shall include in his biennial report a detailed statement of fees received by him including those received as Commis. sioner of Public Lands.
He shall include in his biennial report a detailed statement of fees received by the Attorney General and Treasurer and statement of additional tax levied under this section.
He shall cover into treasury every month all such fees to the credit of the general fund.
Wis. Stats., sec. 1072 , p. 827 ; sec. 141, p. 245.
The act requires the Secretary to make a biennial fiscal report within 15 days after legislature convenes as herein provided to enable the legislature to more intelligently consider fiscal matters. The period covered to be from noon on the first Monday in January, each odd-numbered year to noon, first Monday in January, next odd-numbered year.

- Ch. 368, L. 1901.

Custodian, deeds, etc.
He shall preserve in his office all deeds, mortgages and other state securities for money and the same shall be open to the public inspection.

Wis. Stats., sec. 142, p. 245.

## Enrolled bills to be bound.

He shall cause the original enrolled laws and resolutions, passed by legislature, to be bound with index as provided by this section.

Wis. Stats., sec. 143, p. 245.
Care of book̀s, bills and documents.
He shall care for all books, bills and documents deposited with him by the Chief Clerks of the Legislature.

Wis. Stats., sec. 108, p. 233.

## Stationery.

He or his assistant may draw stationery for the state department from the Superintendent of Public Property.

Wis. Stats., sec. 290, p. 301.

## Postage.

He may procure for his official correspondence necessary postage stamps or. stamped envelopes at state expense.

Wis. Stats., sec. 169, p. 258.

Certificate of appointment of Notary Public.
He shaī deliver Notary Public certificates of appointment after there has been deposited in the State Department applicants impression of official seal as herein required, also oath, bond and postoffice address provided payment of $\$ 2.00$ is made as herein provided.

Wis. Stats., sec. 174, p. 264.

## Notification to Notaries Public.

He shall notify every Notary Public from 30 to 60 days before expiration of commission of time of its expiration.

Wis. Stats., sec. 174, p. 264.
Notice of Election.
He shall give and publish notice between July 1 and September 1 each general election year stating that the election will be held on the Tuesday next succeeding the first Monday in November following.

Wis. Stats., sec. 20 , p. 175.
Duty of Secretary of State as to elections to fill vacancies and as to notice for elections of special circuit and county judges.

Wis. Stats., sec. 94 1, p. 222; sec. 94o, p. 224.
Certificates of election.
He shall prepare three lists of names of the electors, procure thereto the signature of the Governor, affix the great seal of the state to the same, and deliver such certificates thus signed to one of the electors on or before the said second Monday in January.

Wis. Stats., sec. 94aa, p. 227.
Election of senators.
He shall file and record a statement of election of U. S. senator delivered to him by order of the President of the Senate and Speaker of the Assembly.

Wis. Stats., sec. $94 u$, p. 226.
Certificate.
He shall countersign certificate of election.
Wis. Stats., sec. 94 v , p. 226 ; sec. 19 , p. 228.
Blue book.
He shall fix expenses of preparing and publishing blue books other than such is covered by printing contract and make distribution as herein provided.

Wis. Stats., sec. 119, p. 236, amended by ch. 29, L. 1899.

He is aliowed 125 copies of blue book.
Wis. Stats., sec. 121, p. 236.
He shall keep two (2) legislative dockets as herein provided.
Ch. 243, L. 1899.
A committee consisting of two members from the Senate and three from the Assembly shall be called the 'committee of printing' and shall have power to examine all papers and documents on file in the office of the Secretary of State and all printed matter of the state.

Wis. Stats., sec. 206, p. 233.
Census.
He shall supervise the taking of state census in 1905 and every 10 years thereafter.

$$
\text { Ch. } 45 \text {, sec. } 992, \text { p. } 773 .
$$

Record of taxes.
He shall record so much of the abstract as will aggregate, amount of each, kind of tax levied and include a condensed statement thereof in his biennial report.

Wis. Stats., sec. 1006, p. 778.
He is hereby authorized and directed to include in the appropriate tax levies sums sufficient to satisfy the annual appropriation hereby made.

$$
\text { Ch. 322, L. } 1901 .
$$

Statement of sales of real estate.
Each Register of Deeds shall on or before each Sept. 1, make to the Secretary of State a statement of real estate-sales. (On page 779, R. S., is given the requirements for such statements.)

Wis. Stats., sec. 1007, p. 778,
Statement, to be compiled.
He shall make a compilation from such statement for State Board assessment and may include the same in his biennial report.

Wis. Stats., sec. 1008, p. 779.
He shall prepare statistics for the Board of Assessments.
Wis. Stats., sec. 1069, p. 826.
This law constitutes the Commissioner of Taxation the first and second assistants of the commissioner, a State Board of Assessment and prescribes the duties of the Secretary of State in relation thereto.

Ch. 237, L. 1901.

Statistics of farm products.
County clerks shall furnish him statistics of agricultural products procured from assessors' reports.

Wis. Stats., sec. 1010, p. 779.
Blanks to be furnished by him.
He shall furnish officials necessary blanks and instructions for returns and statistics.

Ch. 308, L. 1899.
Wis. Skats., sec. 1000 , p. 778; sec. 1011, p. 780; sec. 1018, p. 781; sec. 1023 a, p. 786 ; sec. 1024 a, p. 787 ; sec. 1025 , p. 788 ; sec. 1026 , p. 789 ; sec. 1032, p. 794.

Statistics as to defective classes.
He shall include statistics furnished him under this Ch. in form of condensed statement in next biennial report.

Wis. Stats., sec. 1013, p. 780; sec. 1014, p. 780.

Neglect of duty.
He shall prosecute such clerks for forfeiture provided for failure to perform duties required by chapter 46.

Wis. Stats., sec. 1019, p. 781.

Duty of register.
He shall file and record statistics of marriages, deaths, and births transmitted to him by the Register of Deeds.

Wis. Stats., sec. 1026, p. 789.

Statement to be sent for.
He may send a messenger for delinquent reports and statements herein provided and expense thereof collected with next state

- tax of such county.

Wis. .Stats., sec. 1068 , p. 825 ; sec. 1016, p. 781.

May require searches.
The Secretary of State, Treasurer and Attorney General may require searches for papers, records and documents in the respective offices of each other as herein provided.

Wis. Stats., sec. 2963, p. 2075.

Commissioners of public lands.
He shall be one of the commissioners for the sale of the school and university lands and for the investment of the funds arising therefrom.

Wis. Stats., sec. 7, p. 120.

Statement of loans.
He shall furnish county clerks a statement of loans made from trust funđ̃ as herein provided.

Wis. . Stats., ses. 258é, p. 293.
Provides for date of interest payment on trust fund loans.
Ch. 72, L. 1901.
Public lands and land mortgaged to state.
He shall transmit to county clerks an abstract of public lands and lands mortgaged to the state. See sections, 1078, 1112, 1145, 1146, 1147.

Wis. Stats., sec. 1046, p. 810.
Record; certificate.
He shall record copies of trade-marks, labels and counterparts and may collect a fee of $\$ 1.00$ therefor.

Wis. Stats., sec. 1747a, p. 1257.
Certificate; evidence.
He shall give a certificate of filing and recording such papers and may collect therefor a fee of $\$ 1.00$.

Wis. Stats., sec. 1747b, p. 1258.
Record of brands, etc.
He shall record description of names, brands, trade-marks, upon demand, and the fee therefor shall be $\$ 5.00$.

Wis. Stats., sec. 1747d, p. 1258.
Deposit.
Title Guaranty company's bonds or security subject to his approval.
When suit may be commenced, upon receipt, he shall issue certificate as herein required.

Wis. Stats., sec. 17771, p. 1301.
Conveyances, etc., how executed and recorded.
He shall endorse his certificate on railroad mortgages and conveyances and satisfaction thereof, specifying day, hour and minute of reception and volume and page where recorded.

Wis. Stats., sec. 1839, p. 1356.
Capital stock.
He shall authorize trust companies to commence business when this section is complied with.

Wis. Stats., sec. 1791d, p. 1316.
He shall compute amounts due each county for maintaining county hospitals, as herein provided.

Ch. 271, L. 1899.

Collection of charges.
He shall include in tax levy amount due from counties for support of inmates in Home for Feeble Minded and notify county clerks and Board of Control.

Wis. Stats., sec. 573, p. 423.
Care of non-residents.
He shall credit the county, in whose asylum insane are cared for, $\$ 3.00$ per week each and clothing.
One-half of this $\$ 3.00$ and all of clothing he shall charge to the county from which sent, as herein provided.

Wis. Stats., sec. 604f, p. 441.
Accounts, rendition and approval of.
He shall refer to the Board of Control for approval names of insane received from county asylums, and thereupon he shall credit amount due each county on state tax next due.

Wis. Stats̀., sec. 804e, p. 440.
Meeting of board; statements, record and publication.
He shall appoint a meeting of State Canvassers and record statements and determinations, as herein provided.

Wis. Stats., sec. 94a. p. 217; sec. 94b, p. 218; sec. 94d, p. 219.
Messengers' compensation; election and registry blanks.
He shall fix a reasonable compensation for messenger services for

- election returns and prepare all necessary election and registry blanks.

Wis. Stats., sec. 94 h, p. 220 ; sec. 94 i , p. 221.
License, application; license for circus.
Peddlers and patent-right dealers and circus exhibitors desiring license shall make a written application to him, giving information as herein provided.

Wis. Stats., secs. 1571, 1573, p. 1156; sec. 1574, p. 1157, amended by ch. 341, L. 1901.

Issue of license; soldiers exempt..
He shall, upon payment of fees, grant license to applicants who have filed treasurers' receipts showing payment of license fees.
He may license soldiers of the rebellion without fees. (See sec. 1579.)

Wis. Stats., sec. 1575, p. 1157.
Proceeds of sale.
He shall keep a correct record of proceedings of the "Board to determine disposition of state chattel property" and embody in his biennial report a detailed account of all sales made.

Wis. Stats., sec. 295, p. 302.-

Preservation and sale of documents, etc.
He shall compute cost price at which Superintendent of Public Property may sell copies of state publications as herein provided.

Wis. Stats., sec. 360, p. 323.
Articles, how amended, recorded.
He shall publish notice of amendments to articles of incorporation as herein provided.

Wis. Stats., sec. 1774, p. 1290.
Examination of work; accounts.
He shall examine printing executed under this chapter and see that it is properly and legally done.
He shall keep accurate account of paper delivered to the State Printer and see that it is used with no unnecessary waste. (See secs. 323, 324, 325.)

Wis. Stats., sec. 326, p. 311.
Accounts; examination of.
He shall examine, compare and correct all accounts for work and material under this chapter, aided, if necessary, by a practical printer, as herein provided.

Wis. Stats., sec. 328, .p. 311.
Printing laws and journals.
He may delay the printing of the regular session laws until adjournment of the extra session so that laws of both may be printed and bound together.

Wis. Stats., sec. 338, p. 316.
In official paper; copy for state paper and printer.
He shall supervise publication of laws in state paper, furnish a copy of laws to such paper and at close of every session he shall furnish a copy of laws with index notes and catch-lines to State Printer, as herein required.

Wis. Stats., secs. 329, 330, p. 312.
Local laws.
He shall at once, after publishing local laws in state paper, furnish copy for publication to paper at place to which subject relates, also to clerks of cities and villages when afflicted by the laws.

Wis. Stats., sec. 332, p. 313.
Publication of laws in newspapers.
He shall supervise the publication of "copy laws," as herein provided, in newspapers of the state.

Wis. Stats., sec. 331, p. 312.

Assessment and election laws.
He may print in pamphlet form for county and town officers a compilation of assessment and collection laws, as herein provided. Wis. Stats., sec. 342, p. 317.

Parts stricken out.
Parts of reports stricken by the Commissioners of Public Printing shall be copied in a book by the Secretary of State and returned to officers making reports, as herein provided.

Wis. Stats., sec. 333, p. 313.
Orders for paper; waste or conversion.
He shall deliver his order on the Superintendent of Public Property to State Printer, preserving a duplicate thereof. "Waste" to be allowed for as herein provided.
Penalty for conversion of paper.
Wis. Stats., sec. 313, p. 307.
Who may make.
He shall issue orders for printing, ruling and binding except what may be ordered by Legislature or required by law.

Wis. Stats., sec. 314, p. 308.
Public documents.
He may order public documents bound in two volumes when pages exceed 1,500 .

Wis. Stats., sec. 319, p. 309.
Laws.
He shall number session laws in consecutive chapters as received from the Governor and annex his certificate, as herein provided. Wis. Stats., sec. 320, p. 309.

## Printing and binding.

He shall cause State Printer to do binding for Historical Society, as herein provided.

Wis. Stats., sec. 375, p. 327.,
He may authorize the State Printer to bind all periodicals of Wisconsin Academy of Science and Arts and shall audit the accounts therefor.

Ch. 186, L. 1901.
Penalties upon counties.
He shall add 10 per cent. to each county apportionment as penalty in cases where taxes are withheld.

Wis. IStats., sec. 1124, p. 849.

## Method of apportionment.

He shall annually apportion the state tax among the counties in proportion to relative valuation of each county to aggregate value. .
He shall certify on or before the first Monday in October to each clerk the amount of such taxes apportioned into special charges as herein provided.
He shall charge to each county the entire amount of taxes and charges.

Wis. Stats., sec. 1070, p. 827.
Appropriations in excess of levy.
Where appropriations and existing laws exceed the amount of tax levied, he shall levy and apportion such additional amount as may be necessary. (See note to Constitution, article 8, section '0, which possibly conflicts.)

Wis. Stats., sec. 1071, p. 827.
Collection of taxes paid on failure of title.
He shall in case state has failed to furnish complete title to land, certify as an additional tax so much of the money paid to each county for other than school purposes.

Wis. Stats., sec. 232, p. 283.
Apportionment of interest and tas to pay.
He shall annually levy a tax sufficient to pay interest on certificate of indebtedness.

Wis. Stats., sec. 260, p. 294.
Agricultural College Fund.
He shall add to the state tax to be levied a sum to replace any part of the Agricultural College Fund diminished or lost.
Fund shall be kept intact.
Wis. Stats., sec. 249, p. 287.
State aid.
He shall yearly include and apportion in state tax sums expended in aid of free high schools.

Wis. Stats., sec. 491b, p. 385; sec. 496, p. 387.
Preparation and issuance of fee.
.He shall prepare license for hunting game in two forms: Non-resident license named by him shall be countersigned by the Fish and Game Warden. Fees paid over to the Treasury. Fees to hunt deér, $\$ 25.00$. All kinds except deer, $\$ 10.00$.

Wis. Stats., sec. 1498 p, p. 1115; sec. 1498q, p. 1115; sec. 1498r, p. 1116, amended by ch. 312, L. 1899.

Articles to contain what; fees.
This section provides what written articles to form Wisconsin corporation shall contain and what fees shall be paid for filing with Secretary of State.

Wis. Stats., sec. 1772, p. 1286, amended by ch. 238, L. 1901.
No fee when no capital stock or when corporation for charitable or reformatory purposes.

Filing articles.
Foreign corporations, fee $\$ 25$ for filing copy of charter or articles of incorporation. Amendments thereto, $\$ 15$.

Wis. Stats., sec. 1770b, p. 1279.
Blanks.
The Secretary of State shall prescribe and furnish the several officers with blanks as herein provided.

Wis. Stats., sec. 1032, p. 794.
Statement to be sent for.
Each county clerk upon the receipt of such statement shall make an abstract of the same and transmit it to the Secretary of State in September.
Statement to be sent for upon failure to do as provided in the preceđing section.

Wis. Stats., secs. 1067, 1068, p. 825.
boards of which the secretary of state is a member.

State Board of Immigration.
Ch. 279, L. 1899, p. 483.
Ex-officio member of Executive Committee of State Historical Society.

Wis. Stats., sec. 374, p. 327.
Board to examine and direct disposition of unused state chattel property.

Wis. Stats., sec. 294, p. 302.
Commission to adjust the claim of Robert S. Houstan. Ch. 174, L. 1899, p. 255.

Commissioners of Public Lands. Wis. Stats., sec. 185, p. 269 . -

Commissioners of Public Printing.
Wis. Stats., sec. 296, p. 303.
State Board of Canvassers.
Wis. Stats., sec. 93, p. 217.
Státe Board of Assessment.
Wis. Stats., sec. 1069, p. 826.
Board of Deposits, as one of the Commissioners of Public Lands.
Wis. Stats., sec. 160a, p. 253.
duties of secretary of state acting with other state officers-nct including the above.

With the State Treasurer and Attorney General and with the consent of the Governor, he may transfer trust funds to the general fund.

Ch. 147, L. 1899, p. 217.

Power when state affected by suits.
With the Governor and Treasurer he may employ counsel as herein provided.

Wis. Stats., sec. 131, p. 241.
Certificates of indebtedness; interest.
In connection with the officers mentioned in section 131, he may execute certificates of indebtedness and apportion funds in the treasury.

Wis. Stats., sec. 259, p. 294; sec. 1069a, p. 827.
Debt against state.
With Governor and Attorney General he may issue authority to create indebtedness as herein provided.

Wis. Stats., sec. 561i, p. 499; sec. 563, p. 414.

Index.
With Attorney General's assistance he shall prepare and publish index as herein required.

Wis. Stats., sec. 328, p. 311.

WHAT THE STATUTES DECLAPE MUST BE DEPOSITED OR FILED IN OFFICE OF SECRETARY OF STATE

Statement of election of United States Senator.
Wis. Stats., sec. 94 u, p. 226.
Certified statement of vote by counties.
Wis. Stats., sec. 94, p. 217.
Certified statement and determination of Board of Canvassers. Wis. Stats., sec. 94b, p. 218

Returns- of Presidential vote.
Wis. Stats.; sec. 94c, p. 218.
Description of Executive privy seal.
Wis. Stats., sec. 98, p. 230.
Notice of contested election.
Wis. Stats., sec. 104, p. żシ2.
Books, bills and documents of Legislature, for safe-keeping. Wis. Stats., sec. 108, p. 233.

Acts and resolutions of Legislature. Wis. Stats., sec. 130 , p. 240.

All patents issued by the Governor.
Wis. Stats., sec. 135, p. 242.
All deeds, conveyances, leases; bonds, mortgages and other securities for money belonging to state, unless otherwise directed. Wis. Stats., sec. 142, p. 245.

Assistant State Treasurer's oath and certificate of appointment. Wis. Stats., sec. 158, p. 252.

Orders of Commissioners of Public Lands directing investments. Wis. Stats., sec. 160, p. 252.

A record of the proceedings of the Board of Deposits. Wis. Stats., sec. 16a, p. 253.

Sworn statements of state depositories. Wis. Stats., sec. 160 f, p. 254.

Notaries Public application, oath and bond. Wis. Stats., sec. 174, p. 264.

Cpmmissioners of Deeds, impression of seal and posţoffice address, Wis. Stats., sec: 182, p. 267,

Certificates of Indebtedness by Commissioner of Public Lands.
Wis. Stats., sec. 2058c, p. 292.
Duplicate Certificates of Indebtedness representing bonds purchased and cancelled bonds when paid.

Wis. Stats., sec. 259, p. 294.
Itemized bills of stationery purchases.
Wis. Stats., sec. 289, p. 300.
Duplicate of Superintendent of Public Property's report.
Wis. Stats., sec. 291, p. 301.
Bids for state printing.
Wis. Stats., sec. 301, p. 304.
Bonds of bidders for public printing.
Wis. Stats.; sec. 302, p. 305.
Paper purchased by Commissioners of Public Printing.
Wis. Stats., sec. 310, p. 307.
All paper in possession of the State Printer. March 1, June, Sep: tember and December.

Wis. Stats., sec. 313, p. 307.
Copies of work ordered of State Printer and copy of each document executed.

Wis. Stats., sec. 323, p. 310; sec. 327, p. 311.
Proof of publication of laws.
Wis. Stats., sec. 331, p. 312.
Written approval of commissioners consenting to enlargement of reports.

Wis. Stats., sec. 337, p. 316.
Supreme Court Reporter's bond, to be approved and his appointment and salary to be certified to the Secretary of State.

Wis. Stats., sec. 346, p. 318.
250 Wisconsin reports free within 60 days after delivering manuscript.

Wis. Stats., sec. 347b, p. 318.
All public documents and Supreme Court reports and receipt of Superintendent of Public Property covering same.

Wis, Stats., sec. 348, p. 320.

State Librarian's bond is executed to the state. Statute does not provide where it shall be filed.

Wis. Stats., sec. 368 , p. 324.
Oaths of members of Board of Control.
Wis. Stats., sec. 561a, p. 406.
Bonds of Steward and other officers of the state charitable, reformatory and penal institutions, which may be fixed by the Board of Control.

Wis. Stats., sec., 561 l, p. 412.

Consent of Board of Control to adoption of children.
Wis. Stats., sec. $573 \mathrm{j}, \mathrm{p} .422$.
Certification of Trustees of County Asylums of names of insane.
Wis. Stats., sec. 604c, p. 440.
Certification of completion of County Asylums.
Wis. Stats., sec. 604d, p. 440.
Names of insane irom County Asylums.
Wis. Stats., sec. 604e, p. 440.
Duplicate of orders of Governor fixing pay of Quartermaster General.

Wis. Stats., 'sec. 630, p. 455.
County elerks' returns.
Wis. Stats., sec. 1005, p. 778.
Register of deed's statements.
Wis. Stats., sec. 1007 , p. 778.
County clerks' statistics. Wis. Stats., sec. 1010, p. 779; sec. 1014, p. 780.

Duplicates of assessors' reports to county clerks.
Wis. Stats., sec. 1012, p. 780.
Statistics of indebtedness, when Secretary of State requires. Wis. Stats., sec. 1017, p. 781.

Copies of register of deeds' records.
Wis. Stats., sec. 1026, p. 789.
County clerks' abstract of property statements.
Wis. Stats,, sec. 1067. p. 825,

List prepared by Board of Assessment, and journal of proceedings. Wis. Stats., sec. 1069, p. 826.
Certification by State Superintendent of apportionment of school tax fund.

Wis. Stats., sec. 1072a, p. 827.
Bond of supervisor of Inspectors of Illuminating Oils.
Wis. Stats., sec. 1421b, p. 1068.
Sworn statements of officers of county agricultural societies.
Wi.j. Stats., sec. 1463, p. 1091.

## Oath of State Veterinarian.

Wis. Stats., sec. 1492, p. 1101.
Application of those desiring to be licensed as peddlers, patent-right dealers and circus exhibitors.

Wis. Stats., sec. 1571, p. 1156; sec. 1573, p. 1156; sec. 1574, p. 1157.
Treasury Agent's oath and bond.
Wis. Stats., sec. 1578, p. 1158.
Applications for licenses by Treasury Agent.
Wis. Stats., sec. 1579, p. 1158.
Copies, counterparts or facsimiles of trade-marks as herein provided.

Wis. Stats., sec. 1747a, p. 1257.

Foreign manufacturing corporations' statements.
Wis. Stats., sec. 1770a, p. 1279.
Foreign corporations-copy charter and articles.
Wis. Stats., sec. 1770b, p. 1279.
Verified copy articles of incorporation of Wisconsin corporations. Wis. Stats., sec. 1772, p. 1286; sec. 1174, p. 874.

Written agreement abandoning corporations.
Wis. Stats., sec. 1773, p. 1288.
Copy of amendments to articles of incorporations.
Wis. Stats., sec. 1774, p. 1290.
Title guaranty companies' statements and bonds or securities with power of substitution.

Wif. Stats., sec. 17771, p. 1301.

Bonds of private corporations conducting private asylums.
Wis. Stats., sec. 1786a, p. 1307.
Certificate of dissolution of Wisconsin corporation.
Wis. Stats., sec. 1789, p. 1311.
Affidavit and annual report of trust company. Wis. Stats., sec. 1791d, p. 1316.

Report of Insurance Commissioner, first day of each month. Wis. Stats., sec. 1792c, p. 1321.

Railroad Commissioner's bond.
Wis. Stats., sec. 1793, p. 1321.
Power of attorney of non-resident railway equipment companies.
Wis. Stats., sec. 1795c, p. 1323.
Copies of records, resolutions, articles, etc., from railroad companies in case of new branches, altering route, making consolidation, changing name, agreement with stockholders, as herein provided.

Wis. Stats., sec. 1820 , p. 1342 ; sec. 1831 , p. 1350 ; sec. 1832 , p. 1350 ; sec. 1825, p. 1353; sec. 1858, p. 1371.

Railroad mortgages, conveyances or satisfaction thereof for recording railroad agreements regarding land sales.

Wis. Stats., sec. 1839, p. 1356.
Articles and affidavits of turnpike and plank road companies.
Wis. Stats., sec. 1865, p. 1377.
Deputy Insurance Commissioner's oath; his bond shall run to Commissioner.

Wis. Stats., sec. 1967, p. 1483.
Insurance Commissioner detailed report the first of each month. Wis. Stats., sec. 1972c, p. 1487.

Certificate as to State Grange. Wis. Stats., sec. 2007, p. 1509.

Bank Examiner's oath, bond and seal. Certificate of Governor's approval.

Wis. Stats., sec. 2023h, j, p. 1522.

Oaths of șupreme judges and clerk.
Wis. Stats., sec. 2398, p. 1727; sec. 2399, p. 1727.

Certificate of Supreme Court Justices as to employment or discharge of stenographer, janitors and messenger.

Wis. Stats., sec. 2400, p. 172\%.
Circuit Court Judges' oāths.
Wis. Stats., sec. ¿419, p. 174 ² $^{2}$
Transcript of judgment against state by Supreme Court Clerk.
W:s. Stats., sec. 3203, p. 2207.
Judgment roll in actions against corporations.
Wis. Stats., sec. 3249, p. 2224.
Warden's bond.
Wis. State., sec. 4896, p. 2877.

Deputy warden's and clerk's bond.
Wis. Stats., sec. 4903, p. 2878.
Copy of account made by warden of prison, after audit and allowance by U. S. government.

Wis. Stats., sec. 4933, p. 2883.
Cancelled bonds, by Commissioners of Public Lands.
Ch. 130, L. 1899, p. 199.
Reports of county clerks of taxes levied.
Ch. 243, L. 1899, p. 402.
Cn. 143, L. 1899, p. 212.
Authorization to act by legislative counsel and agents and account of expense of such counsel and agents.

Ch. 270, L. 1899, p. 460.
Ch. 258, L. 1899, p. 425.
Duplicate of Insurance Commissioner's certificates to certain insurance companies.
On Jan. 1, 1901, records, plats, field notes and papers of land office.
Certificate of Board of Control as to number of acute and chronic insane.

Ch. 271, L. 1899, p. 469.

Notice of intention and bond by those offering to furnish equipments for telephone purposes, together with bond, as herein provded.

Ch. 309, L. 1899, p. 543.

County treasurers' reports as to estates liable to inheritance tax. Ch. 355, L. 1899, p. 668.

The official seal and signature of county judges.
Ch. 1, 5, L. 1901.
Ch. 31, L, 1901.
The expenses of the Board of the Pan-American Exposition with
approval of the Governor endorsed thereon. Ch. 318, L. 1899.

Oath of members of Commission of Inter-State Park of the Dalles of the St. Croix.

Ch. 305, L. 1901.

## disbursements in the state department

## For the year ending Sept. 30, 1900.

Salaries of twenty-two (22) officials and employees............................. $\$ 33,00000$
Printing and publishing, including cost of paper and waste, per report

Postage and P. O. box rent ............................................................................... 84400

Telegrams

Revenue stamps $175{ }^{\circ} 00$

Freight . .............................................................................................................. 28623

Sundry items . ........................................................................................ 4800
Total
.$\overline{\$ 39,52275}$
Pages 155, 156, 488 and 500 in the report of the Secretary of State for the year ending Sept. $30,1900$.

## SECRETARY OF STATE AS AUDITOR.

An explanation is given in the introductory note preceding the laws governing the Secretary of State, showing the dual character of the duties to be performed by this officer. See ante, page -.

As there fully shown when acting as Auditor, his duties are entirely separate and distinct from those devolving upon him as Secretary of State and a separate report is required by law to be made.

In the following sections are given the general duties of the Auditor, also many of the spécific obligations resting upon him in connection with various departments, officials, agencies and branches of the state government and its institutions.

His power is mainly derived from the early state laws which are found in sections 144 to 151, inclusive, of the Wisconsin Statutes of 1898 , pages 246 to 248 , inclusive. The force and effect of these laws and of the Constitutional provision upon which they were founded, have been clearly stated in two (2) decisions of the Supreme Court reported in Vol. 10, Wisconsin Decisions, page 525 and Vol. 82, Wisconsin Decisions, pages 39-51. These, decisions define the meaning of audit, declare it to be the duty of the Auditor to audit all disbursements of the state and sign warrants therefor, that the Legislature can not divest him of the exclusive power to audit all accounts and that the power to audit can not be exercised by any other officer or board. This duty to audit is expressly declared to be a personal one and can not be delegated to an assistant or employee.

Chapter 433 of the laws of 1901, which appears on page 368 of this pamphlet, provides for a centralized system of accounting for all state officers, institutions, societies, departments, boards, commissions, including the University and Normal Schools.

The accounting plan therein referred to by provision of section 1 is to be established by the Governor. Its effect will be to
restore the practise which prevailed during the early years of the state's existence and to discontinue the transferring of money appropriations in lump sums to the exclusive control of the state institutions and commissions. The transfer of appropriations may be made in the fund accounts, but the Auditor must authorize the final payments which must appear on itemized vouchers showing in detail the debt to be paid. Another effect of the investigation and legislation along these lines and of the centralizing of all accounts will probably be to make necessary the rewording of many sections of the Statutes which now improperly employ the word "audit" instead of "allow" or "approve" in defining the dutiés of several of the Boards and commissions. Under the decisions of the Supreme Court referred to, the Legislature has no power to confer the power to audit upon any other person, officer or Board.

## SECRETARY OF STATE AS AUDITOR.

The Secretary of State shall be ex-officio Auditor. Const., art. 6, sec. 2, p. 100.

Duties-To manage fiscal affairs.

1. He shall superintend the fiscal affairs of the state and manage the same.

General duty.
6. He shall suggest plans for the improvement and management of public revenues.

## Accounts.

2. He shall keep fair, clear, distinct and separate accounts of revenues of state and all moneys and funds received or held by the state, and all expenditures, disbursements, and investments, showing the particulars of every disbursement or investment.
3. He shall keep and state all accounts (including accocunts with U. S.) in which the state is interested.
4. He shall examine and settle accounts of all persons indebted to the state.

## Collection of money.

9. He shall direct and superintend the collection of moneys due the state.

## Claims.

10. He shall examine, determine and audit claims against the state.

## Recording accounts audited.

11. He shall enter, in a book for that purpose, a record of all accounts audited by him, showing name of claimant, amount claimed, amount allowed, the number, date and amount of warrant drawn, specifying the fund from which the same is to be paid.

To require returns of property.
12. He shall require those who have received money, property or goods belonging to the state, who have not accounted therefor, to settle their accounts and return property, money or goods to the state.
Wis. Stats., sec. 144, p. 246.
Money securities-Property to be accounted for.
He shall, from time to time, require all persons receiving money or securities, or having management of property of the state, of which an account is kept in his office, to render statements thereof to him, and all such persons shall render such statements as he requires.
(This is from sec. 21 , ch. 9, R. S. 1849 , and sec. 32 , ch. 10, R. S. 1858, amended.)

Wis. Stats., sec. 149, p. 248.
Accounts how verified and audited.
He shall audit accounts and claims where payment is provided by law, when rate fixed by law, or authorized to be fixed by some officer or person, or by the Secretary of State.
Every claim or account that is settled to audit must specify nature and particulars verified by oath, in writing, together with certificate of officer ordering or making claim.
He may require persons making claims to be sworn touching same, and to answer as to facts relating to justness thereof. No claim for traveling expenses is to be audited unless there be an aifididavit attached as to pass or free transportation, and must state that money was actually paid out.
Blank forms of such affidavits are to be furnished to all persons who travel on business and at expense of the state. The order of audit shall be endorsed on or annexed to claim, and shall specify the amount allowed, and from what fund payable, and the act, or part of act, which authorized payment.
All papers connected with such claims are to be preserved in his office.

See chapter 433, laws of 1901, ante, p. 368. Wis. Stats., sec. 145, p. 247.

Salary accounts.
He shall audit all accounts for salaries directed by law to be paid for clerk-hire and services where the employment of persons who render services to state is, or may be, authorized upon certificate of proper officer, setting forth nature of service and necesssity therefor.

Wis. Stats., sec. 148, p. 248.
Compensating court clerks for reports.
He shall audit account for compensation of clerks of courts of criminal jurisdiction for reports made to the Governor under provision of section 1020 on certificate of the Governor.

Wis. Stats., sec. 1021, p. 782.
Warrants payable to claimants-Report.
He shall draw his warrant on Treasurer payable to claimant, for amount allowed on every claim audited, which shall specify from what fund to be paid, and the particular act, or part of act, authorizing payment and he shall only credit Treasurer for money paid out on such warrants.
He shall set forth in his biennial report the name of each person in whose favor warrants are drawn, the gross amount so paid each person during the biennial term, ant the character of service rendered by him.
See chapter 433, laws of 1901, ante, p. 368.
Wis. Stats., sec. 146, p. 248.
He shall issue warrants for amounts due counties from swamp-land fund.

Wis. Stats., sec. 251, p. 288.

## Publishing Laws.

He may cause to be published in newspapers law or extracts relating to collection or payment of money due or to become due, or duties to be performed by state officers, with appropriate forms, as he may deem necessary, at state expense.

Wis. Stats., sec. 150 , p. 248.
He shall audit the account for publishing laws.
If no other provision fixes compensation, it shall be fixed by the law for publication of legal advertisements.

Wis. Stats., sec. 151, p. 249.

The fees for publishing laws, advertisements, proclamations and communications, required by law to be published in state paper, shall be the same per folio as provided by law for publishing legal advertisements, but not exceeding 50 cents for each description of land. (For section providing for payments of $\$ 100$ each to newspapers for publishing laws, see under Secretary of State.)

Wis. Stats., sec. 345, p. 317.

## Printing accounts.

He shall audit all accounts for work executed (and certified to by Secretary of State) under the provision of this chapter, and keep a record of cost of printing, ruling, and binding, the amount of paper used and the entire expense of each document or job and a copy of each document or job shail be filed with cost endorsed thereon. See sec. 328.

Wis. Stats., sec. 326 , p. 311.
Paper Contractors' samples.
Samples of paper shall be delivered to him by the contractor with his bill for paper furnished. If any error is found in such ascount, he shall correct and return the same to the contractor.
W.s. Stats., sec. 312, p. 307.

## Waste allowed.

Ten per cent. is allowed to the State Printer for waste on jobs of ten quires or less and 5 per cent. on jobs exceeding ten quires.

Wis. Stats., sec. 313, p. 307.
Postage-Accounts.
He shall audit accounts for postage stamps and stamped envelopes, when presented in the manner prescribed by law, for the following: Governor, Secretary of State, State Treasurer, Attorney General, State Superintendent, Railroad Commissioner, Commissioner of Insurance, Clerk of Supreme Court, Secretary of State Historical Society, State Librarian, Secretary of State Board of Agriculture, Adjutant General, Quartermaster General, Treasury Agent, State Veterinarian, State Board of Control, Commissions of Fisheries, Dairy and Food Commissioner, Commissioner of Labor Statistics, State Superintendent of Public Property, Secretary of Free Library Commission and Bank Examiner.

Wis. Stats., sec. 169, p. 258.
Messenger service for delinquent statistics.
He shall audit amount paid messenger service in getting in statistics where county officials are delinquent and shall add amount to next state tax for such county.

Wis. Stats., sec. 1016, p. 781.

Education of deaf-mutes.
He shall audit the sums to be paid in aid of schools for education of deaf-mutes, upon a certificate of president and secretary of school board and the superintendent of schools of the city where the school is located, or other proper officers, when such certificates are approved by the State Superintendent and President of Board of Control, and he shall thereupon issue warrant in favor of the treasurer of such city or village for amount due.

Wis. Stats., sec. 579 , p. 426.
Bounty on wild animals-County clerks' certificates.
County clerks shall send him certificates under official seal that the scalps of animals killed have been presented with ears entire. Such oath and certificate shall state amount paid by county. Upon receipt of oath and certificate, made upon blanks furnished by him, he shall audit claim for amount county has paid under provisions of law.

Wis. Stats., sec. 1628, p. 1182, amended by ch. 45, L. 1899, amended by ch. 311, L. 1901.

Interest on certificates of indebtedness.
He shall annually, on or before May 10, compute the interest on all certificates of indebtedness belonging to each fund separately, including May 31, and give credit to income of such fund, and enter a credit upon the several certificates for the amount found due on each and certify to officers authorized to apportion income of such fund and certify to Treasurer such amount. The amounts apportioned shall be paid to the person authorized by law to receive the same and audited.

Wis. Stats., sec. 260, p. 294.
Fiscal year.
Provides that all books shall be kept, and all duties performed, with reference to the beginning, Oct. 1, and the ending, Sept. 30 , of fiscal year.

Wis. Stats., sec. 158, p. 252.
Railway transportations.
This act provides conditions under which the Auditor may approve accounts for railway transportation. It is provided that a statement showing the number of miles traveled, the date, and the points covered with, and explicit statement of the public business transacted.

Ch. 426, L. 1901.
Note.-For details under this head the act itself should be consulted.

While all state departments, boards, institutions, commissions and all state officers and employes thereof are embraced within the general provisions elsewhere given relating to the auditor, in the following cases the power to audit is specifically outlined:

## AUDITOR IN CONNECTION WITY THE LEGISLATURE.

Claims requiring legislative action.
He shall see that all claims requiring legislative action are made in duplicate, in the manner provided by section 145, and filed in his office.
He shall examine the same to see if properly made and justly due, and shall report same to legislature, with recommendations, and designate the fund to which they are chargeable. He shall see that proper account for which appropriation is made, is filed in his office before drawing his warrant on the Treasurer, whenever a bill appropriating money for a claim shall become a law.

Wis. Stats., sec. 147, p. 248.
Warrants.
He shali draw warrants upon certificates of chief clerk and sergeant-at-arms of each house at close of each session, for compensation of officers of legislature. He shall publish in the state official paper a full list of the accounts so audited.

Wis. Stats., sec. 113, p. 235.

Witness fees.
He shall audit account of witnesses before legislative committee, upon certificate of chairman of such committee.

Wis. Stats., sec. 127, p. 289 .
Mileage and salary accounts of members.
He shall audit, except where the member's election is contested, tie account for mileage or salary of members of the legislature. The speaker of the assembly shall be entitled to receive the same compensation, except mileage, as allowed to the other members of legislature, for his services as speaker, in addition to his pay as member, but in case of extra session no compensat̃on is allowed.

Wis. Stats., sec. 110, p. 234; sec. 111, p. 234;

## IN CONNECTION WITH THE GOVERNOR.

Examining treasury.
He shall, as auditor, examine carefully, quarter-yearly, the affairs of the Treasurer's office and immediately give a detailed report regarding the same to the Govrnor, as herein provided.

Wis. Stats., secs. $144-5$, p. 246.
Statement of state funds.
He shall, as auditor, exhibit to and deposit with the Governor, within 10 days after Sept. 30, each year, a complete detailed statement of state funds, revenues, receipts and expenditures, as herein provided.

Wis. Stats., sec. $144-13$, p. 246.

## Financial report.

He shall make a financial report to the Governor at the close of each odd-numbered year, which shall be a condensed financial statement.

Wis. Stats., sec. 335a, p. 314.

## Examining Insurance Department.

He shall, in connection with the Governor and State Treasurer, audit quarterly the accounts and records of the Insurance Department.

Wis. Stats., sec. 1972c, p. 1487.
Witness fees in pardon proceedings.
He shall audit fees and expenses of witnesses in proceedings to determine whether convicts have violated conditional pardons, when approved by the Governor.

Wis. Stats., sec. 4863 , p. 2870.
Warrants for forest wardens.
He shall issue warrants in favor of the forest warden and deputies on approval of governor.

Wis. Stats., sec. $1636 e$, p. 1186.

IN CONNECTION WITH TREASURER'S OFFICE.
Countersigning receipts.
He shall countersign all receipts of Treasurer for money paid into the treasury and charge with same, entering them into his book to the credit of the county, officer or person making the payment.

Wis, Stats., sec. 144-3, p. 246.

To charge Treasurer amount paid by land purchaser.
He shall charge Treasurer with amount for which receipt is given to land purchaser and enter person's name and number of certificates, if any, and time of payment.

Wis. Stats., sec. 216, p. 277.
To keep account betwecn state and treasurer.
He shall keep an account between the state and Treasurer, and charge the Treasurer with the balance in the treasury when he came into office and with all the moneys received by him, and all bonds and securities belonging to all public funds on deposit in the treasury, and credit him with all moneys paid by him pursuant to law.

Wis. Stats., sec. 144-4, p. 246.
Examining treasury.
He shall, quarterly, examine all books and accounts of the Treasurer, and all moneys and bonds and securities belonging to public funds in treasury.

Wis. Stats., sec. $144-5$, p. 246.

To examine and settle accounts.
He shall examine and settle the accounts of persons indebted to the state and certify the amounts to the Treasurer.

Wis. Stats., sec. 144-8, p. 246. IN CONNECTION WITH VARIOUS BOARDS AND OFFICERS.

Attorney General.
Damages and costs.
He shall audit damages and costs when supreme court clerk gives him a transcript of judgment against the state.

Wis. Stats., sec. 3203, p. 2207.

Costs and disbursements.
He shall audit costs and disbursements where actions were had against corporations, when certified to by the Attorney General.

Wis; Stats., sec. 3248 , p. 2223.

Academy of Sciences, Arts and Letters.
He may authorize the state printer to bind in suitable binding all periodicals of the Academy of Sciences, Arts and Letters. Ch. 186, L. 1901.
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Bank Examiner.
Compiling bank statements.
He is authorized to draw a warrant for the payment of not exceeding $\$ 200$ annually to whomever the Treasurer shall select for compiling bank statements, showing condition of state and private banks.

Ch. 347, L. 1899, p. 636.
Expenses of Examiner.
He shan audit the expenses of the Bank Examiner in carrying out the provisions of this section.

Wis. Stats., sec. 2014-26, p. 1517.
Board of Control.
Lxpenses.
He shall audit the accounts of the Board of Control for actual necessary expenses.

Wis. Stats., sec. 561c, p. 407.
Warrants.
He shall diaw his warrant in connection with expenditure authorized by authority to create indebtedness when the provisions ot this section are complied with.
He shall, as auditor, draw warrants on the treasury in favor of each claimant and deliver same to the secretary of the Board of Control.

Wis. Stats., sec. 561 i, p. 409.
List of bills to be certified by him.
Bills incurred by the Board of Control shall be audited by it and a list of such bills as allowed, containing the names of the persons in whose favor they are allowed, the purpose and institution for which they were incurred shall be certified by the president or secretary of the Board and filed with the Secretary of State once a month.

Wis. Stats., sec. 5610, p. 412.
Crediting counties amounts due.
Hə shall credit the amount due counties to each county, certified to by the Board of Control.

Wis. Stats., sec. 604e, p. 440.
He shall credit the county in whose asylum insane persons are cared, $\$ 3$ per week for each and amount expended for clothing. One-half of the said $\$ 3$ and amount spent for clothing shall be charged by him to county from which insane were sent, after certificate is approved by the Board of Control, as herein provided.

Wis. Stats., sec. 604f, p. 441.

Charging counties amount due.
He shall charge counties with amounts due the institutions named therein, shown by certified statement from Board of Control, and credit each institution and certify the amount to the treasurer.

Wis. Stats., sec. 561e, p. 408.
Warrunts amount due counties.
He shall draw his warrant for amount due counties under this law, and deliver it to the State Treasurer, who shall credit the same to counties entitled.

Ch. 271, L. 1899, p. 469.
Warrants in favor of warden of prison.
He shall draw his warrant in favor of the warden of prison, payable when money is received from the United States for account provided for in section 4932.

Wis. Stats., sec. 4933, p. 2883.
Auditing steward's accounts, school for blind.
He shall audit the accounts of stewards of school for the blind for expenses of indigent pupils after the Board of Control shall have approved.

Wis. Stats., sec. 569, p. 417.

## Board of Arbitration and Conciliation.

Witness fees.
He shall draw his warrant in favor of witnesses for fees, to be the same as circuit court allows, for attendance and travel in connection with proceedings before State Board of Arbitration and Conciliation, when properly certified to and approved by the Board.

Wis. Stats., sec. 1729 g, p. 1250.
Expenses of members.
He shall audit accounts for expenses of members of Board of Arbitration and Conciliation, and $\$ 5$ per day each for every day actually and necessarily occupied therein.

Wis. Stats., sec. $1729 \mathrm{~h}, \mathrm{p} .1250$.
Board of Canvassers.
Accounts for service and attendance.
He shall audit account for service and attendance of members of Board of Canvassers, when such members are appointed by Chief Justice of the state, as provided under this section, and shall draw a warrant for the payment of $\$ 15$ per day, which such officer or judge shall be entitled to receive for such attendance and service.

Wis. Stats., sec. $93,{ }^{\prime}$ p. 217.

Supreme Court.
All appointments and compensation fixed shall be certified to the Secretary of State by the Chief Justice, and paid on warrants drawn by the Secretary of State.

## Circuit Court Reporters.

Deficiency in compensation.
On certificate of circuit court judge showing a deficiency in compensation of circuit court reporter from counties amounting to $\$ 2,000$ annually, he shall issue a warrant for such deficiency.

Wis. Stats., sec. 2438, p. 1756.

## Commissioners of Public Lands.

Accounts for expenses.
He shali audit, after the approval of the Commissioners of Pul lic Lands, accounts for expenses connected with securing and selecting public land.

Wis. Stats., sec. 185, p. 269.
Refunds.
He shall issue a warrant for the re-payment from the proper fund in case the Commissioners of Public Lands certify that erroneous and excessive payments for land have been made.

Wis. Stats., sec. 218, p. 277.
Certificates of indebtedness.
He shall draw his warrant for amount of certificates of indebtedness as provided in this section.

Wis. Stats., sec. 258 c, p. 292.
Expenses Forest Warden.
He shall audit accounts for expenses of State Forest Warden and deputy when allowed by the Commissioners of Public Lands and approved by the Governor.

Wis. Stats., sec. 1636e, p. 1186.

> Dairy and Food Commissioner.

Salary and expenses.
He shall audit salary and expenses of inspection agent, after having certified to by the Dairy and Food Commissioner.

Wis. Stats., sec. 1410, p. 1058.

## Expense of analyses.

He shall audit accounts for making analyses, for which Dairy and Food Commissioner is authorized to create indebtedness up to $\$ 600$.

Wis. Stats., sec. 1410d, p. 1060.
Fish and Game Warden.
Expenses and disbursements.
He shall audit expenses and disbursements of the Fish and Game Warden upon vouchers therefor approved by the Governor.

Wis. Stats., sec. 1498, p. 1110.
The actual expenses of the Deputy Fish and Game Wardens shall be paid for per diem upon vouchers approved by the Governor. Wis. Stats.; sec. 1498d, p. 1111.

## Free Library Commission.

Expressage, drayage and telegraphing.
He shall audit the duly certified bills of the Free Library Commismission for expressage, drayage and telegraphing.

Wis. Stats., sec. 373b, p. 326.

## Insurance Commissioner.

Expenses.
He shall audit the expenses of the Insurance Commissioner in connection with the meeting of the National Insurance Commissioners.

Wis. Stats., sec. 1972a, p. 1486.
The necessary expenses of the Commissioner of Insurance and the Attorney General incurred in enforcing requirements or prosecuting violations of insurance law shall be paid on being certified to the Secretary of State that they were actually and necessarily incurred for purpose stated.

Wis. Stats., sec. 1955k, p. 1465.
This act outlines the duty of the Secretary of State as auditor in connection with the Commission of the Interstate Park.

Ch. 305, L. 1901.

## Pan-American.

Secrefary of State shall audit the expenses of the Board of PanAmerican Exposition and draw his warrant for the payment of the same upon the State Treasurer, if the Governor approves.

Ch. 318, L. 1899.

## Railroad Commissioner.

Expenses.
He shall audit expenses incurred by the Railroad Commissioner and his deputy in performance of duties.

Railroad Commissioner shali have experts to assist in examining bridges, expense not to exceed $\$ 800$ per year.

Wis. Stats., sec. 1797, p. 1323, amended by ch. 321, L. 1899.

Superintendent of Public Property.
Gas and electric light accounts.
He shall audit accounts for gas and electricity upon proper cer-* tificate of the Superintendent of Public Property.

Wis. Stats., sec. 148, p. 248.

## State Historical Society.

Binding, etc., expense.
He shall audit the accounts for binding, etc., for State Historical Society.

Wis. Stats., sec. 375, p. 327.
See also laws affecting this Society and Cr. 433, L. 1901, ante, p. 368. This act authorizes the Secretary of State to audit the claim of the Stevens Point Fair Association for state aid for the year 1900, and to audit the claim of said Association each year hereafter. Ch. 270, L. 1901.

La Crosse State Fair Association and Northern Wisconsin State Fair.
Warrant authorized to be drawn.
He shall, during the first 10 days in February, draw his warrant in favor of the Treasurer of the Northern Wisconsin State Fair for appropriation herein made and $10 \%$ of amount of premiums actually paid at the last fair, upon presentation of sworn statement of officers that the organization, at its last fair, prohibited gambling and intoxicating liquors.

In computing amount on which premium percentage is to be paid there shall not be more than $\$ 1,000$ for races, and no other agricultural society in Chippewa County shall receive any aid from the state.

Wis. Stats., sec. 1458d, p. 1088, and ch. 337, L. 1901.

## Normal School Regents.

Warrant authorized to be drawa.
He shall draw his warrant in favor of the Treasurer of the Board of Normal School Regents for one-half of the amount actually expended in conducting teachers' institute, upon proper certificate of officers of said Board, as herein provided.

Wis. Stats., sẹc. 408, p. 340, amended by ch. 179, L. 1899.
Provides that the Secretary of State should draw warrants for accounts allowed.

Ch. 116, L. 1866, pp. 3, 5.

Accounts for purchase and transfer of books.
He shall audit accounts for purchases of books by trustees of State Library, upon affidavits of State Librarian that books have been received, and upon approval by majority of trustees.

Wis. Stats., sec. 371, p. 325.
He shall fix the account of the State Librarian for expense of transporting books.

Wis. Stats., secs. 372-7, p. 325 .

## St. Louis World's Fair Commissioners.

He shall audit the receipts and expenditures of the State Board of Commissioners for the St. Louis World's Fair.

Ch. 297, L. 1901.

State Veterinarian.
Accounts for experimental expenditures.
He shall audit, upon presentation of verified account and itemized statement approved by the Governor, the account of the State Veterinarian for sums expended within $\$ 500$, annually, for experimental purposes.

Accounts for services consulting veterinarians.
Upon itemized vouchers certified to by the State Veterinarian and approved by the Governor, he shall audit the accounts for services of consulting veterinary surgeons at $\$ 7$ ner day and necessary expenses.

Wis. Stats., sec. $1492 \mathrm{e}, \mathrm{p} .1103$.

## State Superintendent.

County training schools.
He shall draw his warrant for one-half amount actually expended by counties for maintaining training schooi ior teachers on receipt of certificate of State Superintendent provided for by this section, and the amount of such state aid is limited to $\$ 2,500$ in any one year, and if more is demanded counties shall be paid proportionately.
Ch. 268, L. 1899, p. 454.
Manual training in high schools.
He shall draw his warrant for $\$ 250$, payable to treasurer of district or corporation, provided that there shall be no more than 10 schools receiving such aid, and that the total expenditure shall not exceed $\$ 2,500$, upon receiving certificate from the State Superintendent that manual training department has been maintained six months during the year.

Wis. Stats., sec. 496 c, p. 389.
Apportionment of school fund income.
He shalī draw his warrant for total amount of school fund income apportioned each county, upon receiving apportionment from the Sitate Superintendent.

Upon satisfactory evidence and facts certified to Secretary of State, he shall draw his warrant for apportionment on any ground mentioned in section 554, in case any town, village, city or district was excluded from participating in apportionment.

Wis. Stats., secs. 555, 556, p. 404.

> University.

Expenses and compensation of agent of Experiment Station.
He shall audit the expenses and compensation of the agent of the director of the Agricultural Experiment Station of the U. W., for which $\$ 300$ are annually appropriated.

Ch. 180, L. 1899, p. 263.

## Wisconsin National Guard.

Inspecting officer.
He shall draw his warrant on order of the Governor, certified to by the Adjutant General for compensation of the inspecting officer of the Wisconsin National Guard of $\$ 600$, annually.

Wis. Stats., sec. 632, p. 456.

Costs and expenses of defending members.
He shall audit the costs and expenses of defending the members of the Wisconsin National Guard when prosecuted for any act performed in connection with military duty, when defense is directed by the Governor upon recommendation of the Attorney General.

Wis. Stats., sec. 649c, p. 462.
He shall, with the assistance of the Adjutant. General, prepare blanks and instructions for enrollment of those liable to military duty when census is taken.

Ch. 228. sec. 8, L. 1901.
to be filed in office of sechetary of state as auditor.
Affidavits of accounts rendered.
Wis. Stats., sec. 145, p. 247.
Statements of all persons receiving money or property of the state or having management of property of which an account is kept in his office.

Wis. Stats., sec. 149, p. 248.
Samples of paper submitted by contractors.
Wis. Stats., sec. 312, p. 807.
Certificates of officers of Board of Normal School Regents as to Teachers' Institutes.

Wis. Stats., sec. 408, p. 340, amended by cl. 179, L. 1899.
Lists of bills certified to by, Board of Control officers.
Wis. Stats., sec. 561o, p. 408.
Certificafes of president and secretary of school board and superintendent of schools as to deaf-mute instruction, to be approved by State Superintendent and President of Board of Control.

Wis. Stats., sec. 579, p. 426.
Sworn statements of officers of State Agricultural Society, and he shall thereupon issue his warrant for the amount paid by the Board.

Wis. Stats., sec. 1458c, p. 1088.
Sworn statements of officers of Northern Wisconsin State Fair and he shall thereupon issue his warrant for the amount paid by the Board.

Wis. Stats., sec. 1458d, p. 1088.

Oaths and certificates of county clerks as to scalps of animals kililed.

Wis. Stats., sec. 1629, p. 1181, amended by ch. 45, L. 1899.

Certificates of circuit court judges as to deficiency of reporter's compensation.

Wis. Stats., sec. 2438, p. 1755.

Certificate of Attorney General as to costs and disbursements. Wis. Stats., sec. 3203, p. 2207.

The disbursements of the Secretary of State's office cover also the expense of Auditor.

## STATE TREASURER.

The State Treasurer, a constitutional elective officer, has charge of all state money and is under bond for the faithful performance of his duties. He is required to pay out money only on warrant of the Secretary of State as Auditor and in pursuance of law authorizing the payment and give receipts countersigned by the Secretary of State for all payments to him. He is also one of the Commissioners of Public Lands, also of the Boards, committees and commissions shown on page 458, post.

Chapter 433 of the laws of 1901 relating to the central system of accounting, declares the Legislative intent as to all state officers, agents and all institutions, departments, societies, Boards and commissions, including the University and Normal Schools supported by the state and employees thereof.

The effect of the complete adoption of the system provided in that act will be that all money collected by any person for or on behalf of the state will be paid direct and promptly into the state treasury accompanied by a proper statement. See page 368, ante.

## STATE TREASURER.

## Election and term.

He shall be chosen at the general election for a term of two years, commencing the first Monday in January next succeeding his election.

Duties in general.
He shall perform duties imposed on him by law. Wis. Stats., sec. $157-13$, p. 251.

Compensation.
His salary is $\$ 5,000$ annually. Wis. Stats., sec. 170 , p. 259.

Oath-Bona .
To take constitutional oath and give bond with not less than six sureties (free-holders) that he will deliver up the money, books, records, etc., and faithful performance, etc., including also faithful discharge of duties as commissioner of public lands.

His bond, $\$ 100,000$, must be approved by the Governor.
Oath and bond shall be filed in the executive office. Wis. Stats., sec. 153. p. 249.

## Bond, additional.

He shall give an additional bond if the Governor requires it. Wis. Stats., sec. 154, p. 249.

Office-State money.
He shall keep his office in the capitol, have charge of all money paid into the treasury, and shall pay out the same as required by law.

Wis. Stats., sec. 152, p. 249.

Books, recorãs, etc.
He shall deliver to his successor all books, records, etc., belonging to the office.

Wis. Stats., sec. 157-6, p. 250.

## Assistant Treasurer.

He may appoint an Assistant Treasurer at $\$ 2,000$, annually, who shall give a bond to the Treasurer and perform all duties assigned him by the Treasurer.

Wis. Stats., sec. 155, p. 250.
Clerks.
He may employ clerks as follows and file appointment in writng with the Secretary of State:

Wis. Stats., sec. 156, p. 250.
A book-keeper at $\$ 1,800$, annually.
Assistant book-keeper at $\$ 1,800$, annually.
Corresponding clerk at $\$ 1,600$, annually.
Mailing clerk at $\$ 1,200$, annually.
Commercial clerk at $\$ 1,200$, annually.
Deposit clerk at $\$ 1,400$, annually.
A stenographer at $\$ 720$, annually.
A watchman at $\$ 744$, annually.
Wis. Stats., sec. 170, pp. 259, 260.

Compiling bank statements.
$\$ 200$ annualiy allowed for compiling statement of condition of private and state banks.

Ch. 347, L. 1899.
Accounts.
The Treasurer shall keep fair, full and separate accounts of money received, distinguishing the several funds, and a cash book in which shall be entered in detail money received and disbursed. Wis. Stats., sec. 157, p. 250.

Examination of accounts.
An examination of books, records and accounts of treasury shall be made at least once each quarter by the Governor and Attorney General. Deficiency, if any, to be made up.

Wis. Stats., sec. 159, p. 252.
Weekly transcript of accounts.
At the end of each week to give the Secretary of State a transcript of his accounts for the previous week as herein provided.

Wis. Stats., sec. 157-1, p. 250.
Interest account.
He shall pay into the treasury and account for all sums received directly or indirectly, including interests on deposits.

Wis. Stats., sec. 157-12, p. 251.
Appropriation of money.
No money shall be paid out except it is appropriated by law and no appropriation shall be made, except claims of the United States and judgments, unless filed within six years after claim accrued.

Const., art. 8, sec. 2, p. 113.
Warrants.
The Treasury shall pay out of the treasury upon warrants of the Secretary of State all sums audited by law if there be appropriated sums to pay the same, and when any sum is required to be paid out of any fund it shall be paid out of such fund only.

Wis. Stats., sec. 157-2, p. 250.
He shall pay no money out except in pursuance of a law authorizing the payment, and shall in no case pay any money from the treasury or have any credit for any money paid therefrom except on the warrants of the Secretary of State and upon each such warrant he shall take the receipt endorsed on (or annexed) of the payee.

Wis. Stats., sec. 146, p. 248.

Fiscal laws.
He shall be furnished by the Secretary of State with a copy of fiscal laws.

Wis. Stats., sec. 141-7, p. 245.
Order of payment.
He shall make payments in order they are presented, giving no preference.

Wis. Stats., sec. 157-3, p. 250.
Receipts.
He shall give receipts for all money, which before delivery must be countersigned by the Secretary of State.
(Not evidence of payment unless so countersigned.)
Wis. Stats., sec. 157-4, p. 250.
Inspection of books, etc.
He shall permit books, papers and transactions of his office to be open at all times to the inspection of the Governor, Secretary of State, Attorney General, the Legislature or any committee thereof.

Wis. Stats., sec $157-5$, p. 250.
Reports.
Requirements as to his reports to the Governor. (Quarterly and biennial.)

Wis. Stats., secs. 157-7, 157-8, p. 251.
Provides for an additional report.
Ch. 97, L. 1901.
Condensed financial statement.
The Treasurer and Secretary of State shall make in addition to their biennial reports, at the close of each odd-numbered fiscal year, a condensed statement of the finances of the state and cause the same to be published in the official state paper and one other Wisconsin newspaper of different political party from the official paper.

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\text { Wis. Stats., sec. 335a, p. } 314 .
$$

Certified copies.
He shall make a certified copy of any paper filed in his office and transcripts of books and records kept therein when required and shall receive therefor 12 cents per folio and 25 cents per certificate.

Wis. Stats., sec. 157-9, p. 251.

Statement of fees.
He shall keep a detailed statement of fees, including his fees as Commissioner of Public Lands, received by him and pay same into the general fund of the treasury.

Wis. Stats., sec. $157-10$, p. 251.
Payments to counties.
He shall furnish each county clerk, between October 10 and November 1 each year, a statement of all money paid by him to the Treasurer of such county for the year ending September 30 .

Wis. Stats., sec. 157-11, p. 251.
Fiscal year.
All books shall be kept with reference to beginning and closing of fiscal year which is July 1 to June 30.

Wis. Stats., sec. 158, p. 252, amended by ch. 400 , L. 1901.
Depository bonds.
Every state depository shall file with the State Treasurer a bond with at least 5 sureties, conditioned for payment free of exchange with such interest as may be fixed.

Wị. Stats., sec. 160b, p. 253.
Deposits.
He may deposit to the limit fixed by the Board of Deposits in any depository complying with the requirements of law and such deposits shall be deemed to be in the treasury.

Wis. Stats., sec. 160d, p. 253.
He shall withdraw money from banks whose designation as depository is revoked.

Wis. Stats., sec. 160 e, p. 254.
Apportionment to funds.
The total interest paid by depositories shall be apportioned by the Treasurer and become part of the following funds: General, School, School income, University, University income, Normal School, Normal School Income, Agricultural College, Agricultural College income, according to the average amount of each such fund on hand the first day of each month.

Wis. Stats., sec. 160f, p. 254, amended by ch. 346, L. 1901.
Postage and stationery.
He may procure postage stamps and stamped envelopes which shall be paid for out of the treasury (for official correspondence of his office.)

Wis. Stats., sec. 169, p. 258.

He or his Assistant may draw stationery for his office from Superintendent of Public Property.

Wis. Stats., sec. 290, p. 301.
Notary public fees.
Applicants for notary public commissions shall pay into the treasury, $\$ 2$.

Wis. Stats., sec. 174, p. 264.
salaries, $\hbar 0 w$ paid.
Provides that all salaries of officers and employes shall be paid at the end of each month for previous month except supreme and circuit court judges, who shall be paid quarterly in advance.

Wis. Stats., sec. 171, p. 263.
Payments for land.
Provides that when payment for land is made to the Treasurer, if it is the result of private sale, the purchaser shall produce memoranda as per section 212. He shall give receipt to such purchaser.
(See Commissioners of Public Lands as to the certificate.)
Wis. Stats., sec. 213, p. 276.

The money for public lands sold shall be paid to him and he shall credit the proper fund. The Secretary of State shall upon countersigning the receipt charge the Treasurer therewith. Wis. Stats., sec. 216, p. 277.

Provision as to.
Money received from sale of property, seized under provision of chapter 16, Wisconsin statutes.

Wis. Stats., sec. 245, p. 286.
Resale and redemption of land.
Provides the duties of the Treasurer in connection with the resale and redemption of lands.

Wis. Stats., sec. 228, p. 281.
Fees for advertising lands.
Prices which shall be paid each newspaper for advertising sale of lanđs.

Wis. Stats., sec. 237, p. 284.
Commissioners of public lands.
The Treasurer in connection with the Secretary of State and Attorney General, shall constitute a Board of Commissioners for
the sale of the school and university lands and for the disposition of all public lands and they shall control the investment of the funds arising therefrom.

Const., art. 10, sec. 7, p. 120.
Wis. Stats., sec. 185, p. 269.

Whenever said commissioners shall purchase any bonds of this state the Governor, Secretary of State and State Treasurer shail execute in duplicate a certificate of indebtedness to the proper fund for the amount thereof used in such purchase and shall deposit one such duplicate in the office of the Treasurer and one in the office of the Secretary of State.

Wis. Stats., sec. 259, p. 294.

All satisfactory proofs of sales of public lands sold at auction to the highest bidder shall be deposited with the State Treasurer.

Wis. Stats., sec. 228, p. 281.

## School fund.

Money paid into the treasury on account of capital of school fund shall be and remain a separate and perpetual fund.

Wis. Stats., sec. 246, p. 287.

Apportionment of school moneys.
The State Superintendent shall certify the apportionment made of school moneys to the Secretary of State and State Treasurer.

Wis. Stats., sec. 1072 , p. 827.

University fund.
All money paid into the treasury on account of University fund shall remain a separate and perpetual fund.

Wis. Stats., sec. 248, p. 287.

Agricultural College fund.
All money paid into the state treasury on account of the sales of Agricultural College lands shall be a separate and perpetual fund.

Wis. Stats., .sec. 249, p. 287.
Normal School fund.
All swamp-lands and money in lieu thoreof from the U. S., and all moneys received as purchase money for swamp lands having been divided into two equal parts, shall constitute two separate funds, Normal School fund and Drainage fund.

Wis. Stats., sec. 250 , p. 288.
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Swamp land fund.
The treasurer shall pay counties on proper warrants amounts due them from swamp land fund.

Wis. Stats., sec. 251a, p. 288.
Provides for date of interest payments from trust fund loans. Ch. 72, L. 1901.

Provision is made in this section as to receipts from Marathon county lands. Wis. Stats., sec. 252, p. 289.

Provides as to receipts from Jackson county. Ch. 391, L. 1901.

Certificate of indebtedness.
Relates to paying apportionment of interest on certificates of indebtedness.

Wis. Stats., sec. 260, p. 294.
Payments of taxes from counties.
County treasurers shall pay to the State Treasurer the amount of state taxes charged to their respective counties on or before the third Monday in February.

Wis. Stats., sec. 1121, p. 849. amended by ch. 335, L. 1899, sec. $-8{ }^{-}$

Procedure when State Treasurer is made to collect taxes within time prescribed by law.

Wis. Stats., sec. 112, p. 845, amended by ch. 308, L. 1899.

Provides an additional penalty of 20 per cent. of amount withheld. Wis. Stats., sec. 1122, p. 849.

Penalties upon counties when they fail to pay any part of the state tax levied upon such county at the time and in the manner required by law to the State Treasurer.

Wis. Stats., sec. 1124, p. 849.
Procedure as to delinquent taxes on contract lands or lands mortgaged to the state.

Wis. Stats., sec. $1145-47$, p. 861 ; see sec. 1149 , p: 862.

Treasurer shall allow county treasurers amount of state tax illegally collected in the next settlement between them.

Wis. Stats., sec. 1164, p. 866.

Railroad tax for destruction of weeds.
Provides for collecting from railroad companies for destruction of weeds that the amount so collected shall be returned to the municipality from which certificate was received.

Wis. Stats., sec. 1480b, p. 1097.

## Railroad license.

Every railroad company, except horse power, shall make returns to Treasurer on blanks furnished by him a true statement of gross earnings, as herein provided.

The railroad company shall pay a fee as herein provided and receive from the State Treasurer a license for calendar year commencing Jan. 1, previous to such application. License shall be delivered if Railroad Commission approves.

Wis. Stats., sec. 1211 , p. 922 ; sec. 1212 , p. 922 , amended by ch. 208 , L. 1899.

This section provides what annual license fee for operation of railroad shall be.
$\$ 5$ per mile, where earnings are less than $\$ 1,500$ per mile.
2 per cent. on gross earnings where railroads are operated on pile and pontoon or pontoon bridges, one-half of fees payable when license issues and balance Aug. 10, each year.

Wis. Stats., sec. 1213, p. 922.
T:legraph companies' liccense.
Details of report to be made by telegraph companies. ....
When report conforms to this section, State Treasurer shall issue license conditioned upon the prompt payment of legal fee to Treasurer on or before June 1, each year.
The basis of computing the fee per mile. (See sec. 1222a below.)
Wis. Stats., sec. 1216, p. 923.

Telephone companies' licenses.
Contains special provision for telephone companies whose lines are wholly in the state where certain limited rates are charged.

Wis. Stats., sec. 1222a, p. 926.
Upon failure of owners to pay, the Treasurer shall advertise such lines in official paper and shall sell such lines to secure unpaid fee.

Wis. Stats., sec. 1217, p. 924.

Penalty of such companies to make returns.
Wis. Stats., sec. 1218, p. 925.

Telephone companies shall return to State Treasurer on blanks furnished by him, a true statement of gross receipts each year and on returning such statement shall apply for a license and pay legal fee and receive license to transact business until Sept. 31 of that year.

Certain telegraph companies on same basis, see above.
Such annual license fee shall be computed on the gross receipts of the business. If the amount be over $\$ 100,000,3$ per cent. If under $\$ 100,0002$ 1-4 per cent.

Wis. Stats., sec. 1222 a, p. 926.
Street Railway and Electric Light companies.
A statement of the gross cash receipts of street railway and electric light companies shall be made the first Monday in December to treasurer of municipality where company is domiciled. Fee is from 2 to 4 per cent.

Wis. Stats., sec. 1222c, p. 927; sec. 1222d, p. 928.
The county treasurer shall pay on or before April 1 each year to the State Treasurer two-thirds of the amount received by him from each municipality in his county to be applied as a state tax and in lieu thereof.

Wis. Stats., sec. 1222e, p. 928, amended by ch. 354, L. 1899.
Dam and boom companies.
Dam and boom companies shall, as herein provided, return to the

- Treasurer, upon his blanks, a true statement of receipts and disbursements, gross and net earnings showing local taxes levied or assessed for the year.

Wis. Stats., sec. 1222g, p. 929.
Each such owner on returning such report to pay a fee of 2 per cent. of gross earnings.

Wis. Stats., sec. 1222i, p. 930.
Title companies.
License fees.
Wis. Stats., sec. 1222 1, p. 930.
Plank and toll roads.
Plank and toll roads, 3 per cent. of gross receipts.
Provides for statement of gross receipts.
Penalty for failure, $\$ 500$.
Wis. Stats, sec. 1222 m, p. 930 .

Trust companies.
Trust companies shall pay $\$ 300$ and 2 per cent. of net income. These payments to be in lieu of taxes except upon real estate.

Wis. Stats., sec. 1222k, p. 930.
Such companies shall deposit with the Treasurer securities as herein provided.

Wis. Stats., sec. 1791e, p. 1316.
Such companies shall pay license fees to Treasurer in lieu of taxes except on real estate.

Wis. Stats., sec. 1791i, p. 1318.
Peddlers' license.
Every peddler, before he shall be entitled to a license, shall pay into the state treasury the license fees herein provided.

Wis. Stats., sec. 1572, p. 1156, amended by ch. 341, L. 1901.

## Patent-right license.

Every patent-right dealer, before he shall be entitled to a license, shall pay into the state treasury the license fees herein provided.

Wis. Stats., sec. 1573, p. 1156.
Every owner, manager or agent of a caravan, circus or menagerie before he shall be allowed to exhibit the same in this state shall procure a state license and shall pay into the state treasury therefor the sum of $\$ 100$.

Wis. Stats., sec. 1574, p. 1157, amended by ch. 341, L. 1901.
There shall be audited and paid out of the state treasury to the Treasury Agent the sum of 25 per cent. of the amount which the Treasury Agent may cause to be colleccted and paid into the state treasury as fees for licenses.

Wis. Stats., sec. 1582, p. 1159.
State licenses for bankrupt sales.
Persons selling bankrupt stocks, insolvent or closing out sales, etc., shall obtain a license.

Wis. Stats., sec. 1584d, p. 1160.
Applications for state license under preceding section shall be made to the State Treasurer, and license issued by him what application must contain.

Files and records of State Treasurer shall be convenient in form and open for public inspection.

Wis. Stats., p. 1584e, p. 1160.

Upon proper application and receipt of $\$ 100$ fee, the State Treasurer shall issue license.

Details of license.
Wis. Stats., sec. 1584f, p. 1161.
Express companies.
Procedure to tax property of.
Ch. 111, L. 1899.

Sleeping car companies.
Procedure as to tax of. Ch. 112, L. 1899. '

Freight line companies.
Procedure as to tax of. Ch. 113, L. 1899.

Equipment companies.
Procedure as to tax of. Ch. 114, L. 1899.

Inheritance tax.
Procedure as to collection of tax.
Ch. 335, L. 1899, p. 17.

Funds from public administrator.
The duty of the State Treasurer on receipt of funds from public administrator.

Wis. Stats, sec. 3820, p. 2438.
W. N. G.

The Quartermaster General is authorized to draw funds not to exceed $\$ 500$ at any one time from the state treasury for the payment of labor at the Wisconsin military reservation, giving his personal receipt therefor and filing proper vouchers within 60 days thereafter.

Ch. 228, L. 1901.
Note.-This section would appear to be entirely inconsistent with if not repealed by chapter 8, laws of 1901.

This act makes provision as to the payment of troops in camp and should be considered in connection with chapter 433, laws of 1901.

Ch. 228, L. 1901.

The Fish and Game Wardens shall pay to the State Treasurer the proceeds of any fish or game caught, killed or taken in violation of any law, sold at public auction less the expense oí such sale.

Wis. Stats., sec. 1498c, p. 1111.
All fees for licenses issued for hunting deer shall be paid to the Secretary of State previous to the issuing thereof who shall pay the same to the State Treasurer.

Wis. Stats., sec. 1498p, p. 1115.

Board of Canvassers.
The Treasurer with the Secretary of State and Attorney General shall constitute the Board of State Canvassers.
Whenever the chief justice shall designate any state office or judge to act as one of the board, such officer or judge shall be entitled to receive a compensation and the Secretary of State shall audit his account for the same and draw a warrant on the State Treasurer for payment thereof. See also section 87, page 215.

Wis. Stats., sec. 93, p. 217.
Board to examine unused.state chattel property.
The Governor, Secretary of State and State Treasurer are hereby constituted a board to examine any chattel property of the state in the hands of the Superintendent which is not in use at any time and direct it to be sold or otherwise disposed of in such manner as the board may deem for the best interest of the state.
The Superintendent shall pay to the Treasurer proceeds of all such sales.

Wis. Stats., sec. 294, p. 302.

Commissioners of Printing.

- The Secretary of State, State Treasurer and Attorney General are commissioners of the public printing.

Wis. Stats., sec. 296, p. 303.
Deposit required with printing bia.
Each bidder for public printing shall deposit with the State Treasurer, before making his proposals, the sum of $\$ 1,000$ to be forfeited in case he shall not make a contract according to his proposals, if accepted, and according to the requirements of this chapter, and shall take a receipt of said Treasurer and deposit the same with his proposals.

Wis. Stats., sec. 347c, p. 319.

Railroad Commissioner's Report to Treasurer.
It is provided in this section what this report must embrace.
Wis. Stats., sec. 1795, p. 1322.
Treasurer Board of Agriculture.
The State Treasurer is ex-officio treasurer of the State board of Agriculture.

Wis. Stats., sec. 1458, p. 1087.

Whatever money shall be appropriated or otherwise received by said board for the department of agriculture shall be paid to the State Treasurer and be disbursed by him on orders signed by the president and secretary of the board, for such purposes as will best promote the interests committed to their charge.

Wis. Stats., sec. 1458b, p. 1088.

## Treasurer Üniversity Regents.

The State Treasurer shall be the treasurer of the Board of Regents of the University and shall perform all duties of such office.

Wis. Stats., sec. s79, p. 330.
Accounts for the expenses of the Board of Regents incurred in the performance of any duty in pursuance of any direction of the board, shall be paid by the treasurer on the order of the board out of the University Fund income.

Wis. Stats., sec. 392 , p. 335.
Commercial fertilizers.
All moneys received by the director of the experiment station shall be paid into the treasury of said station.

Evidently the intent was to have the money paid into the State Treasury.

Wis. Stats., sec. 1494d, p. 1106.
Receipts of Experiment Station under Nursery Stock disease act.
The director of the experiment station shall turn over all moneys received by him under this act to the State Treasurer to be credited to the General fund.

Ch. '180, L. 1899.
Wis. Stats., sec. 8, p. 266; secs. 9, 10.
The State Treasurer is ex-officio treasurer of the Normal School Regents.

Wis. Stats., sec. 395, p. 337.

All moneys actually and necessarily expended by any member of the Board of Normal Regents shall be paid from the Normal School Fund income in the state treasury on accounts presented to and adjusted by the board and certificate signed by the secretary and president thereof.

Wis. Stats., sec. 395, p. 337.
Sums donated and subscribed for the erection, etc. of Normal School buildings must be paid into the state treasury before a warrant shall be issued for any part thereof.

Wis. Stats., sec. 401, p. 338.
State Superintendent-Proceeds of dictionaries sold.
The State Superintendent shall pay all money received on account' of díctionaries sold to the state treasury.

Wis. Stats., secs. $509, \cdot 511$, p. 392.
Fees from Commissioner of Insurance.
The Commissioner of Insurance shall make daily payments to the State Treasurer of all fees and taxes received and shall, on the first day of each month, report in detail the receipts of his department during the preceding month to the Governor, Secretary of State and State Treasurer, together with the dates of such payments to the Treasurer.
It shall be the duty of the Governor, Secretary of State and State Treasurer to quarterly examine and audit the books and records of the department of insurance.

Wis. Stats., sec. 1972c, p. 1487.
An Accident Insurance company shall before a license is issued deposit with the State Treasurer. a security of not less than $\$ 1,000$ to be approved by the Commissioner of Insurance.

Ch. 442, L. 1901.
The State Treasurer shall prepare suitable stamps, seals, marks and brands in connection with the inspection of oils and shall make rules and regulations for the issuing, affixing and canceling of said stamps, etc.

Ch. 466, L. 1901.
He shall number the districts and the appointment of the deputy inspectors shall be filed with him after having been approved by the Governor.
Note:-This account should be consulted for details of treasurer's duty in connection with the superintendent and deputy inspectors.
He shall place all fees received in a special fund to be devoted to the payment of the salaries of the inspector and deputies.

Apportioning funds in the treasury.
In connection with the Governor and Secretary of State he may apply the surplus in the treasury or as much as they deem proper as a portion of tax levy.

Wis. Stats., sec. 1069 a, p. 827.

Aid to New Richmond.
He shall transfer to the Trust fund from the General fund $\$ 21,500$ appropriated by this act and trust fund commissioners shall cancel and file amount of the indebtedness of New Richmond to said trust fund.

Ch. 286, L. 1901.

BOARDS OF WHICH HE IS A MEMBER.
Ex-officio member of the executive committee of the Historical Society.

Wis. Stats., sec. 374, p. 327.
Board to examine unused state chattel property.
Wis. Stats., sec. 294, p. 302.
Commissioners of Public Lands.
Wis. Stats., sec. 185, p. 269.
Commissioners of Public Printing.
Wis. Stats., sec. 296, p. 303.

Board of State Canvassers.
Wis. Stats., sec. 93, p. 217. *

Board of Deposits.
Wis. Stats., sec. $160 \mathrm{a}, \mathrm{p} .253$.
boards of which the state treasurer is treaisurer ex-officio.

University regents.
Wis. Stats., sec. 379, p. 330.
Normal School regents.
Wis. Stats., sec. 395, p. 337.
State Board of Agriculture.
Wis. Stats., sec. 1458, p. 1087.

## LĀWS GOVERNING STATE OFFICERS, ETC. 459

LISBURSEMENTS ON ACCOUNT OF THE TREASURY DEPARTMENT
For the year ending Sept. 30, 1900.
Salaries of ten (10) officials and employees ..... $\$ 17,46400$
Printing and publishing, including cost of paper and waste, per report Commissioners of Printing ..... 53880
Postage and P. O. box rent ..... 35444
Stationery, per report Superintendent Public Property ..... 11897
Compiling bank statement ..... 200 G0
Sundry items ..... 10203
Total .....  18,77824

Pages 157, 488 and 500 in the report of the Secretary of State for the year ending Sept. 30, 1900.

## ATTORNEY GENERAL.

This is a constitutional state officer chosen biennially at the general election. He receives a salary of $\$ 3,000$. per year and is reimbursed his actual and necessary expenses incurred while on duty.

The compilation of laws which follow clearly outline his duties, powers and privileges:

## ATTORNEY GENERAL.

Election and term.
He shall be chosen Biennially at the general election in the evennumbered year. His trm of office shall be two years.

Wis. Stats., sec. 128, p. 240.
Oath and bond.
He shall take the constitutional oath and give bond, approved by the Governor, for $\$ 10,000$ within 20 days after receiving notice of his election and before entering upon his duties also additional bond if required by the Legislature or by the Governor.

Wis. Stats., sec. 161, p. 254.
Salary.
His salary is $\$ 3,000$ including his services as Commissioner of Public Lands; also expenses necessarily incurred in traveling. Wis. Stats., sec. 170, p. 260.

This act provides conditions under which the Secretary of State as auditor may approve vouchers for transportation.

Ch. 426, L. 1901.
Assistants, clerks, messengers, etc.
He may appoint assistants as follows:
An assistant attorney general at $\$ 2,000$ annually and expenses necessarily incurred in traveling.
A second assistant attorney general at $\$ 1,800$, annually.
A law examiner at $\$ 1,500$, annually.
A clerk at $\$ 1,000$, annually.
A stenographer at $\$ 900$ annually.
A messenger at $\$ 720$, annually.
These appointments and constitutional oaths of the two assistants and the law examiner shall be filed with the Secretary of State.

Wis. Stats., sec. 162, p. 254; sec. 170, p. 260.

## Duties in general.

His duties shall be:

1. To prosecute or defend actions in behalf of the state.
2. To prosecute for breach of bonds or contract at the request of the Governor, Secretary of State or State Treasurer.
3. To consult with and advise with the district attorneys.
4. To give written opinions without fee, by Legisiature or heads of departments as herein provided to examine applications.
5. To prepare contracts, etc., for departments. To report to the Legislature regarding any business of his office when requested.
6. To pay into treasury all money received by him belonging to the state immediately upon its receipt.
7. To keep in proper books a register of all actions and proceedings had.
8. To deliver to his successors all money, books documents and effects belonging to his office.
9. To file statement of fees received with Secretary of State on or before each September 30 all such fees to be paid monthly into treasury.
10. He shall perform all duties imposed upon him by law.

Wis. Stats., sec. 163, p. 255.

## Postage.

He shall be furnished with postage stamps and stamped envelopes for his official correspondence, also stationery and Blue books as herein provided.

Wis. Stats., sec. 169, p. 258; sec. 121, p. 236; sec. 390 , p. 301.

Sction against Telegraph companies.
Owners of telegraph lines neglecting to pay the license fee shall forfeit $\$ 5,000$ for each neglect, which shall be sued for in action in name of the state.

Wis. Stats., sec. 1218, p. 925.
T'elephone companies; license; action; forfeiture.
Telephone licenses required by this chapter shall be such in form as shall be approved by the Attorney General.
Telephone companies neglecting to obtain license or pay the fee shaif forfeit $\$ 5,000$ and the Attorney General shall, upon such neglect collect by action and proceed to have franchises forfeited.
Conditions delinquents may make return of license fees before judgment.

Wis. Stats., sec. 1222a, p. 926,

Palace, sleeping and drawing-room car owners.
Owners of palace, sleeping and drawing room cars may be restrained, at suit of Attorney General, from using such cars or collecting compensation.

Wis. Stats., see. 1222b, p. 927.
Dam and Boom companies forfeiture of charter for neglect.
Upon neglect of dam and boom companies to obtain licenses and make report, the Attorney General may proceed to have the charters forfeited.

Wis. Stats., sec. 1222j, p. 930.
Plank and toll road ouners; license fee, action.
When owners of plank and toll road neglect to make report or pay fee, such owners shall forfeit the sum of $\$ 500$ to be sued for and recovered by action in the name of the state.

Wis. Stats., sec. 1222m, p. 930 .
Trusts, Pools-Duty of Attorney General.
Whenever the Attorney General shall have reason, to believe that trusts, pools and conspiracies exist it shall be his duty to determine whether the law has been violated and proceed against such corporation in accordance with this chapter.

Wis. Stats., sec. 1791 k, p. 1319.
Attorney General may have cases printed.
This section provides that the Attorney General may have his cases, arguments and briefs printed by the State Printer.

Wis. Stats., sec. 2414 , p. 1741.
This act authorizes the compilation of the opinions of Attorney General from the organization of the government to the present time.

Ch. 161, L. 1901.
Costs, how paid.
The necessáry costs and disbursements incurred in bringing and prosecuting actions, as herein provided by the Attorney General, shall, when certified to by him, be paid out of the state treasury.
Receiver of corporation may be compelled to reimburse State Treasurer for such costs and disbursements.

Wis. Stats., sec. 3248, p. 2223.
Judgment roll, where filed.
He shall file judgment roll with the Secretary of State, as herein provided.

Wis. Stats., sec. 3249 , p. 2224.

Appropriation for books.
$\$ 200$ is annually appropriated for books purchased for the office of the Attorney General. Ch. 324, L̀. 1899.

Debts and diversion of funds.
Authority to create indebtedness.
Wis. Stats., sec. 563, p. 414.

IN CONNECTION WITH THE GOVERNOR.

Examination of books.
He shall in connection with the Governor examine and see that all the money appearing by the books of the Secretary of State and State. Treasurer as belonging to the several funds, is in the vaults of the treasury or state depositories.

In case of a deficiency the treasurer shall be required to make up such deficiency, and if such treasurer refuse or neglect to do so, the Attorney General shall institute proceedings to recover the same.

Wis. Stats., sec. 159, p. 252.
Examination by Attorney General.
it shall be the duty of the Attorney General to ex'amine corporations when required to do so by the Governor.

Wis. Stats., sec. 1766, p. 1275.

Transfers of moneys.
'The Attorney General in connection with the Secretary of State and State Treasurer, with the consent of the Governor, is authorized to transfer trust funds to the general fund.

Ch. 147, L. 1899.
He shall report to the Governor on or before Dec. 10th, each evennumbered year, as herein provided. This report shall be published by the Commissioners of Public Printing in the public documents of the state, and they shall also print 1,000 copies to be bound in cloth, to be distributed, as herein provided.

Ch. 94, L. 1901.
This act provides an additional report to be made to the Governor before Jan. 10, each odd-numbered year.

Ch. 97, L. 1901.

IN CONINECTION WITH THE SECRETARY OF STATE.
Costs, how paid.
The necessary costs and disbursements in bringing and prosecuting actions against corporations shall be audited by the Secretary of State.

Wis. Stats., sec. 3248, p. 2223.
See page 3, section 159. Ch. 147, L. 1899.
in connection with the state treasurer.
Action for forfeiture.
Money recovered in actions brought by the Attorney General for a forfeiture, shall be paid into the treasury. Wis. Stats., sec. 3300, p. 2236.

IN CONNECTION WITH THE RAILROAD COMMISSIONER.
Neglect to obtain license-Duty of Attorney General.
In case railway companies neglect to obtain licenses and make report, they shall forfeit $\$ 10,000$, and the Attorney General shall collect by action and proceed to have forfeiture of franchises declared.
Conditions under which delinquents may make returns prior to judgment.

Wis. Stats., sec. 1214, p. 923.
Violation of law-Proceedings if law violated; expense.
Expenses of Attorney General in connection with the Insurance Commissioner.

Wis. Stats., sec. 1955 k , p. 1465; sec. 1972a, p. 1486.
Commissioners of Public Lands.
He shall be one of the Commissioners of Public Lands. Wis. Stats., sec. 185, p. 269.

Statement of fees.
His fees as Commissioner of Public Lands shall be included in his detailed statements of fees, which he shall file with the Secretary of State each Sept. 30.

Wis. Stats., sec. 163-9, p. 255.
Commissioners of Printing.
He shall be one of the Commissioners of Printing.
Wis. Stats., sec. 296, p. 303. .

## Manufacturing in the state prison; debt against state.

His consent, in writing, is necessary, in connection with the Governor and Secretary of State, before the State Board of Control

- can create indebtedness when the appropriation is insufficient or great emergency exists.

Wis. Stats., sec. 561 i , p. 490.

## State Board of Deposits.

He shall be a member of the State Board of Deposits.
Wis. Stats., sec. 160a, p. 253.
Board to try complaints against railways.
He shall be a member of the Board to hear and try complaints against railway companies. Ch. 225, L. 1899.

## Board of Canvassers.

He shall be a member of the Board of Canvassers.
Wis. Stats., sec. 93, p. 217.
Legislative committees.
He shall ăppear in person or by his assistant before the committee and give counsel in relation to the liability of the state thereon and act for the state in all things connected therewith.

Wis. Stats., sec. 107, p. 233.

## Escheats.

\% His duty to bring action to protect the state.
Wis. Stats., .sec. 283, p. 298.
State officers may require searches, etc., without fees. Wis. Stats., sec. 2963, p. 2075.

## DISBURSEMENTS IN THE DEPARTMENT OF THE ATTORNEY GENERAL

For the year ending Sept. 30, 1900.

Pages 157, 158, 488 and 500 in the report of the Secreiary of State for the year ending Sept. 30, 1900.

## STATE SUPERINTENDENT.

This elective state officer has general charge of the educational interests of the state and the law confers upon him the power and prescribes appropriate duties.

The synopsis of laws which follow fully set forth his duties and privileges.

The salary provided for this officer by the constitution of the state is but $\$ 1,200$ annually. By provision of legislative acts he does, however, receive annually an amount for other services rendered to the state which will make his total salary the same as the Governor, Secretary of State and State Treasurer.

He is allowed to draw $\$ 3,800$ annually as commissioner for the common schools provided by chapter 99 of the laws of $190^{\circ}$.

By chapter 258 of the laws of 1901 it is proposed to submit to the people an amendment to the constitution to permit this officer to receive such a salary as the legislature shall designate instead of the $\$ 1,200$ provided by the constitution.

## COMMON SCHOOLS.

The common schools of the state are supported by the income of the school fund and the one (1) mill tax on all assessable property which is distributed under authority of the provisions of chapter 28 of the Wisconsin Statutes of 1898, sections 554 to 560 , inclusive.

The amount apportioned to counties during the year ending September 30, 1900, was $\$ 796,826.27$, of which $\$ 625,000$ was the result of the one (1) mill direct tax on assessable property and the balance was interest on land certificate loans, bonds, certificates of indebtedness and bank deposits.

## FREE HIGH SCHOOLS.

The state aids free high schools under the provision of section 491 b and 496 , pages 385 and 387 of the Wisconsin Statutes of 1898 and chapter 214 of the laws of 1899 , wheh provide that
they may receive from the general fund of the state under conditions named one-half ( $\frac{1}{2}$ ) of the amount actually expended for instruction in high schools over and above the amount required to be expended for common schools.

It is the duty of the State Superintendent to apportion the money among the high schools under the conditions provided by the laws referred to.

The amount expended by the state during the year ending September 30, 1900, was $\$ 97,371.80$.

## MANUAL TRAINING IN HIGH SCHOOLS.

Under conditions named in sections 496 b and 496 c of the Wisconsin Statutes of 1898 the state gives further aid from the general fund to free high schools that have maintained manual training departments.

The State Superintendent is charged with the duty of passing upon the fact set forth by the city superintendents where such school is located and making certificate to the Secretary of State as required in the laws referred to.

The amount paid by the state on this account during the year ending September 30, 1900, was $\$ 3,500$.

## COUNTY TRAINING SCHOOLS FOR TEACHERS.

By the authority of chapter 269, laws of 1899, the state aids counties in maintaining training schools for teachers provided no Normal schools are located therein.

The condition under which such aid is given is set forth in section five (5) of the act on page 456 of the session laws of 1899.

The total amount which can be paid out under this law is limited to $\$ 2,500$ annually. During 1900 only two (2) counties, Dunn and Marathon, established schools to conform to the requirements, and the amount appropriated was divided equally between them.

## STATE SUPERINTENDENT.

Term and oath.
His term of office shall be two years.
He shall take his constitutional oath of office within 20 days after receiving notice of election and it shall be filed with the Secretary of State.

Wis. Stats., sec. 164, p. 256.
Office.
His office shall be in the capitol, where papers and documents relating to his office shall be deposited.

Wis. Stats., sec. 167, p. 258.
This act provides conditions under which the Secretary of State as Auditor may approve vouchers for transportation.

Ch. 426 , L. 1901.

## Salary.

His salary is $\$ 1,200$ annually and he is to be reimbursed his travelling expenses in making official visits required by law, for the preparation of Agricultural Courses in Common Schools.

Wis. Stats., sec. 170, p. 260.

As Commissioner under this act his salary is $\$ 3,800$ annually, and traveling expenses.

Ch. 199, L. 1901.

## Assistant Superintendent.

He may appoint an assistant at $\$ 1,800$ annually and traveling expenses, whose oath of office and appointment shall be filed with Secretary of State.
Such assistant shall perform such duties as Superintendent shall prescribe.

Wis. Stats., sec. 165, p. 256, amended by ch. 297, L. 1899.
High School Inspector.
In like manner he may appoint a High School Inspector at $\$ 1,800$ and necessary expenses, who shall assist him as provided in thịis section. The salary and expenses of this office to be from the appropriation to free high schools.

Wis. Stats., secs. 165a, 170, p. 256.
Clerks, etc. $\square$
He may appoint clerks, as follows:
A chief clerk, at $\$ 1,500$ annually, who shall have charge of the office books and correspondence.

A library clerk at $\$ 1,400$ annually, who is allowed travelling expenses, and who shall aid school libraries.
An index filing clerk at $\$ 1,000$.
A mailing clerk at $\$ 1,000$.
A clerk and stenographer at $\$ 720$.
Wis. Stats., sec. 165b, p. 256, amended by ch. 297, L. 1899.

## Duties.

He shall have general supervision over common schools, and it shall be his duty

1. To visit andi inspect the schools and work for the cause of education, as herein stated.
2. To recommend the most improved text-books and advise and correspond regarding the improvement in the common school system.
3. To prescribe rules and regulations regarding school libraries, laws and courses of study.
4. To examine and determine finally appeals under the laws and prescribe rules of practice in respect thereto.
5. To collect educational work.

He may expend therefor not over $\$ 150$ a year.
6. To apportion and distribute school fund income.
7. To make copies when required of any paper in his office or any of his acts or decisions, and he may charge therefor 12 c per folio.

Wis. Stats., sec. 166, p. 256.
8. To deliver his report to the Governor on or before Dec. 10 each even numbered year.

Wis. Stats., sec. 355b, p. 314.
(This subdivision states what his report shall embrace.)
Ch. 97, L. 1901.
9. To hold at least four conventions yearly for consultation, etc., with county superintendents.
This act provides for an additional report to be made to the Governor before Jan. 10, each odd-numbered year.
9,000 copies of the biennial report of the State Superintendent shall be printed, not to exceed 250 pages.

## U. S. grant of public land.

Every 16th slection of public land of the U. S. is granted to the state for the use of schools.

Énabling act, p. 49.

## State superintendent.

The supervision of public instruction is vested in the State Superintendent, who shall be chosen by the electors of the state. His compensation shall not exceed $\$ 1,200$, annually.

Const., art 10, sec. 1, p. 119.
School fund, interest of, how applied.
The interest of the school fund shall be applied to the support and maintenance of public schools, the purchase of suitable libraries and apparatus therefor.

Const., art. 10, sec. 2, p. 119.
District schools; tuition; sectarian instruction.
Provides for the establishment of district schools, which shall be uniform and free from tuition charge to children between four and twenty, and no sectarian instruction shall be allowed.

Const., art. 10, sec. 3, p. 119.
Annual school tax.
Each town and city shall raise by tax for support of common schools annually, a sum not less than one-half the amount received by such municipality for school purposes from the income of school fund.

Const., art. 10, sec. 4, p. 120.

Income of school fund.
Provision for the distribution of school fund income.
When no distribution.
Const., art. 10, sec. 5, p. 120.

## Regents.

He is ex-officio member of the Regents of Normal Schools.
Wis. Stats., sec. 293 , p. 336, amended by ch. 74, L. 1899.

## Board of Visitors.

He shall appoint a Board of Visitors for Normal Schools.
Wis. Stats., sec. 406, p. 340.
Report of academies.
He shall receive on or before October 10 of each even-numbered year a report from the trustees of academies and institutions for the year ending with the 31st of August of the second preceđing year.
What report shall contain.
Wis. Stats., sec. 411, p. 341, including secs. 407, 408.

## Record of examination.

He shall record the date of certificates issued and the name, age and residence of person to whom issued and preserve on file in his office all papers relating to the examination of applicants for state certificates.

Wis. Stats., sec. 456, p. 367.
Compensation of examiners.
The State Superintendent shall fix and certify all the actual and necessary expenses incurred by the examiners.

Wis. Stats., sec. 458, p. 367.
Examinations for superintendents certificates.
Relates to the conduct of examination for teachers' state certificates.

Wis. Stats., sęc. 461 l, p. 373.
Purchase of books; librarian and records.
He shall prepare a list of books and furnish the same for district libraries. He shall furnish to each town clerk record books for the use of his office in connection with duties specified in this section.

Wis. Stats., sec. 486a-b, p. 382, amended by ch. 272, L. 1899.
Farm bulletins.
He shall distribute farm bulletins deposited with him oy the Sur perintendent of Agricultural Institutes.

Wis. Stats., sec. 486c, p. 383.
State aid.
He shall certify the amount to be paid in aid of free high schools to the Secretary of State.

Wis. Stats., sec. 491b, p. 385.
State aid, how obtained.
State aid to manual training schools-how secured, amount of and how paid.
Limitations as to amount of state aid.
Amount of state aid how determined and obtained.
Wis. Stats., sec. 496, p. 388, amended by ch. 214, L. 1899.
Supervision and course of study.
State Superintendent's duties in the line of supervision.
Wis. Stats., sec. 496a, p. 388.
State aid for manual training department.
Wis. Stats., sec. 496c; p. 389, amended by ch. 273, L. 1899.

## Dictionaries.

He may furnish to any school district or department thereof one copy of Webster's Dictionary, on receipt of an affidavit of the proper officer that the school has not peen suppiied or that the one furnished has been lost or is unfit for use. On payment in advance of the cost price to said Superintendent for any so to be re-placed.
He may sell, at the cost price, to any of the charitable, educational, reformatory, or penal institutions on the written requisition made by institution superintendent, as many copies of such dictionary, not exceeding the number of departments in the institutions, as may be necessary.
He may also furnish each county superintendent, each teacher employed in Normal Schools or University, each state officer and member of Legislature and their employees, with one copy thereof at cost price.
He may purchase, at not exceeding $\$ 7$ per copy delivered at his office, a sufficient number of copies of such dictionaries to furnish as above and the expense thereof shall be paid out of the state treasury.

Wis. Stats., sec. 509, p. $£ 92$.

## Payment of money.

The State Superintendent shall pay to the State Treasurer all the money received on account of dictionaries sold as afore stated and render an account of all dictionaries sold in his report to the Governor.

Wis. Stats., sec. E11, p. 592.
Apportionment of; loss of right.
School Fund income tax.
Apportionment to counties how made.
There shall be no apportionment when schools are not maintained 7 months in the year.

Wis. Stats., sec. 554 , p. 403, amended by ch. 115, L. 1899.

## Certificate and notice.

He shall certify the apportionment made to the Secretary of State immediately giving notice to each county clerk and county treasurer stating amount apportioned to his county.

Wis. Stats., sec. 555, p. 404.
Correction of apportionment.
Procedure when there is a correction to be made in the apportionment.

Wis. Stats., sec. 556, p. 404.

State aid to schools.
When application is made to him, the State Superintendent shall, with the consent of the Board of Control, grant permission to establish schools for instruction of deaf-mutes residents of this state.

Mayor of any city and president of any village which shall maintain such schools shall report to the State Superintendent annualiy, and oftener if so directed, facts in relation to such schools as they may require.

Accounts, how made.
Certificates and affidavits substantiating accounts for sums to be paid for support of such schools shall be approved in writing by The State Superintendent.

Wis. Stats., sec. 578 , p. 425 ; sec. 579 , p. 426.
Postage.
He is entitled to postage stamps and stamped envelopes for his office for official correspondence at the expense of the state.

Wis. Stats., sec. 169, p. 258.
Stationery.
He or his assistant may procure stationery for his office at the expense of the state.

Wis. Stats., sec. 290, p. 301.
Duties of State Superintendent.
He shall give information and assistance in organizing training schools in counties for common school teachers.
He shall prescribe the courses of studies to be pursued and determine the qualifications of the teachers.
He shall supervise and inspect the same.
Ch. 268, L. 1899.
County training schools.
The secretary of each county training school board shall report to the Superintendent on each July 1. Upon receipt of such report, if satisfactory, the Superintendent shall make a certificate to that effect and file the same with the Secretary of State.

Ch. 268, L. 1899
The assistant state superintendent and library clerk shall be reimbursed expenses actually incurred in performance of duty when such accounts are approved by the Superintendent.

Ch. 297, L. 1899.

Appointment of Harvey as commissioner.
Appointment of State Superintendent L. D. Harvey as commissioner to investigate methods of manual training. Duties. Ch. 121, L. 1899.
$\$ 1,000$ may be used by the State Superintendent for providing public lectures in connection with institutes.

Wis. Stats., sec. 408, p. 340, amended by ch. 179, L. 1899.
Institute instructors.
No money shall be paid for services rendered as an instructor in any institute to any person unless he holds a certificate signed by the State Superintendent certifying that the committee on institutes of the Board of Regents of Normal Schools approves of said person as a competent institute instructor.

Wis. Stats., sec. 461i, p. 372.
School fund tax; apportionment.
School fund apportionment.
He shall apportion the school moneys each county will be entitled to receive and certify the apportionment so made to the Secretary of State and,State Treasurer and he shall at the same time certify the amount of said tax to each county clerix and treasurer.

Wis. Stats., sec. 1072a, p. 827.
Report of academies.
On or before October of each even-numbered year he shall receive the report of the academies.
What report shall contain.
Wis. Stats., sec. 411, p. 341.

Any person who has graduated from a regular collegiate course at the University and after such graduation shall furnish evidence to the State Superintendent of good moral character and of successful teaching for one year in a public school of this state may have his diploma countersigned by said Superintendent which shall then have the force and effect of a limited state certificate, subject to the power vested in the State Superintendent to revoke the right given by his signature to such diploma.

Wis. Stats., sec. 387, p. 333.
This act adds a new section to be known as 497a and relating to the review of the decisions of the State Superintendent.

Ch. 184, L. 1901.

Whenever there shall be a vacancy in the office of the county superintendent the State Superintendent may appoint a suitable person to such office until another shall be elected and qualified.

Wis. Stats., sec. 967, p. 765.
The State Superintendent shall furnish each office by whom a report shall be made blank forms upon which they shall make their annual reports.

Wis. Stats., sec. 466, p. 375.
He is authorized to issue certificates as herein provided for after countersigning diploma issued by the State University. Force and effect of this act results in a legal license to teach in public schools.

Ch. 171, L. 1901.
This act relates to the decisions of the State Superintendent provided for by chapter 27 of the Wisconsin statutes of 1898. Ch. 180, L. 1901.

This act provides for the establishing and maintenance of county schools of agriculture and recites the duties of the State Superintendent in connection therewith.

Ch. 288, L. 1901.
The State Superintendent may appoint two competent persons who shiall act under his direction as inspectors of day school for the deaf and for the school for the deaf at Delavan. When not engaged in the inspection of the schools such inspectors shall perform such other duties as the State Superintendent shall direct.

$$
\text { Ch. } 422, \text { L. } 1901 .
$$

This act authorizes the State Superintendent to appoint two persons to assist him in the inspecting and supervising of state graded and free high schools to be known as the state school inspectors.

Ch. 439, L. 1901.
DISBURSEMENTS IN THE DEPARTMENT OF STATE SUPERINTENDEN'T
For we year ending Sept. 30, 1900.
Salaries of eight (8) officials and clerks .....  $\$ 10,52000$
Traveling expenses of five persons ..... 1,998 56
Dictionaries purchased to be sold. ..... 4,404 00
Postage and P. O. box rent ..... 91550
Printing, including memoria; and arbor day annuals and cost of paper and waste, per report Commiss!oners of Printing ..... 3,665 81
Expressage ..... 75869
Stationery, per report Superintendent Public Property ..... 21942
Sundry items ..... 14349
Total .....  $\$ 25,52547$
Pages 158,488 and 500 in the report of the Secretary of State for the yearending Sept. $30,1900$.
DISBURSEMENTS ON ACCOUNT OF COMMON SCHOOLS
For the year ending Sept. 30, 1900.
Per diem expenses of three (3) persons ..... $\$ 84480$Interest on certficates of indebtedness due from general fund to schoolfund income
$.109,45900$
Total, $\$ 110,303.80$ per page 182 , and $\$ 691,500.32$ per pages $212-213$, transfers having been deducted, making, in all. ..... $\$ 801,80412$
See report of the Secretary of State for the year ending Sept. 30, 1900.
DISBURSEMENTS IN COUNTY TRAINING SCHOOLS FOR TEACHERS
For the year ending Sept. 30, 1900.
Amount of state appropriation, divided equally between Dunn and Mara- thon counties ..... $\$ 2,50000$
Page 182 in the report of the Secretary of State for the year ending Sept. 30,1900.
DISBURSEMENTS IN FREE HIGH SCHOOLSFor the year ending Sept. 30, 1900.Amount apportioned to the various counties in the state\$97,571 80
Page 197 in the report of the Secretary of State for the year ending Sept.30, 1900.
DISBUIiSEMENTS IN CONNECTION WITH MANUAL TRAINING IN' HIGH SCHOOLS.
For the year ending Sept. 30, 1900.
Amount paid to ten (10) cities complying whith the law ..... $\$ 3,50000$
Page 197 in the Secretary of State's report for 1900.
DISBURSEMENTS IN. CONNECTION WITH DEAF MUTE INSTRUCTION IN CITIES.
Amount paid to 15 cities complying with the law ..... \$25,749 64
Page 191 in Secretary of State's report for 1900.

## RAILROAD COMMISSIONER.

This elective state officer is charged with the duty to inspect and examine the condition of the railroads doing business in the state with relation to the public safety and convenience.

Any*one desiring the full details of his powers and duties, reference should be made to the section of the Wisconsin Statutes of 1898 and the acts amendatory thereto to which reference is made in the compilation which follows.

## RAILROAD COMMISSIONER.

How chosen; election and term.
He shall be chosen at the general election each even-numbered year for a term of two years, beginning the first Monday in January succeeding election.
No person owning stocks or bonds or in the employ of or interested otherwise pecuniarily in any railroad or transportation company shall be eligible to this office.

Wis. Stats., sec. 128, p. 249; sec. 1792, p. 1321.
Salary; resignation.
His salary is $\$ 3,000$ annually.
If he resigns his resignation shall be made to the Governor.
Sections $94 \mathrm{k}, 94 \mathrm{~L}$ and 965 provide how vacancy may be filled.
Wis. Stats., sec. 170, p. 261; sec. 961, p. 763.
His oath and bond.
He shall take the oath herein provided.
His bond shall be $\$ 20,000$, with sureties approved by the Governor.
Bond shall be filed with the Secretary of State.
Wis. Stats., sec. 1793, p. 1321.
Assistance.
He shall appoint a deputy commissioner whose salary shall be $\$ 1,750$ annually, and who shall have the same power as Commissioner. His oath shall be as herein provided and shall be filed with the Secretary of State. He shall give such bond to the Commissioner as the latter may prescribe.
No other clerical assistance is provided.
-Wis. Stats., sec. 170, p. 261.

Duties.
He shall inquire into any neglect or violation of the laws of the state by any railroad, corporation doing business therein. He shall inspect and examine the condition, equipment and manner of management of any and all railroads doing business in the state with relation to the public safety and convenience. He shall also examine and ascertain the pecuniary condition and the manner of the financial management of every such railroad corporation.

Wis. Stats., sec. 1794, p. 1321.
Further duties; companies to report.
His duty relating to complaints made in writing.
He shall on or before Feb. 10 in each year ascertain and return to the State Treasurer:

1. The actual cost of each railroad in this state up to and including Dec. 31, the next preceding.
2. The total gross receipts resulting from the operation of every such railroad during the next preceding year.
3. The total net earnings resulting from the operation of every railroad during the preceding year.
4. The total interest-bearing indebtedness of the corporation owning or operating such railroad and the amount of interest paid such corporation during the preceding year, ending on the 31st of December.

Wis. Stats., sec. 1795, p. 1322.
Powers; witnesses.
He shall have the power to examine witnesses, administer oaths, send for persons or papers and at any and all times may have access to all books and papers of every such railroad corporation in any railroad oluce of this state.

Wis. Stats., sec. 1796, p. 1323.
Railroad maps.
He shall supervise the publishing of the 25,000 copiesi of railroad maps of Wisconsin.
How certain number of copies shall be mounted.
Wis. Stats., sec. 1795 a, p. 1323.
Office supplies, expenses, transportation.
He shall keep his office at the capitol and shall be provided with all necessities, and the expense thereof shall be paid out of the state treasury.
Commissioner and his deputy shall have the right of passing, in the discharge of their official duties, on all railroads and railroad trains free of charge.

Wis. Stats., sec. 1797, p. 1323.

Books to be produced; bridge devices.
He may require railroad corporations to produce their books as may be required, as herein provided.
He may approve interlocking bridge device and safety crossings.
Wis. Stats., sec. 1751, p. 1264.

## Postage.

He shall be furnished with postage and stamped envelopes for his official correspondence.

Wis. Stats., sec. 169, p. 258.
Stationery.
He shall be furnished with necessary stationery.
Wis. Stats., sec. 290, p. 301.
Blue Book.
He may have 125 copies of Blue Book.
Wis. Stats., sec. 121, p. 236.
Palace, sleeping and drawing room cars.
Every owner of palace, sleeping and drawing room cars shall make and return to the Railroad Commissioner a true statement of the gross earnings made by the use of such cars between points within this state.

Wis. Stats., sec. 1222b, p. 927.
R. R.; return of earnings.

A true statement of the gross earnings made and returned to the State Treasurer by every railroad company.

Wis. Stats., sec. 1211, p. 922.
Report, when to be made.
Every person or corporation owning or operating a street railway within the state of Wisconsin shall on or before Jan. 31, report to the Railroad Commissioner annually of its operations during the preceding year.

Ch. 329, L. of 1899, p. 599.
Provides for an additional report to be made to the Governor oddnumbered year.

- Ch. 97, L. 1901.

What report shall contain.
Ch. 308, L. 1899.
Penalty in case of neglect.
Provides for report to him from assessors.

Board to hear and determine complaints against R. R. Cos.
The Railroad Commissioner, Attorney General and Governor are hereby constituted a board to hear, try and determine the complaints.
Railroad Commissioner shall investigate the complaints and report to the Board. Ch. 225, p. 376.

## Printing.

The report of the Railroad Commissioner shall be limited to 200 pages and 1,000 copies shall be printed.

Wis. Stats., sec. 335b, p. 314.

## - Disbursements on account of the department of the RAIĹROAD COMMISSIONER.

For the year ending Sept. 30, 1900.
Salaries of officials and employees
Traveling expenses of commissioner and deputy............................................... 98434
Printing, including cost of paper and waste, per report Commissioners Printing . ................................................................................... 49093
Postage and P. O. box rent ................................................................... 16700
Stationery, per report Superintendent Public Property ..................... 4063
Sundry items . ......................................................................................... 13684
Total . ....................................................................................... \$7,129 74
Pages 159, 488 and 500 in the report of the Secretary of State for the year ending Sept. $30,1900$.

## INSURANCE COMMISSIONER.

This elective state officer is charged with the duty of determining under the state laws as to what companies shall do business in the state.

The reports which shall be made to him, his power, duties and privileges are as outlined in the laws which follow:

## COMMISSIONER OF INSURANCE.

Election and term.
He shall be chosen biennially at the general election in even-numbered year.

Wis. Stats., sec. 128, p. 240.

## Salary.

His salary shall be $\$ 3,000$, annually.
(Secs. 961 and $94 \mathrm{k}, 94 \mathrm{~L}$, provides how he may resign and how vacancy may be filled.) .

Wis. Stats., sec. 170, p. 261.
Commissioner's oath, bond, office-Reports.
Before entering upon his duties he shall take the oath of office and execute a bond for $\$ 20,000$, as herein required. The oath shall be filed with the Secretary of State and the bond with the State Treasurer, after having been approved by the Governor. He shall have an official seal and conduct examinations and exercise such control of insurance corporations as may be required by law.
His office shall be in the capitol and he shall be provided with postage, printing office supplies and Blue Books.
All insurance companies shall report to him.
Wis. Stats., sec. 1967 , p. 1483 ; sec. 121 , p. 236 ; sec. 169 , p. $2 \Sigma 8$; sec. 290 , p. 301.

Deputy and other assistants and salaries.
He may appoint a deputy; at $\$ 1,500$ annually, whose oath of office shall be filed with the Secretary of State and who shall give a bond to the Commissioner as he may prescribe. Such deputy shall have the same power as Commissioner in case of the latter's sickness or absence or when detailed to do special acts.

He may appoint:
A chief clerk at $\$ 1,200$ annually.
An actuary at $\$ 1,200$ annually.
An examiner at $\$ 1,200$ annually.
Two clerks at $\$ 1,200$ each annually.
A stenographer at $\$ 720$, annually.
A filing clerk at $\$ 900$ annually.
A messenger at $\$ 900$, annually.
A mailing clerk at $\$ 900$, annually.
Wis. Stats., sec. 1967a, p. 1483; sec. 170, p. 261.
Investigation; fees; revocation of license.
The Commissioner may address inquiries to any insurance company doing business in this state or any officer thereof in relation to its doings or conditions or any other matter connected with its transactions, and it shall be the duty of every corporation or officer so addressed to promptly reply in writing to such inquiries; and, whenever he shall deem it expedient to do so, or when any responsible person shall file 'with him written charges against any such corporation, alleging that any return or statement filed by it with such Commissioner is false or that its affairs are in an unsound condition, he shall, in person, or by some one to be appointed by him for that purpose, not an officer or agent of, or in any manner interested in, any insurance corporation doing business in this state, except as a policy holder, examine into its affairs and condition; and it shall be the duty of the corporation, its officers or agents to cause its books to be opened for inspection, and to pay all reasonable expense of and compensation for such examination upon the certificate and requisition therefor of said Commissioner; which expenses, however, shall not exceed $\$ 5$ per day during the time of the examination and 5 c per mile for traveling.

Whenever $i t$ shall appear to the said commissioner from his own examination or the report of the person appointed by him that the condition of any foreign company examined is unsound he shall revoke the certificate granted such company and cause a notification thereof to be published in the official state paper and mail a copy thereof to each agent.

The Commissioner shall examine insurance corporations applying for admission to transact business in this state, and if the affairs or condition of any such corporation do not fully meet the requirements of law he shall withhold his certificate.

Wis, Stats., spe. 1968, p. 1483.

Restoratian of capital.
Provides the duty of the Commissioner as to requiring restoration of capital of insurance companies, as herein provided.

Wis. Stats., sec. 1969, p. 1484.
Reduction of capital.
Provides that the Commissioner may, as herein provided, authorize corporations to continue business on reduced capital stock where capital has been impaired.

Wis. Stats., sec. 1970, p. 1484.
Forms for and publication of statements.
The Commissioner of Insurance shall prepare and furnish to each insurance corporation organized under the laws of the state and to the attorneys of corporations incorporated in other states and countries, doing business of insurance in this state printed forms of annual and other statements as required by law to be made by such corporations, and may make such changes in such forms as shall seem best adapted to elicit from them a true exhibit of their condition in relation to the matters required by law to be reported to him; and all such corporations shall make such statements as required by the said commissioner; and he may for such reasons as he shall deem sufficient, extend the time for filing such annual statements, but not exceeding 60 days.
He shall cause condensed statements of certain companies to be published in the state official paper and in one other daily newspaper.

Wis. Stats., sec. 1971, p. 1485, amended by ch. 192, L. 1899.
Fees payable.
There shall be paid to the commissioner in addition to the fees elsewhere in these statutes provided for, by every insurance corporation, person or agent to whom this chapter applies, the following fees: For filing the first declaration or statement, with certified copy of charter, $\$ 25$. For filing the annual statement of any insurance corporation, $\$ 25$.
For each certificate of authority issued by him to each agent of any foreign fire or marine insurance company not organized as aforesaid, $\$ 2$.
For every copy of a paper filed in his office, other than such declarations and statements, 15 cents per folio.
For certifying and affixing his seal to any paper, 50 cents.
Millers' and manufacturers' mutual insurance corporations shall pay

For filing the first declaration or statement and issuing certificate thereon, $\$ 10$. For filing annual statement and issuing certificate thereon, $\$ 3$.

Wis. Stats., sec. 1972, p. 1485.
Agents to be licensed.
No officer or broker, agent or sub-agent of any insurance corporation of any kind, except town insurance corporations of this state shall act or aid in any manner in transacting the busi. ness of or with such corporation, in placing risks or effecting insurance therein without first procuring from the Commissioner a certificate of authority as provided by law nor after the period named in such certificate shall have expired.

Wis. Stats., sec. 1976, p. 1488.
Proceeding if law violated; expenses.
The Commissioner shall bring notice of the violation of any of the provisions of this chapter by insurance companies to the nofice of any company which shall have committed the same. And in case of persistent violation thereof by any company he shall, if the company be incorporated under the laws of this state, report the same to the Attorney General.
He shall aiso bring or cause actions to be brought to recover all forfeitures imposed by these statutes for a violation of any of their provisions by insurance companies or their agents.

Wis. Stats., sec. 1972a, p. 1486.
Commissioner's report.
The Commissioner shall keep and preserve in a permanent rorm a full record of his proceedings, including a concise statement of the condition of each insurance company reported, visited or examined by him; and shall annually at the earliest date make a report to the Governor of the general conduct and condition of all such companies.

Wis. Stats., sec. 1972b, p. 1486, amended by ch. 233, L. 1901.
What report shall contain.
Provides for the preparation and distribution of the reports issued by the Commissioner of Insurance. -

$$
\text { Ch. 1897, L. } 1901 .
$$

Payments; monthly report.
The Commissioner shall make daily payments to the State Treasurer of all fees and taxes received and shall, on the first day of each month, report in detail the receipts of his department during the preceding month to the Governor, Secretary of State and State Treasurer, together with the dates of such payments to the Treasurer.

Wis, Stats., sec. 1972c, p. 1487.

Valuation of policies.
The Commissioner shall calculate the existing value of all the outstanding policies of any corporation not valued by the insurance department or proper officers of either state under whose iaws it is organized, or of New York or Massachusetts and such corporation shall pay him compensation therefor as herein provided.

Wis. Stats., sec. 1950, p. 1458.
Fire and navigation insurance; fees.
Provide for payment by insurance companies of license fees to the Commissioner of Insurance.

Wis. Stats., sec. 1219, p. 925; sec. 1220, p. 925, amended by ch. 326 , L. 1899, and ch. 21, L. 1901.

Fees of foreign companies.
Provide for payment by insurance companies of license fees to the State Treasurer.

Wis. Stats., sec. 1221, p. 925.
Formation of, for insuring property-Articles, what to contain.
Not less than 15 persons may organize an insurance corporation by filing articles of incorporation containing declarations as herein provided.

Wis. Stats., secs. 1896, 1897, p. 1388.
Commissioner shall approve of security of any accident association of $\$ 1,000$ before license is issued.

Ch. 442, L. 1901.
Articles, proof of publication.
Proof of publication of such articles shall be filed with the Commissioner.

Wis. Stats., sec. 1899, p. 1389.
Examination, patent; name.
The Commissioner shall cause examination of corporations as herein provided.
Provision is made for filing certificate with the Commissioner as to the condition of such corporation.
Commissioner shall have the right to reject proposed name or title when he deems it likely to mislead the public.

Wis. Stats., sec. 1900, p. 1390.

In the foregoing condensed compilation of the duty of the Commissioner of Insurance no reference has been given to numerous provisions of law which specifically provide the detailed procedure of the Insurance Department in connection with each class of corporations.

For the benefit of those seeking such details, the following reference index to the statutes may be of service:

Special funds, duty as to. Wis. Stats. of 1898, sec. 1909, p. 1394.
Where funds or capital are impaired, Wis. Stats. of 1898, sec. 1912, p. 1395.

Foreign insurance corporations, Wis. Stats. of 1898, sec. 1915, p. 1396; sec. 1919, p. 1401.
Reports and statements, when made; what to show, Wis. Stats. of 1898, sec. 1920, p. 1401; sec. 1921, p. 1403.
Town insurance companies, Wis. Stats. of 1898, sec. 1927, p. 1406; articles filed with, sec. 1932, p. 1408; reports, sec. 1938, p. 1411.
Millers' and manufacturers' insurance companies, duty as to, Wis. Stats. of 1898 , secs. 1941a, b, c, d, pp. 1412-1414.
Mutual companies in cities and villages, duty as to, Wis. Stats. of 1898, sec. 1941-1, p. 1415; sec. 1941-6, p. 1417; sec. 1941-12, p. 1418. Bankers' mutual casualty companies, duty as to, ch. 65, laws 1899, p. 88.
Druggist insurance companies, duty as to, Wis. Stats. of 1898, sec. 1941-14, p. 1419; sec. 1941-20; sec. 1941-22, p. 1421.

Church fire insurance companies, duty as to, Wis. Stats. of 1898, sec. 1941-23, p. 1421; sec. 1941-25, p. 1422; sec. 1941-28; ch. 118, L. 1899, p. 176.

Lumber dealers' insurance associations, duty as to, Wis. Stats. of 1898, sec. 1941-34, p. 1424; sec. 1941--36; sec. 1941-40, p. 1425.
Standard fire policy, duty as to, Wis. Stats. of 1898, sec. 1941-42, p. 1425.

Fire insurance company, power to revoke license; foreign fire companies, Wis. Stats. of 1898 , secs. 1943a, b, p. 1451.

Duty as to inspection, Wis. Stats. of 1898, sec. 1945e, p. 1453; see Ch. 190, L. 1899.
Stock fire insurance companies, Ch. 166, L. 1899, p. 241.
Insurance on Lloyd's principle, Wis. Stats. of 1898, sec. 1945g, p. 1454.

Duty of commissioner in connection with Lloyd's principle, Ch. 249, L. 1901.

Assessments by foreign companies, Wis: Stats. of 1898, sec. 1945i, p. 1454.

Life companies, approval of, Wis. Stats. of 1898 , sec. 1947, p. 1456;
examination of, sec. 1948-9, p. 1457; papers to be filed, sec. 1953, p. 1458.

Life companies, reports, domestic, Wis. Stats. of 1898, sec. 1954-5, pp. 1459-60.

Assessment or mutual companies, duty as to, Wis. Stats. of 1898, secs. 1955a to n, pp. 1460 to 66.

Life companies, discrimination in rates, Wis. Stats. of 1898 , sec. 19550, p. 1466.

Domestic hail companies, Wis. Stats. of 1898 , sec. 1965, p. 1469.
Foreign hail companies, Wis. Stats., of 1898, secs. 1966-1-11, pp. 1469 to 1472.

Mutual live stock companies, Wis. Stats. of 1898, secs. 1966-14-15-24. pp. 1472 and 1473.

Domestic, casualty, credit, title, suretyship companies, Wis. Stats. of 1898, secs. 1966--26-31, pp. 1474-76; sec. 1966-46, p. 1481; sec. 1966-32, p. 1476.

Foreign-same.
Insurance of domestic animals, Wis. Stats. of 1898, secs. 1966-51 to 54; p. 1482.

## disbursements in the insurance department.



Pages 159, 488 and 500 in the report of the Secretary of State for the year ending Sept. 30, 1900.

## COMMISSIONERS OF TAXATION.

Commission of what to consist; appointments.
In order to secure improvement in the system and an equalization of taxation in this state, there shall be a commission of taxation, a first assistant commissioner and a second assistant commissioner. The Governor shall nominate and by and with the consent of the senate at this session, appoint as such officers persons known to him to possess knowledge of the subject of taxation and skill in matters pertaining thereto, to serve ten years from May 1, 1899.

Ch. 206, L. 1899.
Wis. Stats., sec. 1, p. 341.
To take oath of office.
The commissioner and his assistants and any clerk appointed by him, within 30 days after his acceptance of such appointment and before entering upon their duties, shall take, subscribe and file with the Secretary of State the constitutional oath.

Wis. Stats., sec. 2, p. 341.
Power and duty of commissioner.
The commissioner shall have general supervision of the system of taxation throughout the state, shall have power to make a thorough investigation thereof, and shall report to the legislature on the first day of each regular session the results of his supervision and investigation, and shall formulate and recommend legislation for the improvement of the system and for the equalization of the taxation of the state. He shall keep in his office a public record of his acts and orders and print for general circulation such information as he may deem proper.

Wis. Stats., sec. 3, p. 342.
This act defines and enlarges the powers and duties of the commissioner.

Ch. 220, L. 1901.
He may take testimony, etc.
Wik. Stats., sec. 4, p. 342.
Duties of assistant commissioners.
The commissioner shall prescribe the duties of the assistant commissioners, and in the performance thereof they shall exercise so far as necessary the power hereby vested in the commissioner.

Wis. Stats., sec. 5, p. 342.

Commissioners to preside over meeting of State Board of Assessment. The commissioner shall be a member and preside at the meetings of the Board of Assessment, and shall lay before the Board such information within his possession as in nis judgment will assist ic in its deliberations.

Wis. Stats., sec. 6, p. 343.
Compensation of commissioners and employcs.
The annual compensation of the commissioner shall be $\$ 5,000$; assistant commissioner, $\$ 4,000$ annually; second assistant commissioner, $\$ 4,000$ annually.

The commissioner shall fix the compensation of any clerk or employee in his office; and no person while serving as commissioner or as either of his assistants, or as a clerk in his office, shall hold any other office or position of trust or profit, or pursue any other business or avocation, or serve on or under any committee of any political party.

Wis. Stats., see. 7, p. 343, amended by ch. 322, L. 1899.
Office suppties, who to furnish.
Rooms in the capitol shall be set apart for the use and furnished under the direction of the commissioner. He shall be furnished with necessary postage, stationery and supplies and his printing done by the commissioners of public printing.

Wis. Stats., sec. 8, p. 343.

## Appropriation clause.

The salaries of the commissioners, his assistants and clerks, their necessary traveling expenses and all other disbursements of his office shall be paid out of the state treasury, as the salaries and expenses of other state officers are paid, and a sum sufficient to carry out the provisions of this act is hereby appropriated.

Wis. Stats., sec. 9, p. 343, amended by ch. 220, L. 1901.
This law constitutes the commissioner and the first and second assistants a State Board of Assessment, and prescribes their duties in relation thereto.

Ch. 237, L. 1901.
DISBURSEMENTS IN THE DEPARTMENT OF THE TAX COMMISSIONERS
For the year ending Sept. 30, 1900.
Salaries and services of nine officials ..... \$15,012 18
Traveling expenses of three (3) persons ..... 19152 Freight and expressage
4914
Printing, including cost of paper and waste, per report Commissioners of Printing
Postage and P. O. box rent ..... 18003
Stationery, per report Superintendent Public Property ..... 1,026 00
Telephone and telegrams ..... 34405
Total ..... 1746waste, per report Commissioners Printing85497Pages 156 and 488 in the report of the Secretary of State for the year endingSept. 30, 1900.

## COMMISSIONERS OF PUBLIC LANDS.

The Commissioners of Public Lands are the Secretary of State, State Treasurer and Attorney General, as provided by the constitution.

They have the supervision and care of state lands or of lands of which the state has an interest. They receive no compensation as such commissioners.

Chapter 258 of the laws of 1901 provides that the land office should be removed to the office of the Secretary of State, reduces the salaries of the land-office clerks and places them under the Secretary of State. This was to have been effective January 1, 1901. The provisions of this act were never carried out. Chapter 432, laws of 1901, reorganizes the lanid-office, restores the salaries of the chief clerk and assistant chief clerk and provides that the Commissioners of Public Lands may employ such clerks and pay such salaries as may be deemed necessary provided that not more than $\$ 6,500$ shall be expended for salaries during one year, including the salaries of the chief clerk and assistant chief clerk.

In certain cases the subject head only is given in the compilation which follows, because those desiring the detailed procedure as to drainage fund, the sale of public lands, forfeiture and resale, annulment of certificates, etc., should consult the statutes.

The province of this pamphlet is to give an outline only of the duties of each department.

## COMIMISSIONERS OF PUBLIC LANDS.

Commissioners of school and university lands.
The Secretary of State, State Treasurer and Attorney General shall constitute a board of commissioners for the sale of the school and university lands and for the investment of the funds therefrom.
Any two of said commissioners shall be a quorum for the transaction of all business pertaining to the duties of their office. Const., art. 10, sec. 7, p. 120.

Commissioners and their powers.
They have the general care and supervision of all lands belonging to the state or in which it has an interest.
They may make investigations concerning the rights of the state to indemnity swamp-lands and select and secure all such lands as it is or may hereafter be entitled to.
The accounts for expenses incurred in so doing, on their approval, shall be payable out of the general fund.

Wis. Stats., sec. 185, p. 269.
Office and records; copies as evidence.
They shall keep their office at the capitol. They shall arrange and preserve therein all records, books; reports, surveys, etc., pertaining to the public lands heretofore, including all such as have been or shall be received from the United States or any officer thereof., All records, books and files kept by the commissioners shall at all business hours be open to the inspection of any person free of charge.

Wis. Stats., sec. 186, p. 269.
Clerks and their oaths.
The commissioners may employ one chief clerk at $\$ 1,800$, an assistant chief clerk at $\$ 1,600$, and other clerks at salaries the commissioners deem necessary, provided the entire amount paid in salaries is not over $\$ 6,500$ annually. They shall take the oath of office herein provided.

Wis. Stats., sec. 187, p. 269, amended by ch. 452, L. 1901.
Investment of funds.
They, by and with the approval of the Governor, may direct the investment of so much of the money of any fund or of the income of any fund in the state treasury as they may deem advantageous to the state to so invest and also direct the disposal of any such bonds at any time by their written order, approved by the Governor and recorded in the office of the Secretary of State.

Wis. Stats., sec. 160, p. 252.
They are authorized by this act to direct the loan from the trust fund of $\$ 75,000$ to be repaid to the trust fund as herein provided.

Ch. 230, L. 1901.
Fees.
They shall collect as fees 50 cents on every certificate and 50 cents on every patent, issued by them, to be paid by the purchaser and credited as herein provided.

Wis. Stats., sec. 189, p. 270, amended by ch. 432, L. 1901.

Expenses, how made.
All expenses incurred by them in the care and management of the funds, etc., and in the care, protection and saie of the public lands, including advertising, shall be fixed by the commissioners and paid out of the state treasury.

Wis. Stats., sec. 190, p. 270.
Survey of lands.
Whenever it shall appear to them necessary that surveys should be made in order to ascertain the true boundaries of any tract or portion of the public lands, or to enable them to describe and dispose of the same in suitable and convenient lots, they may cause all such necessary surveys to be made.

Wis. Stats., sec. 192 , p. 270.
Plat of land̈s.
Whenever they shall deem it advantageous to any fund to be derived therefrom they may cause to be laid off into small village lots any tract or portion of the public lands held for sale, and to be appraised by three disinterested freeholders of the county in which the lands so to be subdivided are situated.
Such freeholders shall be appointed by the commissioners.
All reports, surveys, returns, maps and appraisals shall be recorded in the office of the commissioners.

Wis. Stats., sec. 193, p. 270.
Lease of lands.
They may from time to time lease for terms not exceeding one year and until the same are disposed of according to law, all such public lands under their care as shall have improvements on them.

Wis. Stats., sec. 194, p. 271.
Sale of land with water-power.
Whenever there shall be a water-power upon any of said lands which are offered for sale, it shall be optional with the commissioners to sell together all the tracts or lots upon which such water-power is situated and such other tracts or lots as are necessary for the use and enjoyment of the same; or they may sell each such tract or lot separately as in their opinion will be most beneficial to the fund to be derived from such sale.

Wis. Stats., sec. 195, p. 271.
Sale of public lands.
Relate to the duties of the commissioners with reference to the sale of public lands.

Wis. Stats., sec. 202, p. 272; sec. 212, p. 275, amended by ch. 432 , L. 1901.

Wis. Stats., secs. 213-221, p. 276-279.

Is an act authorizing the commissioners to sell certain state lands in Buffalo Co.

Ch. 127, L. 1901.
Forfeiture and resale of lands.
Wis. Stats., secs. 227-229, p. 280-282.
Annulment of certificates and patents.
Wis. Stats., sec. 231, p. 282.
Taxes.
Lost certificates and patents.
Wis. Stats., sec. 233, p. 283; sec. 234.
Fees for advertising.
Fees for advertising sale of lands shall be 50 cents for each separate description of land, provided that any such advertisement shall not exceed fifteen descriptions; the fees to be paid therefor shall be the same as provided for publication of legal notices.

Wis. Stats., sec. 237, p. 284.
Commissioners' authority; seizure and sale of materiat.
The chief clerk shall, when necessary, examine the public lands and protect them from trespass or to aid in collecting damages for trespasses committed, and be paid his actual expenses while on such duty.
commissioners may award persons informing them of trespass commitied 20 per cent. of amount collected.
The commissioners shall have the power to selze or cause to be seized any lumber, timber, bark, minerals, or other materials or property cut upon, dug, removed or taken from any of the public lands belonging to this state, and sell the same at auction to the highest bidder under rules and regulations prescribed by them. On such sale they may cause a bid to be made on behalf of the state for not less than half the actual value of the property to be sold and such property shall be sold at such price as they deem best for the interest of the state.

Wis. Stats., sec. 238, p. 284; sec. 289, p. 284; sec. 240 , p. 285.
Trespass by stranger and certificate holder.
Wis. Stats., sec. 241, p. 285.
Payments out of fines collected,
Payments to District Attorney out of fines collected,
Wis. Stats., sec. 243 , p. 286 ,

Money, how disposed of.
All money received from the sale of logs, lumber, shingles, timber, minerals or other articles seized under the provisions of this chapter, or recovered in legal proceedings for damages done to public lands, shall be paid into the treasury to the credit of the respective funds to which the lands belong on which such trespasses were committed, and all other money collected as expenses, fees, penalties and damages for trespass on such lands shall be paid into the general fund.

Wis. Stats., sec. 245, p. 286.

## Division of swamp land and funds.

All swamp iands and all moneys in lieu of swamp lands, which the state shall hereafter receive from the United States, shall on receipt thereof be equally divided between the normal school fund and the drainage fund by the commissioners.

Wis. Stats., sec. 251, p. 288.
Drainage fund.
Wis. Stats., sec. 253, p. 289; sec. 254.
Investment of trust funds.
Wis. Stats., secs. $258-263$, pp. 290-296, amended by ch. 129, L. 1899 ; ch. 130, L. 1899 ; ch. 123, L. 1901.

Provides for date of interest payments on trust fund loans.
Ch. 72, L. 1901.
Appraisal and abstracts of land.
Appraisal, how made.
Duty of commissioners with reference to the appraisal and abstracts of mortgaged lands.
Appraisal, how made.
Wis. Stats., sec. 278, p. 296; sec. 279.
The Treasurer shall transfer to the trust fund from the general fund $\$ 21,500$ appropriated by this act, and trust fund commissioner shall cancel and file amount of the indebtedness of New Richmond to said trust fund.

Ch. 286, L. 1901.
Lands, how sold; reduction of price.
Said lands how sold by commissioners.
Reduction of price.
Wis. Stats., sec. 280, p. 296; sec. 281, p. 297.
Proceedings if debt not discharged by sale:
Wis. Stạts., sec. 282, p. 297.

Forfeited mortgaged lands. Redemption.
Wis. Stats., sec. 282a, p. 297.
Lands to be sold.
Duty of commissioners when they have reason to believe that any lands have escheated to the state for defect of heirs.

Wis. Stats., secs. $284,285,286$, p. 298.
Right of way through public lands.
Wis. Stats., sec. 1857, p. 1370.

Tax for and appropriation of part-loans.
They may direct the State Treasurer to set apart by way of loan to the fund known as the university income for university uses such uninvested moneys or part thereof in the trust funds for the period while so uninvested as in their judgment shall be prudent, such loan to be repaid from the trust funds from the portion of such tax hereinbefore appropriated, with interest at the rate then required on deposits made pursuant to sections 160a to 160 f inclusive.

Wis. Stats., sec. 890, p. 385, see ch. 170, L. 1899.
State tax loans.
They may loan to the Board of Normal School Regents such part of the normal school funds as they deem prudent, not to exceed $\$ 60,000$, to be repaid from the income of the normal schools and from any appropriations hereafter made for their support and maintenance, as follows:
Feb. 1, \$5,000, 1898.
Feb. 1, $\$ 5,000,1893$.

- Feb. 1, $\$ 10,000$ each year thereafter until said loan is fully paid and discharged.

Wis. Stats., sec. 4C6a, p. 340, see ch. 170, L. 1899.
The commissioners are authorized to loan a portion of the trust funds of the state to the city of Rhinelander, Oneida Co., Wis. Ch. 126, p. 193, L. 1 §99.

They may loan a portion of the trust funds of the state to the county of Door and to the city of Sturgeon Bay, Wis. Ch. 241, p. 899, L. 1899.

To set aside certain state land to the Wisconsin Military Reservation.

Ch. 293, p. 516, L. 1899.

This act requires them to convey to grantees of the Sturgeon Bay of Lake Michigan Ship, Canal and Harbor Co. certain lands herein described. Ch. 287, L. 1901.

Printing.
Eight hundred and fifty copies of the report of the commissioners of public lands shall be printed, not to exceed 50 pages. Wis. Stats., sec. 335b, p. 314.

Authorizes Portage county to borrow $\$ 80,000$ from the trust funds and the commissioners of public lands shall have authority to make the loan to the state.

Ch. 45, L. 1901.
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## STATE FOREST WARDEN.

State forest warden.
The chief clerk of the land office shall be the state forest warden, and he may appoint a clerk in such office as his deputy with duties as herein provided.

Wis. Stats., sec. 1636b, p. 1185; amended by ch. 432, L. 1901.

Fire warden; duty, pay and liability.
The state forest warden shall appoint at least one fire warden in each organized town and shall keep a register of names and address.
The oath of office of the fire warden shall be filed with the state forest warden.
Duty of fire warden, pay and liability.
Wis. Stats., sec. 1636c, p. 1186.
Notices to be posted; report.
On suitable blanks furnished by the state warden the fire warden shall conspicuously post notices.
They shall report to the state forest warden as to all fires, and on or before Dec. 1 succeeding each general election shall report to the Governor a summary of such facts.

Wis. Stats., sec. 1636d, p. 1186.
Allowance to state warden and deputy.
The commissioners of lands shall audit all the accounts of the sfate forest warden and his deputy, and when allowed by them and approved by the Governor they shall be audited by the Secretary of State, who shall issue his warrant therefor, but in no case shall such expense and compensation exceed $\$ 300$ per annum.

Wis. Stats., sec. 1636e, p. 1186, amended by ch. 432, L. 1901.
Further duties.
For additional duties of the state forest warden see this section. Wis. Stats., sec. 1816a, p. 1340.

Postage, stationery; Blue Book.
He shall be furnished with necessary stationery and postage, and shall have one copy of the Blue Book.

Wis. Stats., sec. 121, p. 236; sec. 169, p. 258; sec. 290, p. 301.
DISBURSEMENTS IN THE DEPARTMENY OF THE LAND COMMISSIONERS
For the year ending Sept. 30, 1900.
Salaries, including salaries under section 186, R. S., swamp-land claims, salaries and expenses paid under sec. 190 of R. S., salary of Forest Wardens, per diem and expenses of Commissioner and fee for ex- amining state lands ..... \$20,225 97
Printing, including cost of paper and waste and print.ng of Forest Warden ..... 44618
Postage and P. O. box rent, including postage of Forest Warden ..... 2974
Telephone and telegrams, including telegrams of Forest warden ..... 2974
Expressage ..... 35
Stationery, per report Superintendent Public Property ..... 7063
Draughtsman ..... 1,200 00
Disbursements for advertising lands ..... 23880
Total ..... $\$ 2095087$

## COMMISSIONERS OF PUBLIC PRINTING.

While the statutes are not entirely clear as to the intention of the legislature as to printing, and while all laws on the subject do not in express words define the duty of the Commissioners, it is believed that the following summary of the acts governing their duties will be sufficiently comprehensive for the purposes of this pamphlet.

The system provided to be established by chapter 433 of the laws of 1901, see ante, page 368, contemplates that all of the printing, binding etc., will be charged to the department, board, society or institution receiving it, together with the paper used and waste sustained and allowed as provided by law, and that these entries will be made with such promptness that expense of this character will at all times appear on the records of the Auditor.

## COMMISSIONERS OF PUBLIC PRINTING.

Commissioners, who are.
The Secretary of State, Treasurer and Attorney General are the commissioners.

Wis. Stats., sec. 296, p. 303.

To advertise for proposals.
They shall during the first week in June each even-numbered year advertise in six (6) newspapers for printing proposals as herein required.
. Wis. Stats., sec. 297, p. 303.
Advertisement what to contain.
Said advertisement shall contain maximum legal prices and forms of bids.

Wis. Stats., sec. 298, p. 303.
For other requirements consult page 304.
For maximum prices and conditions see pages 303 and 304. Wis. Stats., sec. 299, p. 303.

Contract, how let.
The contract shall be let to the bidders who offer to do the work at the greatest uniform discount from the maximum legal prices, conditions, guaranty and procedure as to bids.

Wis. Stats., sec. 300, p. 304.
Const., art. 4, sec. 25, p. 93.
Contract; bond.
Details of execution of printing contract and bond.
Wis. Stats., sec. 302, p. 304.
Forfeiture of deposit; breach of contract.
Procedure is given in this section in case of failure of bidders to enter into contract.
Forfeiture of deposit.
Wis. Stats., sec. 303, p. 305.
Reletting contract.
Reletting of contract provided for in case of breach of contract.
Wis. Stats., sec. 304, p. 306.
Advertisement.
The commissioners shall, during the first week in February and August each year and at other times when they deem it necessary, advertise in two newspapers in Wisconsin, as herein required for paper required.

Wis. Stats., sec. 305, p. 306.
Classes of paper, separate bids. :
Paper must be clear and uniform in color and be divided into two classes, as herein provided, and be bid for separately.

Wis. Stats., sec. 306, p. 306.
Samples.
Samples of qualities desired shall be provided for by bidders.
Wis. Stats., sec. 307, p. 306.
Paper bids, b̀ond.
Details of execution of paper contract and bond.
Wis. Stats., sec. 308, p. 306.
Paper contract how awarded.
Wis. Stats., sec. 309, p. . 77 .
When to be rejected.
The commissioners shall carefully examine the paper received to see if it corresponds to samples furnished. If it fails to equal such samples the commissioners shall notify the contractor and reject the paper.

Wis. Stats., sec. 311, p. 307.

Printing bids; guaranty.
Bids shall be deposited with the Secretary of State.
A certificate of the Treasurer certifying that he has received from the bidder $\$ 1,000$ in money or U. S. bonds must accompany a biid before it shall be considered. Bids shall be accompanied by a written guaranty signed by two or more freeholders in the sum of $\$ 5,000$ to the effect that they guarantee the bidder will, if his bid be accepted, execute the contract and bond required by law within the time commissioners may prescribe.

Wis. Stats., sec. 301, p. 304.
Order for paper; waste or conversion.
Ten per cent. shall be allowed the state printer for waste on jobs of 10 quires or less and 5 per cent. on jobs of more than 10 quires.

Wis. Stats', sec. 313, p. 307.
Who may make printing orders.
Printing orders shall be made by the heads of departments requiring work and shall be transmitted through the Secretary of State. No order shall be given for work not absolutely needed nor in quantities greater than absolutely required.

Wis. Stats., sec. 314, p. 308.
Duty of legislative clerks.
Duty of legislative clerks in connection with orders for printing. Wis. Stats., p. 315, p. 308.
Bills, etc., how printed.
Provides as to the printing of bills, joint resolutions and memorials.

Wis. Stats., sec. 316, p. 308.
Daily journals; appendix.
The printing of daily jeurnals and appendix provided for. Wis. Stats., secs. 317, 318, p. 308.
Public documents.
What the public documents shall contain.
$T_{\mathrm{v}}$ is. Stats., sec. 319, p. 309.
Reports what to contain; how printed, what to be omitted.
The Governor shall transmit reports received by him to the commissioners, who shall strike out therefrom all parts not actually necessary, in their judgment, to be printed for the information of the people and to order the publication of the remainder in condensed form as the commissioners may prescribe.

Wis. Stats., sec. 333 , p. 313 ; sec. 334 , p. 313.

The part so stricken out shall be copied in a book by the Secretary of State and returned to the officers or boards making the reports.

Commissioners' report.
The commissioners shall make a biennial report to the Governor and the report shall be bound with the reports of the Secretary of State.

Wis. Stats., sec. 335, p. 313.
An addítional report is provided by this act to be made to the Governor before January 10, each odd-numbered year. Ch. 97, L. 1901.

Size of reports.
Limitations of number of pages of the biennial reports of the various officers and boards.

Wis. Stats., sec. 335b, p. 314.
Number of copies.
Limitations of number of copies on orders of commissioners through the Secretary of State.

Wis. Stats., sec. 335b, p. 314.
How bound.
This section provides how reports shall be bound.
Wis. Stats., sec. 335d, p. 315.
Reports for Board of Agriculture, Horticultural Society, Dairymen's Association, Experiment Station of University of Wisconsin, Conference of Charities and Reform.

Wis. Stats., sec. 335 c , p. 315.

Enlargement of reports, etc.
In no case shall the number of printed pages of any of the reports or transactions provided by law exceed the maximum number specified except upon written request of the officer of the department submitting the same and upon the written approval of the majority of the commissioners.

Wis. Stats., sec. 357, p. 316.

Geogruphical and Natural History Survey.
This act permitted the Commissioners of Printing to print the reports of the Survey.

Ch. 297, L. 1897.

Printing for Historical Society.
Relates to printing and binding that may be done for the Historical Society.
The commissioners shall approve of the matter printed.
Wis. Stats., sec. 340 , p. 316 ; sec. 375 , p. 327.
Assessment and election laws.
Provides for printing assessment and election laws.
Wis. Stats., sec. 342, p. 317.
Supreme court reports; contract for publicaton; price of reports.
Relates to the publication of supreme court reports.
Wis. Stats., sec. 347b, p. 318, amended by ch. 118, L. 1901.

Free Library Commission, office, printing and incidental expenses.
The state printer, upon the order of the commissioners, shall print such circulars. labels and blanks as may be required by the Free Library Commission.

Wis. Stats., sec. 373b, p. 326.

The new section added by this act directs the state printer to furnish the secretary of the Free Library Commission with copies of all state documents.

Ch. 168, L. 1901.

University reports and printing thereof.
The commissioners may order such paper and binding, on and with which the reports of the University Regents shall be printed and bound, with the approval of the Governor. Also the Washburn Observatory reports.

Wis. Stats., sec. 383, p. 332.

A ijutant General, reports of officers' convention.
Adjutant General may procure printing of report of officers' convention upon order of the commissioners.

Wis. Stats., sec. 648, p. 461.

## Dairy and Food Commissioner's printing.

Provides that the Dairy and Food Commissioner shall be furnished such printing as may be necessary.

Wis. Stats., sec. 1410, p. 1058.

State Veterinarian, bulletins.
Relates to the printing of the report and bulletins of information issued by the State Veterinarian.

Wis. Stats., sec. 1492e, p. 1103.

Board of Arbitration, report.
Relates to the printing of the report of the Board of Arbitration and Conciliation. Wis. Stats., sec. 17291, p. 1250.

Attorncy General may have cases printed.
The Attorney General may require to be printed by the state printer copies of or abstracts from the records and his argument and brief.

Wis. Stats., sec. 2414, p. 1741.
This act provides that the report of the Attorney General be published by the commissioners of public printing in the public documents of the state, and they shall also print 1,000 copies to be bound in cloth to be distributed as herein provided.

Ch. 94, L. 1901.
They shall publish the opinions of the Attorney General in accordance with this act and deliver the documents to the Attorney General as herein provided.

Ch. 161, L. 1901.
Commissioners of taxation.
The printing for the commissioners of taxation shall be done by the commissioners of public printing.

Ch. 206, L. 1899, sec. 8, p. 343.
Printing for Board of Health, as herein provided.
Wis. Stats., sec. 1407, p. 1053.
Printing for Academy of Sciences, etc.
Printing for Academy of Sciences, Arts and Letters 2,000 copies of transactions; also binding not exceeding $\$ 150$ cost.

Wis. Stats., sec. 341, p. 317, ch. 186, L. 1901.
The commissioners of public printing shall, in connection with the other printing of the Board of Agriculture, supply secretary of said Board with necessary blanks and cause to be printed in pamphlet form the report of said Board, provided that not more than 5,000 copies are printed.

Ch. 79, L. 1901.
The state printer shall print biennially under the direction of the commissioner of the Bureau of Labor in such year as the legislature shall meet in regular session, for the use of the senate and assembly a book to be denominated the "Blue Book of Wisconsin."

He shaill also, under the direction of the commissioner, print a sufficient number of copies to make the đistribution herein - provided.

Ch. 405, L. 1901.
The commissioner shall cause to be printed on Saturday of each week a sheet showing lists received from each employment office.

Ch. 420, L. 1901.
The Board of Control shall cause to be printed by-laws, rules and regulations as herein required.

Wis. Stats., sec. 561j, p. 409.
The state aprinter shall print for the use of the justices of the supreme court so many decisions and opinions, and at such times, as shall be directed by them.

Wis. Stats., sec. 2410 , p. 1740.
The state printer shall deliver to the Secretary of State in good order all copies of work ordered to be printed, ruled or bound by him or any other state officer or agent.
Provides for the contract for printing supreme court decisions.
Wis. Stats., sec. 323 , p. 310 ; sec. 347 b, p. 318 , amended by ch. 118 , L. 1901 .

The commissioners of public printing shall print 1,000 copies of the annual convention of National Guard officers.
Ch. 228, L. 1901.
A committee, consisting of two members of the senate and three of the assembly, shall be called the committee of printing, and shall have power to examine all papers and documents on file in the office of the Secretary of State and to examine all printed matter of the state.

Wis. Stats., sec. 106, p. 233.

## EXPENSE.

The expenses of publishing, public printing, notices during the year
ending Sept. 30, 190Q, was .................................................................... $\$ 69253$
See page 191 in the report of the Secretary of State for the year ending Sept. 20, 1900.

STATE BOARD OF CANVASSERS.

Board of canvassers.
The Secretary of State, State Treasurer and Attorney General shall constitute the Board of State Canvassers, two of whom shall be a quorum, and if only one of said officers attend on the day appointed for a meeting of such board, the clerk of the Supreme Court, on being notified by said officer shall attend, and with him shall form the board. When a member of said board is a candidate for an office as to which votes are to be canvassed, the chief justice, upon the request of any opposing candidate, shall designate some other officer or judge, who shall act as herein provided; such officer or judge shall receive not exceeding $\$ 15$ per day for each day engaged.

Wis. Stats., sec. 93, p. 217.
Missing returns.
The Secretary of State, upon receipt of the certified statements of votes in the counties from clerks, shall record the result and file and preserve statements. If any clerk neglects to forward to the Secretary of State any such statement such Secretary shall obtain the same from the Governor or State Treasurer, if received by either of them, and if not he may by mail or telegraph require such statement from such clerk. If from any cause no such statement is obtained within thirty days after an election the Secretary of State may dispatch a messenger to obtain the same.

Wis. Stats., sec. 94, p. 217.
Meeting of board; corrected returns; statement of result.
For the purpose of canvassing result of elections other than for president and vice-president, the secretary shall appoint a meeting of the board to be held at his office on the 15th of December next after a general election and within forty-five days after a special election.

Wis. Stats., sec $94 \mathrm{a}, \mathrm{p} .217$.

Note.-Sections 94b, 94c, 94d and 94e, page 218-220, provides the details of the procedure of the board and shows how the canvass is made.

## Board of deposits.

Any national or state banking corporation which shall be approved by a board, to be known as the "Board of Deposits," consisting

- of the Commissioners of Public Lands and the Governor, may upon filing a bond as provided and upon compliance with the requirements of the law, become a state depository.
The board receives no compensation. The record of the board proceedings is kept by the Secretary of State.

Wis. Stats., sec. 160a, p. 253.
Bond of depository.
Every state depository, before it shall be entitled to receive any state moneys, shall file with the State Treasurer a bond to the state of Wisconsin approved by the Governor.
Bank Examiner may be required to investigate and report concerning condition of any such depository.

Wis. Stats., sec. 160b, p. 253.

## Interest.

The board shall from time to time fix the rate of interest to be paid by said depositories upon state moneys deposited with them and cause notice thereof to be published in/the official state paper. The rate of interest, until changed by said board, shall be $21 / 2$ per cent. per annum.

Wis. Stats., sec. 160c, p. 253.

## Treasurer's liability.

The Treasurer may deposit with any depository which has fully complied with all requirements of law any state moneys in his hands or under his official control, not exceeding limit prescribed and sums so on deposit shall be deemed in treasury, and the Treasurer shall not be liable for any loss thereof resulting from the failure or default of any such depository without fault or neglect on his part or on the part of his assistants or clerks. The amount at any time on deposit with any depository shall not exceed its actual paid-up capital, nor one-half of the penalty of the bond filed by it, nor the amount prescribed by the board of deposit.

Wis. Stats., sec. 160d, p. 253.
Additional bond from depository.
The board shall not approve the bond of any such corporation until fully satisfied that said bond is good and sufficient and that the corporation is prosperous, financially sound and has, unimpaired, the paid-up capital claimed by it. The board may at. any time require any state depository to furnish a new or addi-
tional bond and revoke their designation and approval thereof, and immediately upon such revocation shall forthwith withdraw all state moneys therefrom.

Wis. Stats., sec. 160 e, p. 254.

## Return of deposits and interest.

Every depository shall, on the first day of each month, and oftener if required, file with the Secretary of State a sworn statement of the amount of public moneys deposited with it, and shall within ten days after the first day of each January, April, July, and October, make a full statement of all deposits and payments of state moneys during the preceding quarter, together with a computation and statement of the interest earned thereon, computed upon the daily balance on deposit, which interest shall thereupon be added to and become part of the deposit balance; such statement shall be accompanied by an affidavit of the president and cashier, as herein provided. The total interest paid by all depositories shall be apportioned by the State Treasurer among, added to and become a part of the following funds:

- General fund.

School fund.
School fund income.
The University fund.
The Univiersity income fund.
Normal School fund.
Normal School fund income.
The Agricultural College fund.
The Agricultural College fund income.
According to the average amount of each such fund on hand the first day of each month.
No expense is incurred by this board.
Wis'. Stats., sec. 160 f, p. 253.

## BANK EXAMINER.

This officer is appointed by the State Treasurer, with the approval of the Governor. His duty is to visit banks of the state without notice, examine their resources and determine the accuracy of their statements.

To assist him in his duties the law provides for a deputy examiner and an assistant deputy examiner, a chief clerk and a clerk and stenographer.

The provisions of the law which follow set forth the duty and power of this state officer, including his duty with reference to the Building and Loan Associations.

## Appointment, oath and bond.

-The State 'Treasurer may appoint, with Governor's approval, a Bank Examiner to supervise the banking institutions of the state, to be a skillful bank accountant, thoroughly conversant with the business of banking. Term, five years and until his successor qualifies. Vacancies to be filled by appointment for the balance of term. Before entering upon duties, he shall take the constitutional oath and file the same with the Seeretary of State and execute a bond for $\$ 25,000$ with sureties, approved by the Governor for the faithful discharge of his duties. Said Bank Examiner shall appoint two deputies and may at any time revoke such appointment. Such deputies shall file the same oath and like bond, perform the same duties and exercise the same powers and authority as the Examiner.

Wis. Stats., sec. 2023h, p. 1522, amended by ch. 467, L. 1901.
Examination of depositories.
He may be required to examine the state depositories.
Wis. Stats., sec. 160b, p. 253.
Seal, Office, papers, report, etc.
The examiner shall have an official seal, a description of which with impression thereof and a certificate of Governor's approval to be filed with the Secretary of State. He shall occupy an office in the capitol, where he shall file and keep all papers, reports and public documents received.

Wis. Stats., sec. 2023j, p. 1522.

Clerk and stenographer.
He may, with the consent of the Treasurer and Governor's approval, appoint a chief clerk and a person as clerk and stenographer to assist in office duties. The chief clerk shall have power, under like conditions and restrictions which are required of the Bank Examiner and deputies to make examinations of banks at such times as the clerical work will permit.

Wis. Stats., sec. 2023k, p. 1922, amended by ch. 69, L. 1899.

The examiner shall visit, without notice, once each year and at other times deemed necessary, every state bank, examine its resources and liabilities, ascertain fully its financial condition, determine the accuracy of the last official statement in pursuance of law and examine into any transaction he may deem foreign to a legitimate banking business or a violation of laws; provided, that if said Bank Examiner shall be interested in any bank the Treasurer, his assistant or some other competent person specially designated shall act as such examiner. Examiner shall have free access to all records, books, securities and papers showing the resources and liabilities of banks and may examine on oath any one connected with or doing business with. The substance of such examination shall be reduced to a written statement and subscribed by the person examined, and filed in the examiner's office. He may inform the directors of bank of any fact or matter relating thereto disclosed to him in his examination. Any person who shall wilfully and corruptly swear to any material matter or thing in any such examination shall be punished as provided by section 4471.

Wis. Stats., sec. 2023 1, p. 1522.
Subpoenas, oaths.
He may issue subpoenas and administer oaths.
Wis. Stats., sec. 2023n, p. 1523.
Report of banks.
Every such bank shall make to the examiner upon request not less than three times yearly, a report in the form which shall conform to the form furnished by the U. S. comptroller of currency for national banks as nearly as practicable.

Wịs. Stats., sec. 20230, p. 1523.
Note.-For details of such reports consult sections referred to in margin.

Penalty for failure to report.
Provides penalty for failure of banks to report as provided.
Wis. Stats., sec. 2023p, p. 1524.

Capital impaired.
When examiner believes that the capital of any bank is impaired or reduced to endanger depositors' interests, he shall have power to examine said bank and ascertain its condition, and if he deem it proper he shall by notice in writing require such bank to make good any deficiency. If bank refuses or neglects for thirty days after such notice to make good deficiency, the examiner shall cause to be published in manner herein provided a notice of such refusal or neglect, together with a statement of the conaition of said bank.

Wis. Stats., sec. 2023q, p. 1524; ch. 317, L. 1901.

Examiner's report.
On the second Monday in December, annually, the examiner shall report to the Governor, to be published and shall exhibit:

1. A tabular summary of the condition of every bank from which report has been received during the twelve months preceding, showing its condition as herein provided.
2. A statement of banks closed since his last report, the financial condition and amount paid creditors.
3. The names of persons interested in each of said banks and the amount of the capital owned by each.
On the first of January, each year, he shall make to the Treasurer a statement of expenses of his office and the amount of fees received and penalties collected during the year.

Wis. Stats., sec. 2023r, p. 1524.

## Secrecy.

The examiner and every employee of his office shall be sworn to keep secret all facts disclosed and information obtained in any examination except so far as officially required. They shall not disclose the names of any debtor of any bank nor anything relating to any private accounts or transactions therewith, except in case of proceedings in court for liquidation. Violation of this section shall subject the person or persons offending to forfeiture of office and to the payment of a fine from $\$ 100$ to $\$ 1,000$, or imprisonment in the state prison, or both.

Wis. Stats., sec. 2023s', p. 1524.

Postage, stationery, Blue Book.
He is allowed one copy of the Blue Book, postage and stationery for his office.

Wis. Stats., sec. 121, p. 236; sec. 169, p. 258; sec. 290, p. 301.

## Compensation.

The salary of the examiner shall be $\$ 3,000$ annually and traveling expenses.
Deputy examiner, $\$ 2,000$ annually.
Assistant deputy examiner, $\$ 1,800$ annually and traveling expenses. Chief clerk, $\$ 1,500$ annually.
Clerk and stenographer, $\$ 1,200$ annually.
Actual and necessary traveling expenses are also allowed to Bank Examiner and deputy.

Wis. Stats., sec. 170, p. 262, am̀ndled by ch. 299, L. 1899, and ch. 467, L. 1901.

Provides conditions under which the Secretary of State as Auditor may approve vouchers for transportation.

Ch. 426, L. 1901.
Comp̀nsation not to exceed $\$ 200$ for compiling bank statements.
The Secretary of State is authorized to sign a warrant for not over $\$ 200$ per year for compiling bank statements in favor of persons named by the Treasurer.

Ch. 347, p. 636, L. 1899.

## Incorporation.

Articles of incorporation of building and loan associations shall be filed with examiner, who may issue certificate of incorporation after articles and by-laws have been approved by Attorney General. Fee for certificate is $\$ 10$.
Amendments, $\$ 5$, to be paid to the Bank Examiner and by him paid into the treasury.

Wis. Stats., sec. 2010, p. 1510.
Building and loan associations; duty of Bank Examiner.
All associations formed hereunder or authorized to transact in this state a business similar to that authorized herein to be done, shall be under the examiner. Every such corporation, at the end of its fiscal year, shall report of its business done the preceding year and of its condition at the close thereof, in such form and containing such information as said examiner requires and shall file with him a verified copy within thirty days with an affidavit of the secretary of said association, as herein provided.
If any such association fails or refuses to furnish the report required it shall forfeit $\$ 10$ per day for each day report is withheld, and examiner may maintain an action to recover such penalty to be paid in the treasury.

Wis. Stats., sec. 2014-12, p. 1513 ,

Examinations.
Once every two years the examiner shall examine such association and shall have full access to and may compel the production of all their papers, securities and moneys, administer oaths to and examine their officers and agents as to their affairs.

Wis. Stats., sec. 2014-14, p. 1514.
Note.-For details as to further proceedings sections noted in margin should be consulted.

Ouster; winding up business.
Should examiner find such association conducting its business contrary to law he shall take actions as herein provided.

Wis. Stats., 'sec. 2014-14, p. 1514.
Examiner's report.
The examiner shall annually after the reports have been received, make a report to the Governor of the general conduct and condition of all building and loan associations in this state, including the information contained in such reports, arranged in tabular form, together with such further information as herein required.
One thousand copies of said report shall be printed; each local association shall be entitled to three copies, the remainder to be for general distribution.

Wis. Stats., sec. 2014-16, p. 1514.
This act provides for an additional report to be made to the Governor before January 10, each odd-numbered year. Ch. 97, L. 1901.

Relates to the duty of the Bank Examiner as to foreign building and loan associations.

Wis. Stats., secs. 2014-17, 2014-26, pp. 1514-1517.
Provides for supervision and control of investment, loań, benefit, trust or guarantee companies.

Ch. 216, p. 356, L. of 1899.
Printing.
Two thousand copies of the report of the examiner shall be printed. Wis. Stats., sec. 335a, p. 314.

## DISBURSEMENTS FOR THE DEPARTMENT OF THE BANK EXAMINER.

For the year ending Sept. 30, 1900.
Salaries of four (4) officials and employees ........................................ \$7,700 00
Traveling expenses of three (3) persons ........................................ 2,755 84
Publishing and printing, including cost of paper and waste, per report of Commissioners of Public Printing ................................................. 34290
Postage and P. O. box rent ................................................................ $342^{90}$
Stationery, per report Superintendent Public Property ....................... 5433
Telephone, telegrams and expressage .................................................. 4127

Disbursements for publishing reports ........................................... 29639

Pages $161,162,488$ and 500 in the report of the Secretary of State for the year ending Sept. 30, 1900.

## COMMISSIONER OF BUREAU OF LABOR AND INDUSTRIAL STATISTICS'.

The Commissioner of this Bureau, who is appointed by the Governor, is directed and empowered by law to "collect and publish statistical and other information relating to manufacturing industrial classes and material resources of the state." His investigations embrace the preservation of life and health in factories and work shops, the employment of women and children, the hours of labor, the condition of employees, the cost of the necessaries of life, the relations of capital and labor, the causes of strikes and lockouts, "and other kindred matters pertaining to the welfare of industrial interests and classes." He is also charged with the duty of enforcing the factory laws of the state.

The laws effecting these topics and giving the duties of the Commissioner and Factory Inspectors are numerous and are not all included in the following compilation. Only the laws setting forth generally the authority of the Commissioner and the other officers of the Bureau are thought to be appropriate in this connection.

## BUREAU OF LABOR AND INDUSTRIAL STATISTICS.

Office and supplies.
To occupy rooms in the capitol and bel allowed such printing and supplies as may be necessary for the performance of duties of the officers of the bureau.

Wis. Stats., sec. 1021b, p. 782.
Postage; stationery.
It shall be provided with necessary postage and stationery. Wis. Stats., sec. 169, p. 258; sec. 290, p. 301.

4ppointment of Commissioner.
The Governor shall appoint the Commissioner, with the consent of the Senate for a term of two years, beginning the first Monday in February in the year appointed. Vacancies shall be filled for unexpired term.

Wis .Stats., sec. 1021c, p. 782.

## Salary.

The Commissioner's salary shall be $\$ 2,000$ annually, with necessary traveling expenses.

Wis. Stats., sec. 1021d, p. 782, amended by ch. 152, L. 1899.
This act provides conditions under which the Secretary of State as Auditor may approve vouchers for transportation.

Ch. 426 , L. 1901.
Assistants' salaries.
He may appoint a deputy at $\$ 1,500$ annually, and a clerk at $\$ 1,300$ annually.
A clerk and typewriter at $\$ 720$ annually.
A clerk and janitor at $\$ 744$ annually.
One factory inspector at $\$ 1,200$ annually and traveling expenses outside of Milwaukee.
One assistant factory inspector at $\$ 1,000$ annually.
Seven assistant factory inspectors at $\$ 1,000$ annually and traveling expenses.

Wis. Stats., sec. 170 .
Provides for an additional factory inspector who shall be a woman.
Ch. 409, L. 1901.
Inspector may rent an office in Milwaukee at state expense but not to exceed $\$ 300$ annually.
Commissioner may expend $\$ 50$ for books and periodicals for bureau library.

Seal; oaths; witness' fees.
Provides as to seal, oaths, etc.
Wis. Stats., sec. 1021j, p. 784.
Report.
Commissioner shall report to the Governor at the end of the biennial term.

Wis. Stats., sec. 1021k, p. 785.
Provides for an additional report. Ch. 97, L. 1901.

## Printing.

The report of the Bureau of Labor shall be limited to 300 pages and 10,000 copies shall be printed.

Wis. Stats., sec. 335b, p. 314.

## Blue Book.

This act authorizes the Commissioner to compile, prepare and cause to be printed by the State Printer biennially in such year as the Legislature shall meet in regular session, for the use of the Senate and Assembly, a book to be denominated the "Blue Book" of the State of Wisconsin.
He shall cause to be printed a sufficient number of copies to make the distribution herein provided.

$$
\text { Ch. 405, L. } 1901 .
$$

Note.-Where the state laws in express terms confer other powers upon or prescribe additional duties for the bureau officers, the provisions have been incorporated in the following analysis:

Powers.
Commissioner. May prescribe blank forms and transmit them to employers to be filled out under oath and returned to hilm. Wis. Stats., sec. 10211 .
Commissioner or Deputy. May administer oaths, take testimony and subpoena witnesses. Wis. Stats., sec. 1021 j .
Commissioner, Deputy or Factory Inspector. May enter any factory, mercantile establishment or workshop to obtain facts and to examine means of escape from fire and provisions made for health and safety and seats for females. Wis. Stats., sec. 1021f, amended by ch. 158, L. 1899.
May examine hotels and lodging or boarding houses to see if equipped with fire escapes, and may post in such places the laws relating to fire escapes with his official statement as to whether such laws are complied with. Wis. Stats., sec. 1021 g.
May post up in any factory or workshop the laws relating to matters pertaining to health and safety of artisans or that elevators are unsafe and may order dangerous machinery enclosed or guarded. Wis. Stats., sec. 1021h.
May demand to be shown affidavits required by this act for children under sixteen. Ch. 182, sec. 2, L. of 1901.
May demand inspection of register of names and addresses required to be kept and may visit and inspect all places covered by this (child labor) act. Ch. 182, sec. 4, L. 1901.
May demand physician's certificate of physical fitness for those who seem unfit to work. Ch. 182, sec. 5, L. 1901.
May in their discretion issue permit to minors over twelve under conditions herein named. Ch. 182, sec. 6, L. 1901.
May file charges against any district attorney who refuses or neglects to do his duty as herein stated. Wis Stats., sec. 10211.
Commissioner and Factory Inspector. May require necessary changes or any process of cleaning, painting or whitewashing in rooms under this act that they deem essential to assure freedom from stench, filth and vermin or any condition liable to impair health or breed disease. Ch. 239, sec. 3, L. 1901.

May issue special written permits as herein required to regulate number of employes in limited air space where there is suitable light in sweatshops. Ch. 239, sec. 1, L. 1901.
May revoke such license if sanitary conditions improper. Ch. 239, sec. 1, L. 1901.

May inspect and examine rooms in sweat-shops to ascertain if garments, etc., are clean and free from contagious diseases. Ch. 239, sec. 1, L. 1901.
May require rooms, used to make garments, to be separate from and have no opening into living or sleeping rooms and that no such room shall contain beds, bedding or cooking utensils. May require suitable closet arrangements for each sex, as herein provided. Ch. 239, sec. 3, L. 1901.

May demand inspection and copy of register of names and addresses of persons to whom articles and materials are given out to be made. Ch. 239, sec. 4, L. 1901.
Factory Inspector. May enforce all the provisions of this (Cigar Factory) act. Ch. 79, sec. 9, L. 1899.

## Duties.

Duties Generally.
Commissioner. Shall collect, collate and publish information relating to labor and the material resources of the state.
Shall examine into relation between cfipital and labor and causes of labor troubles.
Shall examine into employment of women and children and hours of labor.
Shall examine into the protection of life and health and means of escape from factories and shops.
Shall examine into edrcational, sanitary, moral and financial condition of workers.
Shall examine into cost of all necessaries of life and all kindred subjects pertain:ng to the welfare of industrial interests and classes. Wis. Stats., sec. 1021e.
Shall prepare and furnish blank applications for licenses. Ch. 239, sec. 1, L. 1901.
Shall have posted a new statement setting forth the fact when notified that hotels, lodging or boarding hcuses are equipped $w$ :th fire escapes. Wis. Stats., sec. 1021 g .
Shall recommend to the Governor for appointment a superintendent for free employment offices, as herein provided for. Ch. 420, sec. 2, L. 1901.

Shall cause to be printed on Saturday of each week a sheet showing lists received from each such employment offices and shall mail copies to each superintendent and factory inspector as herein provided.
Shall publish annual reports of each such superintendent. Ch. 420, sec. 1, L. 1901.
Commissioner, Deputy or Factory Inspector. Shall give facts to D'str'ct Attorney if offense or neglect is not remedied in thirty days after written notice. Wis. Stats., sec. 1021f, amended by ch. 158, L. 1899.
Shall give wriitten notice to owner or occupant where laws herein referred to are violated. Wis. Stats., sec. 1021f, amended by ch. 158, L. 1899.

Shall keep a record of buildings examined as to fiie escapes, etc., and posted. Wis. Stats., sec. 1021 g .
Shall examine freight and passenger elevators and condemn those defective by serving written notice as herein provided. Wis. Stats., sec. 1021h.
Shall see that in every manufacturing establishment speaking tubes or electric bells connect engineer's room with rooms where machinery is operated and shall give notice to the proper party who fails to provide such means of communication. Wis. Stats., sec. 1021h.
Commissioner and Factory Inspector. Shall enforce the provisions as to fire escapes. Ch. 349, sec. 4, L. 1901.
After ninety days' writiten notice, shall file written statement with the district attorney in cases where fire escape laws are violated. Ch. 349 , sec. 4, L. 1901.
Shall wisit and inspect places and enforce provisions covered by this (child labor) law and prosecute violation of it. Ch. 182; sec. 4, L. 1901.
Shall make an inspection of rooms where license is applied for and grant a license if conditions are as herein provided. Ch. 229 , sec. 1, L. 1901.

Shall report to the local Board of Health when he finds unsanitary conditions in rooms used for making goods named in this act. Ch. 239, sec. 5, L. 1901.

Shall notify owner or agent if rooms or apartments are unlawfully - used as herein provided for. Ch. 239, sec. 6, L. 1901.

Factory 'Inspector. Shall make a complaint in writing before a police justice or magistrate if he finds that persons operating such factories or workshops have failed to comply with this act regulating operation of emory wheels, etc. Ch. 189, L. 1899.
Shall enforce provisions of this act regutating manufacture of cigars and shall notify employers in writing thirty days before prosecution of violation of sections 2,3 and 4 , as herein provided. Ch. 79, sec. 9, L. 1899.

Shall cause an inspection to be made of scaffolding and other devices used in construction and repairing of buildings when complaint is made of unsafe conditions. Ch. 257, sec. 2, L. 1901.
Shall prohibit the use thereof if unsafe; require the same to be altered to avoid danger and notify persons responsible.
Shall attach certificate that examination has been made as herein provided. Ch. 257, sec. 2, L. 1901.
Shall do all he reasonably can to assist in securing positions for applicants. Ch. 420 , sec. 4, L. 1901.

## DISBURSEMENTS ON ACCOUNT OF THE BUREAU OF LABOR S'LATISTICS.

## For the year ending Sept. 30, 1900.

Salaries of officials and clerks .............................................................. $\$ 6,19449$
Traveling expenses of two (2) persons ................................................................... 61770
Total printing, including that of the Department of Factory Inspection and cost of paper and waste, per report Commissioners Printing........ 1,855 49
Postage and P. O. box rent ........................................................... 1,182 10
Telegrams . ......................................................................................... 2672
Expressage . ........................................................................... 11330
Stationery, per report Superintendent Public Property ....................... 16036
Total
$. \$ 10,14963$
Pages 162, 163, 488 and 500 in the report of the Secretary of State for the year ending Sept. 30, 1900.

## ADDITIONAL DISBURSEMENTS ON ACCOUNT OF FACTORY INSPECTION

For the year ending Sept. 30, 1900.
Salaries of factory inspectors, seven persons ................................. \$7,200 00



Page 162 in the report of the Secretary of State for the year ending Sept. 30 , 1900.

## DAIRY AND FOOD COMMISSIONER.

Appointment, term, vacancy, supplies, assistants and report.
The Commissioner shall be appointed by the Governor, by and with the advice and consent of the Senate, for a term of two years from the date of his appointment and until his successor qualifies.
Vacancies shall be filled by the Governor, with the approval of the Senate if it be in session; if not, at the next session held after such appointment.
Such Commissioner may, with the advice and consent of the Governor, appoint an assistant and a chemist. He may also appoint an agent for the inspection of milk, dairies, factories and creameries and to assist in the work of the Dairy and Food Commission at such times as may be required. He may also appoint a stenographer and confidential clerk. The Commissioner shall be furnished with a suitable office in the capitol and with such supplies and printing as may be necessary.
He shall as soon as practicable after the 30th of September in each even-numbered year, make a report to the Governor.

Wis. Stats., sec. 1410, p. 1058.
This act provides an additional report to be made to the Governor each odd-numbered year on or before January 10.

Ch. 97, L. 1901.
The report shall be limited to 350 pages and 20,000 copies shall be printed.

Wis. Stats., sec. 335b, p. 314."
His power and duties; legal assistance.
He shall enforce the laws regarding the production, manufacture and sale of dairy products and has power to appoint, with the approval of the Governor, special counsel to prosecute or assist in the prosecution of any case arising under the provisions of these statutes.

Wis. Stats., sec. 1410a, p. 1059.
Analyses.
Submission to him of articles for analysis, is provided for in this section.

Wis. Stats., sec. 1410c, p. 1060.

This act to his duty as to adulteration of flax or linseed oil. Ch. 234, p. 391, L. 1899.

Farmers' institutes; expense of analyses.
The Governor may authorize him or his assistants, when not engaged in the performance of other official duties, to give such aid in farmers' institutes, dairy and farmers' convention and the Agricultural department of the State University, as may be deemed advisable.
The Commissioner may incur an annual expense, not to exceed $\$ 600$ for the necessary expenses of making the analyses in the foregoing sections, the accounts for which, when verified and itemized, and approved by the Governor, shall be audited by the Secretary of State.

Wis. Stats., sec. 1410d, p. 1060.

## Obstructing Food Commissioner.

Penalty provided for obstructing Food Commissioner in his duties. Wis. Stats., sec. 4607 h, p. 2791.

## Postage; stationery; blue Book.

He is allowed postage and stamped envelopes for his official correspondence and stationery for his office and one copy of a Blue Book.

Wis. Stats., sec. 121, p. 236; sec. 169, p. 258; sec. 290, p. 301.
Salaries.
Salaries paid in this department:
Dairy and Food Commissioner, $\$ 3,000$ annually.
Assistant Dairy and Food Commissioner, \$1,600 annually.
Chemist, $\$ 1,800$ annually.
Stenographer and clerk, $\$ 900$ annually.
Commissioner, his assistant and the chemist are allowed their actual expenses incurred in discharge of duties, on the approval of the Governor.

[^66]DISBURSEMENTS IN THE DEPARTMENT OF THE DAIRY AND FOOD COMMISSIONER.
For the year ending Sept. 30, 1900.
Salaries of five (5) officials and employees ..... $\$ 8,70610$
 Printing ..... 26700
Postage and P. O. box rent ..... 26700
Telephone and telegrams ..... 22897
Stationery, per report Superintendent Public Property ..... 4129
Total ..... \$11,791 33
Pages 163, 488 and 500 in the report of the Secretary of State for the yearendingt Sept. $30,1900$.
Laboratory expenses: ..... $\$ 25000$
Water rent ..... 2059
Supplies ..... 15454
Total ..... $\$ 42513$
Page 163 in the report of the Secretary of State for the year ending Sept. 30, 1900.

## BOARD OF CONTROL.

The Board of Control, consisting of five (5) members appointed by the Governor, has entire charge of all reformatory, charitable and penal institutions of the state as follows: .

State Hospital.
Northern Hospital.
School for Deaf.
School for Blind.
Industrial School for Boys.
State Prison.
State Public School.
Home for Feeble-Minded.
State Reformatory.
Offices of the board are in the capitol building, where the accounts and records are in charge of the secretary, who has an office force of four (4) clerks and a janitor.

Purchases are made and business done either by the Board or by the officers of the several institutions under instruction of the Board.

The accounts from all institutions are passed upon monthly by the Board, and bills therefor, if allowed, are filed, certified to the Secretary of State as Auditor, who issues warrants upon the Treasurer for those audited.

The details of the unified accounting system, adopted by chapter 433 of the laws of 1901, provides that all original bills after having been allowed by the Board of Control, shail be filed with the Secretary of State as Auditor, and that no warrant shall be issued and no money shall be paid out except upon itemized vouchers which have been filed with him, showing for what purpose the debt has been contracted.

## STATE BOARD OF CONTROL OF REFORMATORY, CHARITABLE AND PENAL INSTITUTIONS.

Organization and power of board.
It consists of five members who shall devote their entire time and attention to their duties prescriibed by law.
The board is a body corporate with such powers as may be necessary for full performance of expressly conferred powers. Wis. Stats., sec. 561, p. 406.

Appointment; oath; terms; vacancies.
Members are appointed by the Governor, and at the time of appointment no two shall reside in same Congressional district.
They shall not all, at such time, be of same political party.
Terms five years and vacancies to be filled for unexpired term.
Each member shall take the constitutional oath, which shall be filed with Secretary of State.

Wis. Stats., sec. 561a, pp. 406, 407.

## Meetings.

The memberss shall have an office in the capitol and shall hold a regular meeting once each month.

Wis. Stats., sec. 561b, p. 407.
Supplies--Books.
Necessary furniture, blanks and printing shall be supplied to the board, and it may purchase 200 copies of proceedings of the National Conference of Charities and books, etc., for its library. not to exceed $\$ 100$ per annum.

## Salaries and assistants.

Salary of members shall be $\$ 2,000$ yearly and expenses necessarily incurred for the state, which shall be audited by the Secretary of State.

Wis. Stats., sec. 561c, p. 407.
This act provides the conditions under which Secretary of State as Auditor may approve vouchers for transportation.

Ch. 426, L. 1901.
The board may employ:
A secretary at $\$ 2,000$ annually.
A clerk at $\$ 1,200$ annually.
A clerk at $\$ 900$ annually.
A clerk at $\$ 720$ annually.
A stenographer at $\$ 720$ annually.
Wis. Stats., sec. 170, p. 262, as amended by ch. 249, I, 1899.

Report.
The board shall make a report to the Governor on or beiore December 1, each even-numbered year covering the preceding two years for details (see page 407) of what the report shall contain (last page).

Wis. Stats., sec. 561d, p. 407.
This act provides for an additional report to be made to the Governor before Jañuary 10, each odd-numbered year.

Ch. 97, L. 1901.
Charges for support of inmates of institutions.
Each October 30th the board shall file with the Secretary of State a statement as herein provided, giving names of inmates in the hospitals, in Industrial School for Boys and in Home for Feeble Minded during last fiscal year for any part of whose support any county is legally chargeable. The amount of charges for such support shall be collected with the state tax.
For further details of procedure see page 408.
Wis. Stats., sec. 561c, p. 408.
Investigations; communications to board.
The board has full power to make investigation of complaints against institutions, as herein provided.
Letters from inmates of institutions to board members shall not be opened or read by institution officers or employee.

Wis. Stats., sec. 561g, p. 409.
Spur railroad tracks.
Board may construct and operate spur railroad track or license any railway company to do so, to connect any institution with a general railway line under provision of this section.

Wis. Stats., sec. 561 h, p. 409.
Manufacturing in state prison; debt against state.
Board may establish a manufacturing business in state prison and may incur a debt against the state, as herein provided.

Wis. Stats., sec. 561i, p. 409.
Duties of board as to state institutions.
The duty of the board shall be (as relates to following institutions) :

1. To maintain and govern:

Wisconsin State Hospital for Insane. Northern Hospital for Insane. The State Prison. Wisconsin State Reformatory.

Industrial School for Boys.
School for the Blind.
School for the Deaf.
State Public School.
Home for Feeble Minded..
And all other reformatory, charitable and penal institutions that may be maintained by the state.
2. To direct the management and promote the interests of said institutions.
3. To hold in trust for institutions property or money conveyed or bequeathed thereto as herein stated.
4. To care for the institutions' property.
'5. To make October 1, each year, an inventory as herein required.
6. To make and cause printed by-laws, rules and regulations, as herein required.
7. To visit and inspect institutions at least once each month for purposes herein named.
8. To fix the number of officers, teachers, and employees in each institution and prescribe duties and compensation where same is not fixed by law.

Wis. Stats., sec. 561j, p. 469.

## Postage and stationery.

The Board of Control shall be furnished with postage and stamped envelopes for the official correspondence; also stationery, as herein provided.

Wis. Stats., sec. 169, p. 258; sec. 390, p. 301.

Transfer of inmates of institutions.
Any inmate committed to any institution by the board may be transferred in a proper case from one of the institutions to any other by the board.

The board, acting as a commission in lunacy, may also adjudge any prisoner in the state, in any county jail or in the Milwaukee house of correction to be insane and may, with the approval of the Governor, remove him to one of the state hospitals for the insane.

Sec. 561 jj, p. 411 ; see also sec. 561 f , p. 408.
Secretary's duties.
The Secretary of the board shall keep its books, records and accounts as it may prescribe.

Wis. Stats., sec. 561 k, p. 411 .

Salaries of institutions and bonds.
The board shall determine the salaries of the officers of institutions if not otherwise fixed, and shall require any other officer or person having the possession or custody of any money or property belonging to the state or institution under its control to give bonds and from time to time renew the same.

Wis. Stats., sec 561L, p. 412.

Bills for purchases.
All bills of property purchased shall be laid before the board at its next regular meeting, which they must allow before payment. Wis. Stats., secs. $561 \mathrm{~m}-5610$, p. 412.

Estimates and accounts.
The board once each month, with the aid of institution officers, shall prepare an estimate of the expenditures for each institution.
It shall also fix a regular time for passing upon all accounts and charges against the institutions.

Wis. Stats., sec. 561n, p. 412.
Funds for inmates.
The steward shall, as herein provided, make a report to thẹ board of all money or property paid or delivered to any officer or employee of either institution for the benefit of any inmate thereof.

Wis. Stats., sec. 561p, p. 413.
Reports from institutions.
Each institution shall make a monthly report to the Board of Control.
What reports shall contain.
Wis. Stats., sec. 562, p. 413.

Duties of board as to cther than state institutions.
Duties of board in reference to protection of institutions against fire and other contingencies.
Reference to inspection of jails and county asylums.
Wis. Stats., sec. 564, p. 414, amended by ch. 226, L. 1899.

## Veterans' Home.

The Wisconsin Veterans' Home shall be visited by at least two board members, who shall carefully examine into the management of said home as to its system of accounts and keeping books, etc.

Wis. Stats., sec. 567, p. 416 ,

School for Blind-Accounts.
The accounts of the steward of the School for Blind for moneys advanced for the education of any pupil shall be approved by the board.

Wis. Stats., sec. 568, p. 417; sec. 569, p. 417.
Authority over state public school.
Wis. Stats., sec. 573 a, p. 418 , amended by ch. 223, L. 1901.
School record.
The board shall provide and keep in the state public school at
Sparta a record in which shall be entered the names and ages of all children received. A brief history of each child shall also be kept and continued during the guardianship of the board.
(Ch. 109, L. 1901, provides for the admission of certain deformed or crippled children.)

- Wis. Stats., sec. 573h, p. 421.

Agent of schools; duties.
The board may appoint one or more persons to act as agent or agents thereof, with duties to be prescribed by board.
Duties of agent.
Wis. Stats., sec. 573h, p. 421.
Superintendent's report.
The board shall receive, at the close of each biennial term, a report from the superintendent of such school.
What repori shall contain.
Wis. Stats., sec. $573 i$, p. 421.

## Adoption of children.

The board may consent to the adoption of any child who is an inmate of the state public school in the manner provided by law; and such consent given in writing shall have the same force and effect as if given by the parent.
On the consummation of such proceedings the guardianship of the board over the child ceases.

Wis. Stats., sec. 573 j, p. 422.
Home for Feeble Minded.
Wis. Stats., sec. 573 k, p. 422.

Charges for support.
The board shall adopt and publish a schedule of maximum charges for the care of persons in the Home for Feeble Minded.

Wis. Stats., sec. 573L, p. 422.

Discharge and transfer of patients.
Wis. Stats., sec. 573r, p. 422.
Collection of charges.
The superintendent shall certify to the State Board of Control the several amounts credited to the Home for Feeble Minded.

Wis. Stats., sec. 573 m, p. 423.

This act provides counties with remedies to recover sums in certain cases out of the estates of inmates.

Ch. 63, L. 1901.
School for Deaf.
Wis. Stats., sec. 574, p. 424.

Object and government of school.
The accounts for moneys advanced to steward for the School for the Deaf shall be approved by the Board of Control.

Wis. Stats., sec. 575, p. 424.

State aid to schools.
The State Superintendent, with the consent of the board, may grant permission to any city, village, upon applicaction, to establish and maintain one or more schools for the instruction of the deaf mutes who are residents of this state.

Wis. Stats., sec. 578, p. 425 .
The State Hospitals for Insane.
Wis. Stats., sec. 580, p. 426.
Hospital districts.
The board and Governor shall constitute a special board who shall divide the state by counties into two districts for hospitais for the insane.

Wis. Stats., sec. 581 , p. 427.

Correction of mistake as to charge for patients' support.
A. written application may be made to the board for relief from improper charges for any inmate in either the State or county hospital through the Attorney General, in behalf of the state, and the distict attorney, in behalf of the county. If the board is satisfied that the relief asked for should be granted, it shall grant it by a written order.

Wis. Stats., sec. 591, p. 435.

## Removal of non-resident.

When it is found that any inmate of either hospital is a non-resident and that neither the state or county is properly chargeable for his support, the board shall ascertain the residence of such inmate and communicate with the proper officers with respect to his return thereto, and if practicable cause him to be removed from such hospital and delivered to the proper officer, if the same can be done at a cost not exceeding $\$ 100$.

Wis. Stats., sec. 594, p. 436.

## Compensation by state.

Whenever any asylum is completed according to the plans and specifications approved by the board, a certificate of that fact, signed by the president and secretary thereof, to be filed with the Secretary of State.

Wis. Stats., sec. 604d, p. 440.

Accounts, rendition and approval of care of non-residents-Compensation for care of inmates.
The certificate of the trustees of any county asylum shall be verified by the affidavits and delivered by the Secretary of State to the board. If the board approves approval to be indorsed thereon.

The board may, whenever in its opinion any county has not made provision for the proper care of its acute or chronic insane, direct the removal of either class thereof to the asylum of some other county.

For compensation for care of inmates see statutes noted in the margin.

Wis. Stats., sec. 604 e, p. 440 ; sec. 604 f, p. 441 ; sec. 694 m, p. 443.

Transfer of insane.
All orders made by board for the transfer of insane under this chapter shall be sent to the judge of the county to which the support is chargeable.

Wis. Stats., sec. 604n, p. 443.

Collection of cost of support from estate.
The board may apply to the proper county judge to compel any person having charge of property and estate of any inmate of either hospital to pay therefrom for the support of such inmate.

Wis. Stats., sec. 604q, p. 444.

Support of insane accused persons.
The board may with the approval of the Governor contract with the trustees of the Milwaukee insane hospital for the care and maintenance of insane convicts or of any person who may be acquitted of any criminal charge on ground of insanity.
The price must not exceed $\$ 4.25$ per week for each person.
Wis. Stats., sec. 604r, p. 444.
Corporations for care of insane, etc.
The board may visit institutions covered by this section whenever they will and shall examine into the condition, care and treatment of its inmates and report concerning the same to the Governor.

Wis. Stats., sec. 1786a, p. 1307.
Reports.
Any corporation organized under this chapter shall report to the board such facts as may be required.
Provision made for children placed in improper homes.
Wis. Stats., sec. 1786d, p. 1309.
Government of.
The board shall govern the state prison and shall exercise those powers conferred by chapter 29, in addition to the powers herein prescribed.

Wis. Stats., sec. 4887, 'p. 2876.
Warden and steward.
The board shall appoint a warden and steward for a term of one year unless sooner removed by said board.

Wis. Stats., sec. 4888, p. 2876.
Other officers, etc.
All other officers and assistants in the prison shall be appointed by the state board upon the nomination of the warden and shall be subject to removal at the pleasure of the board.

Wis. Stats., sec. 4889, p. 2876.

## Compensation.

The board may fix the amounts received by the officers and employees with the exception of the warden, deputy warden and 1 chaplain as herein provided.

Wis. Stats., sec. 4890, p. 2876, amended by ch. 277, L. 1901.

## Visits by and powers of board.

The board visit the prison at least once a month and it shall have the power to direct any alteration in the business.

Wis. Stats., sec. 4891, p. 2876.

Books to be open.
All books and documents relating to the concerns of the prison shall be open at all times to the examination of the board who shall once in each quarter examine said books and compare them with the vouchers and documents relating thereto.

Wis. Stats., sec. 4892, p. Z877.

Report.
What the biennial report of the board shall contain in addition to the matters specified in section 561d.

Wis. Stats., sec. 4894, p. 2877.
Warden's duties.
The board shall direct the warden in regard to the charge and cus-.
tody of the prison. It shall on the first day of each month receive a full statement of all moneys received and expended by the warden, showing on what account received and expended and such report shall be accompanied with proper vouchers for the expenditures therein reported.

Wis. Stats., sec. 4895, p. 2877.

Oath and bond.
The board shall approve of the bond of the warden.
Wis. Stats., sec. 4896, p. 2877.
New bond.
The board may require the warden to file new bonds with satisfactory security subject to the approval of the board.

Wis. Stats., sec. 4897, p. 2877.

Prison clerk's duties.
The board may require other duties of the prison clerk in addition to those herein specified.

Wis. Stats., sec. 4902, p. 2878.

Bonds of deputy and clerk.
The board shall approve of the bonds of the deputy warden and prison clerk.

Wis. Stats., sec. 4903, p. 2878.
Steward's bond and duties.
The board shall approve of the sureties of the steward.
Wis. Stats.; sec. 4907, p. 2879.

Contract labor; arbitration.
Whenever any controversy shall arise respecting any contract made on account of the prison or a suit shall be pending thereon, the board may submit the same to the final determination of arbitrators or referees to be appointed by the Governor.

Wis. Stats., sec. 4908, p. 2879.
Books, purchase of.
The board may direct the purchase of books and stationery for the prison by the warden.

Wis. Stats., sec. 4936, p. 2883.
Authority of state board.
The board is authorized and empowered to lease the labor of such portion of the prisoners confined in the prison, together with such shop-room, machinery and power as may be necessary for their proper employment.

Wis. Stats., sec. 4938, p. 2884.
Contracts for convicts' labor.
The board shall, before entering into any contract for the leasing of convict labor by public advertisement for at least four weeks in one newspaper published in each of the cities of Milwaukee and Chicago and in the official state paper, invite sealed proposals for the hiring of such labor and the shop-room, machinery and power which can be furnished.

Wis. Stats., sec. 4943, p. 2885.
The board shall use its utmost powers to have all the terms and conditions of the contracts fully complied with on its part.

Wis. Stats., sec. 4940 , p. 2884.
Cancellation of contract.
The Board may make all needful rules and regulations for the guidance of the warden in the execution of any contract made by it and may determine and cancel any contract as herein provided.

Wis. Stats., sec. 4941, p. 2884.
Money for deserving convicts.
Whenever any convict, by good behavior, diligence in labor or study or otherwise shall surpass the general average of convicts, the board may compensate him therefor and may adopt rules for the payment to deserving convicts on their discharge or while in prison.

Wis. Stats., sec. 4942, p. 2884.

Industrial school; discharge and return of inmates.
The board is authorized to discharge any child or children from the industrial school who shall have been legally committed thereto, subject to the power of the Governor to grant pardons.

Wis. Stats., sec. 4962, p. 2894.

Authority of state board.
The board may make such rules, regulations, ordinances and bylaws for the government discipline and management of the school (Industrial) and the inmates thereof as to it seems just and proper.

Wis. Stats., sec. 4964, p. 2894.

Officers and teachers.
The board shall appoint officers and teachers as it may deem neces. sary.

Wis. Stats., sec. 4965, p. 2 §94.
Printing.
The report of the board shall be limited to 350 pages and 2,000 copies shall be printed.

Wis. Stats., sec. 335a, p. 314.

## Debts.

It shall be unlawful for the board or any member or committee thereof to contract or assume to contract either directly or indirectly, any debt or liability against the state or either of such institutions for any purpose whatever without authority of law therefor.

Wis. Stats., sec. 563, p. 414.
Facilities for investigation-oaths and expenses.
Wis. Stats., sec. 565, p. 415.
For current expenses of the institutions under the control of the board there is appropriated under this act to the Wisconsin State Hospital, to Jan. 1, 1903, $\$ 130,000.00$; Northern Hospital, to January 1, 1903, $\$ 127,000.00$; School for the Deaf, to March 1, 1903, $\$ 74,000.00$; School for the Blind, to March 1, 1903, $\$ 65,000.00$; Industrial School for Boys, to January 1, 1903, $\$ 100,000.00$; State Prison, to March 1, 1903, $\$ 87.000 .00$; Public School, to March 1, 1903; 80,000.00; Home for Feeble-minded, March 1, 1903, $\$ 88,000.00$; State Reformatory, to April 1, 1903, $\$ 80,000.00$.

Ch. 186, L. 1901.

> Appropriates for repairs and improvements as follows: Northern Hospital, $\$ 15,000.00$; State Prison, $\$ 12,500.00$; State Public Schiool, $\$ 2,000$; Home for Feeble Minded, $\$ 50,000.00$.
> For details the act should be consulted.

Ch. 382, L. 1901.
This act authorizes the Boara of Control with the approval of the Governor to purchase land for the reformatory at a price not to exceed $\$ 1.50$ per acre.

Ch. 289, L. 1901.
This act authorized the board to settle the boundary line of grounds at Home for Feeble Minded in Chippewa county.

Ch. 222, L. 1901.

## DISBURSEMEN'TS FOR MAINTAINING INSANE IN COUNTY ASYLUMS

For the year ending Sent. 80, 1900.
375,860 62
Pages 165 and 171 in the report of the Secretary of State for the year ending
cpt. 80,1900 . Sept. 30, 1900.

## DISBURSEMENTS OF THE BOARD OF CONTROL

For the year ending Sept. 80, 1900.
Salaries and expenses of five (5) members ....................................... $\$ 14,319$ 92

Per diem and expense of auxillary member ...............................................540 000
PrintIng and advertising, including cost of paper and waste, per report


ixpressage . .............................................................................................. 7286
Telephone and telegrams . ................................................................................................. 26782
Books . ................................................................................................ 7560
National conference of charities report $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots . .$.
Subscription . ................................................................................................................ 11280
Stationery, per report Superintendent Public Property .................................................................. 60
Total
.$\overline{\$ 24,08477}$
Pages.163, 164, 488 and 500 in the report of the Secretary of State for the year ending Sent. 80, 1900.

## DISBURSEMENTS FOR INSTITUTIONS

For the year cnding Sept. 30, 1900 .

| Wages and salaries |  |
| :---: | :---: |
| Current expenditures | $\$ 232,277$ 420,135 98 |
| Expenditures other than above | 420,135 98 |
| Printing, including cost of paper an ers Printing | 42,10165 21486 |
| Appropriation under ch. 302, L. 1899 | $\begin{array}{r} 21486 \\ 1640 \end{array}$ |
| Total |  |

Pages 164 and 488 of the report of the Secretary of State for the year ending
1900 .
Sept. 30, 1900.

## WISCONSIN INDUSTRIAL SCHOOL FOR GIRLS.

To this institution the legislature makes appropriations, but no state control in the strict sense is sought to be-exercised. Chapter 33 of the laws of 1899 appropriated $\$ 16,000$ under restrictive conditions, and provided that a correct account be kept of expenditures and reports to the Governor and legislature in the next annual and biennial reports.

Chapter 180 of the laws of 1901 appropriates to this school $\$ 6,000$ for repairs and building and for the care of the property belonging to the state, and $\$ 3,000$ for the erection and furnishings of additional building upon land belonging to the state, provided that no plans shall be adopted or contracts entered into until the plans have been approved by the Governor as herein provided.

The managers of the school are required to report to the legislature biennially and annually.

DISBURSEMENTS FOR WISCONSIN INDUSTRIAL SCHOOL FOR GIRLS

$$
\text { For the year ending Sept. } 80,19010 .
$$

Appropriation by the state . $\$ 13,00000$

Page 171 in the report of the Secretary of State for the year ending Sept. 30, 1900.

## WISCONSIN VETERANS' HOME AT WAUPACA.

This institution was founded by the state for the support of honorably discharged veterans of the Civil War, who were inelegible for admission to the National Soldiers' Homes, also for the support of destitute women under conditions imposed by law. In addition to the support given by the state, the United States, by authority of acts of Congress approved August 27,1888 and subsequent, pays each state to aid in the support of disabled volunteer soldiers in state Soldiers' Home, under conditions named in acts of Congress, not exceeding onehalf ( $\frac{1}{2}$ ) the cost of maintenance, but not over $\$ 100$ for each person, provided that one-half ( $\frac{1}{2}$ ) of any sums retained by said Homes on account of pensions received from inmates shall be deducted from the aid provided.

The present practise is for the claims against the general government for this aid to be made up by officials of the "Home" and forwarded direct to Washington and for payments thereof to be made to the Governor of the state.

The amount received from the United States in 1899 on this account was $\$ 26,322.92$, and in $1900, \$ 17,033.24$.

The amount paid by the state to the "Treasurer of the Veterans' Home" for care of inmates was $\$ 70,652.72$ in 1899, and $\$ 73,989.40$ in 1900.

The state also pays to the Treasurer of Veterans' Home $\$ 5,000$ annually (chapter 248, laws of 1893), in addition to special appropriations for specific purposes, which in 1899 was $\$ 20,000$ and in $1900, \$ 15,000$.

- The accounts of this Home have never been regularly passed upon by the State Auditor. The Home is not treated as a state institution in the general sense, but as one to whom the state grants aid to carry out the purposes for which it was founded.
(The act of Congress of August 27, 1888, provides that said

Homes shall be exclusively under the control of the state authorities.)

Based upon the report of the secretary of state for 1900 , pages 153 and 171, the state paid over to the Veterans' Home $\$ 93,989.40$ in 1900 and received during the same period from the United States $\$ 17,033.24$ resulting from claims for "onehalf ( $\frac{1}{2}$ ) the cost of maintaining," etc., making the net expense of the institution to the people of the state for one (1) year $\$ 76,956.16$.

## WISCONSIN VETERANS' HOME.

Support of inmates of Wis. Vet. Home.
This institution shall receive from the state $\$ 3.00$ per week for each inmate upon monthly bills as herein provided. This support limited to destitute soldiers, sailors, marines and such women as are herein provided.
Payments subject to provision of chapter 393, laws of 1891.
Wis. Stats., sec. 1529a, p. 1130, amended by ch. 304, L. 1899.
This act appropriated $\$ 20,000$ for improvements.
Ch. 383, L. 1901.
Examination by board of control.
Proviāes for a careful examination of this Home twice a year by the Board of Control and report to the Governor-but no power is thereby given to said board to interfere in the management thereof.

Wis. Stats., sec. 567, p. 416.

DISBURSEMENTS ON ACCOUNT OF THE WISCONSIN VETERANS HOME
For the year ending Sept. 30, 1900.

| Care of inmates ...... | .\$73,989 40 |
| :---: | :---: |
| Annual appropriation |  |
| Balance appropriation, ch 122, L. 1899 | 15,000 00 |
| Total |  |

Page 171 in the report of the Secretary of State for the year ending Sept. 30, 1900.

## STATE BOARD OF HEALTH.

This board was established in 1876 to have general supervision of the interests of the life and health of the citizens of the state and consists of seven (7) members, one of whom is appointed annually, term seven (7) years.

The board elects its own officers, meets as required by law in January and June and at other times fixed by the President. The annual appropriation is $\$ 5,500$. The state prints the biennial report of the Board and circulars of information. All other printing and the expenses of the Secretary of the Board are to be paid out of the amount of the annual appropriation.

## STATE BOARD OF HEALTH.

Haw constituted, term, vacancies.
The State Board of Health and Vital Statistics shall consist of seven members. Their terms of office shall be seven years and until successors appointed, and they shall continue as at present arranged so that the term of office of one member shall expire each year.

The Governor shall fill all vacancies with the approval of the senate, if the legislature be in session, and if not, then subject to the approval of the senate at the next succeeding session.

Vacancy filled for residue of term only.
Wis. Stats., sec 1404, p. 1052.
Meetings, quorum.
The board shall meet in January and June in each year and at such other times and places as may be directed by the board or its president, except that the January meeting shall be held at Madison.

The board may adopt by-laws for its government not inconsistent with the law.

Wis. Stats., sec. 1405, p. 1052.

## LAWS GOVERNING STATE OFFICERS, ETC.

Officers; compensation.
The officers of the board shall be a president, a member of the board and a secretary, either from their own number or otherwise. The secretary shall receive an annual salary to be fixed by the board. No other compensation shall be paid any other member of the board except for special services for which provision is expressly made.

Wis. Stats., sec. 1406, p. 1052.
Duties of secretary.
The secretary shall be the executive officer of the board. He shall keep a record of its transactions and have the custody of its papers, books and other property. He shall, so far as practicable, communicate with other similar boards of health within the state and file and keep all reports of correspondence. He shall prepare and distribute to local boards blank forms and instructions as may be necessary and collect all such information and statistics as concern the work of the board and perform all other duties which may be prescribed by law or by the by-laws of the board.

He shall also be superintendent of vital statistics, and under the directions of the Secretary of State collect the statistics of marriages, births and deaths and prepare and publish the report thereof required by law.

Wis. Stats., sec. 1409', p. 1055.
General authority.
The board shall have a general supervision throughout the state of
the interests of the health and life of citizens and shall especially study the vital statistics of the state and endeavor to put the same to intelligent and profitable use.
They shall make sanitary investigations and inquiries respecting the causes of diseases, especially epidemics.
They shall voluntarily or when required advise public officers or boards in regard to the location, drainage, water supply, disposal of excreta, heating or ventilation of any public building or institution and shall recommend works of hygiene for the use of public schools.
They shall send their secretary or committee to any part of the state whenever deemed necessary to investigate the cause and circumstances of any special or unusual disease or mortality or to inspect any public building. Such officers shall have full authority to do any necessary act therefor.

The board shall in October of each even-numbered year, report to the Governor their transactions, investigations and discoveries during the preceding year and such suggestions for legislature as they think fit.

Wis. Stats., sec. 1407, p. 1053.

This act provides for an additional report to be made to the Governor before January 10, each odd-numbered year.

Ch. 97, L. 1901.

Power as to contagious diseases.
Effect of rules.
Wis. Stats., sec. 1408, p. 1053.

## Reports to board.

The state board shall receive at least once a year reports from the health physician and the clerk of the board of health in every town, village and city of their transactions and such facts as shall be required upon blanks and according to instructions furnished and shall also make special reports when required.

It shall also receive any information requiired touching the public health from all officers of the state, the physicians of all mining, manufacturing, and other companies or associations, all presidents, officers, and agents of any corporation transacting business under the laws of the state. Any person refusing to comply with the provisions of this section shall forfeit $\$ 10$.

Wis. Stats., sec. 1409a, p. 1055.
Report to State Board of Health.
It shall be the duty of every register of deeds to make such monthly or quarterly reports of births and deaths on blanks furnished by the State Board of Health, as the Secretary of the board may designate in said blanks, to enable the board to study the vital statistics of the state.

Wis. Stats., sec. 102fa, p. 790.

## Physiology and hygiene.

To approve text-books, when.
Wis. Stats., sec. 447a, p. 364.

## Printing.

Its report shall be limited to 200 pages and 9,000 copies shall be printed.

Wis. Stats., sec. $335 \mathrm{a}, \mathrm{p} .314$.

Duty of the local health board; power of veterinarian.
Wis. Stats., sec. 1492a, p. 1101.
The health commissioner, his duties, rule to be approved, recommendations, salary, assistants.

Wis. Stats., secs. 925 to $925-111$, p. 668.
The act provides $\$ 50,000$ for the prevention of Asiatic cholera. Ch. 200, L. 1901.

Board may investigate sanitary condition of school-houses. Ch. 225, L. 1901.

## disbursements in the state board of healith

For the year ending Sept. 30, 1900.
Secretary's expenses and salary of Board
\$5,933 77
Secretary's sanitary work at New Richmond (whikh was paid out of $\$ 50,000$ contingent fund, provided by ch. 24 , L. 1901) .................. 4,08228

Total . ........................................................................., $\overline{\$ 10,01605}$
Page 171 in the report of the Secretary of Sitate for the year ending Sept. 30, 1900.

## STATE VETERINARIAN.

This officer is appointed by the Governor and confirmed by the Senate. He may quarantine animals afflicted with contagious and infectious diseases, and the Statutes of Wisconsin of 1898 , section $1492 b$, provide under what conditions animals may be killed.

His salary is $\$ 2,000$ per year and his actual and necessary expenses incurred in the performance of his duties.

## -state veterinarian.

Appointment, term, duties.
The Governor shall with the advice and consent of the senate, appoint a competent veterinary surgeon to the office of State Veterinarian for a term of two years. The person so appointed shall take oath of office which shall be filed in the office of the Secretary of State.

It shall be his duty to prevent the introduction or spread of contagious diseases among domestic animals in this state.

Wis. Stats., sec. 1492, p. 1101.
Allowance to; bulletins.
He shall be allowed, with the consent and approval of the Governor, $\$ 500$ annually for experimental purposes. He shall, from time to time, issue such information as he may deem advisable, which, with his report to the Governor, to be made in October of each even-numbered year, shall be printed. He shall deliver lectures on veterinary science in the Agricultural department of the University.

Wis'. Stats., sec. 1492 e, p. 1103.
Power of killing and appraisement of animals. Notice of disease.
His power as to quarantine, as to killing animals and appraisal of animals, as to reporting to the Governor recommendations in regard to contagious or infectious animal diseases. (Sections 1492a, b, and c should be consulted.)

Wis. Stats., sec. 1492a, p. 1101; sec. 1492b, p. 1102; sec. 1492c, p. 1103.

Postage, stationery, compensation, expenses.
He is allowed postage and stamped envelopes for his official correspondence.
His compensation shall be $\$ 2,000$ per year and actual and necessary expenses incurred in performance of duties.

Wis. Stats., sec. 169, p. 258; sec. 121, p. 236; sec. 170, p. 261.

## disbursements in the department of the state vererinarian

For the year ending Sept. 30, 1900.

| ry of State Veterinarian | \$2,000 00 |
| :---: | :---: |
| Expenses of State Veterinarian | 2,144 71 |
| Supplies | 11328 |
| Consultation with other veterinary surgeons, twelve | ¢9888 |
| Services of other individuals | 776 |
| Disbursements on account of diseased animals slaughtered | 3,631 25 |
| Stationery, per report Superintendent Public Property. | 1020 |

Pages 171, 172, 173 and 500 in the report of the Secretary of State for the year ending Sept. $30,1900$.

## COMMISSIONERS OF FISHERIES.

This is a Board composed of the Governor and six (6) commissioners appointed by him and confirmed by the Senate, and the professor of zoology in the University. The terms of office of the appointed commissioners is six (6) years:

The commissioners have charge of all matters pertaining to the propagation and breeding of fish.

No compensation is received by the commissioners but they are reimbursed their actual and necessary expenses incurred while on duty.

They are required to report to the legislature each odd-numbered year.

Under the provisions of chapter 423 of the laws of 1901 the money appropriated by the legislature will be paid out only on itemized vouchers filed with the auditor showing for what purpose the debt has been contracted. The practice heretofore has been for the commissioners to draw the money in round sums and disburse the same free from the control of the state auditor.

## COMMISSIONERS OF FISHERIES.

Appointment, terms.
The Commissioners of Fisheries shall consist of eight members as follows: The Governor, six commissioners to be appointed by him and confirmed by the senate, and the professor of zoology of the university. The terms are six years and until their successors appointed. If the senate is not in session the commissioners shall act from the date of appointment. As vacancies occur the Governor shall appoint one commissioner for one year, one for two, one for three, one for four, one for five and one for six years and when vacancies have been filled the appointments shall be for six years. Vacancies by appointment filled residue of term only.

Officers, committees, supplies and fund.
One member shall be president, one treasurer and one secretary. ${ }^{\circ}$ They constitute an executive committee, and may act in all matters pertaining to the propagation of fish in the absence of the board under regulations prescribed in the by-laws. They may choose from their number other officers as by-laws provide. They may meet at times and places as by-laws prescribe and appoint such committees for such duties as they deem wise.
They shall receive no compensation, but each shall be paid his actual expenses, certified by him by items to be actually and necessarily incurred in the performance of duties, out of legislative appropriation. They shall have a suitable office in the capitol, furniture therefor and such stationery, postage and printing as may be necessary and may use not to exceed $\$ 26,000$ per annum in the discharge of the duties devolved upon them.

Wis. Stats., sec. 1496, p. 1108.
Powers and duties.
They have charge of the following matters and necessary powers therefor.

1. The propagation and breeding of fish.
2. The collection and diffusion of useful information in regard to same.
3. The control, supply and repair of the state hatcheries and grounds, buildings, ponds, apparatus and all other property belonging to or held by the state for the propagation of fish.
4. The purchase and establishment and control in like manner of new hatcheries when appropriations shall be made by law.
5. The receiving from the U. S. and from other states or other persons all spawn, fry and fish donated to the state or purchased and procure, receive, distribute and dispose of spawn and fish. To make contracts and carry out the same for the transportation of fish cars, cans, commissioners and employees and to take measures as shall in their judgment best promote the supply of food fishes in the state.
6. The propagation of Chinese pheasants and such other fowl and other game as they may deem advisable.
7. They shall report in January of each odd-numbered year to the Legislature.

Wis. Stats., sec. 1497, p. 1109, amended by ch. 203, L. 1899, sec.. 1.
This act provides for an additional report to be made to the Governor each odd-numbered year.

Ch. 97, L. 1901.

Commissioners may appoint a superintendent of fisheries at $\$ 2,000$ annually and an assistant superintendent at such salary as they may fix.
Duties of such officers.
Wis. Stats., sec. 1497a, p. 1109.
Power to take fish from public waters as herein provided.
Wis. Stats., sec. 1497b, p. 1110; ch. 311, L. 1899, amentled by ch. 407, L. 1901.

Provisions empowering the superintendent to take fish from any person or corporation to be stripped of eggs and milt, as herein provided.

Wis. Stats., sec. 1497c, p. 1110; ch.. 311, L. 1899.
Postage, Stationery.
Authorizes postage and stationery for the commissioners.
Wis. Stats., sec. 169, p. 258; sec. 290, p. 301.
Printing; report .
The report of the Commissioners of Fisheries shall be limited to 25 pages and 1,050 copies shall be printed.

Wis. Stats., sec. 335b, p. 314.
This act authorizes the commissioners to release a public easement in certain lands.

Ch. 189, L. 1901.

## DISBURSEMENTS ON ACCOUNT OF THE COMMISSIONERS OF FISHERIES

For the year ending Sept. 30, 1900.

| Appropriation paid to their treasurer (including $\$ 5,000$ available from previous appropr:ation) |  |
| :---: | :---: |
| Printing, including cost of paper and waste, per rep ers Printing |  |
| Postage . .... |  |
| Stationery, per report Superintendent Publac |  |
| Tota |  |

Pages 173, 488 and 500 in the report of the Secretary of State for the year ending Sept. 30, 1900.

## FISH AND GAME WARDEN AND DEPUTY WARDENS.

The State Warden is appointed by the Governor for a term of two years with a salary of $\$ 1,800$ per year and his actual and necessary expenses and disbursements incurred in performance of duty.

Chapter 312 of the laws of 1899, amending section 1498a of the statutes of 1898, provides for the appointment, with the approval of the Governor, of thirty special deputies to assist in the enforcement of the fish and game laws.

The compensation of such deputies, which shall be fixed by the State Warden with approval of the Governor, shall be paid from a fund created by the license money received by the state as provided by chapter 312 of the laws of 1899 .

FISH AND GAME WARDEN AND DEṖUTY WARDENS.
Appointment, duties and salary.
The Governor shall appoint a fish and game warden for a term of two years from the date of his appointment. Any vacancy shall be filled by the Governor for the residue of the term.

He shall enforce the laws for preservation of fish and game and bring actions and proceedings to recover fines and penalties provided for. He shall receive $\$ 1,800$ per year and actual disbursements while traveling in the line of duty. Such expenses shall be approved by the Governor. He shall be furnished with the necessary printing, stationery and postage and shall be furnished a suitable room in the capitol.

Wis. Stats., sec. 1498, p. 110, amended by ch. 408, L. 1901.
This act provides for the conditions under which the Secretary of State as auditor may approve the vouchers for transportation.

Ch. 426, L. 1901.

Deputy wardens.
The warden may appoint with Governor's approval 30 special deputies who shall have like authority with the warden in the enforcement of the laws. At least two and not more than four of said special wardens shall be appointed from each congressional district. Such special wardens may be removed by the state warden at any time and their places filled in like manner as at the original appointment.

Wis. Stats., sec. 1498a, p. 1110, amended by ch. 312, L. 1899, amended by ch. 358 , L. 1901.

## County deputies.

When any county Board shall authorize the appointment of county wardens and shall fix the number of same the county judge, district attorney and county clerk, acting as a board of appointment, shall select person theretor and certity their names to the state warden, who shall, if he approves, issue commissions as deputy wardens to such persons. The compensation of said county wardens shall be fixed by the board and be paîd out of the county treasury.

Wis. Stats., sec. 1498b, p. 1111, amended by ch. 312, L. 1899, amended by ch. 408, L. 1901.

Deputies to make complete statements to the state warcen.
Ch. 312, sec. 3, p. 563, L. 1899.
For general powers and duties of the warden and his deputies see statutes referred to in margin.

Wis. Stats., secs. 1498c-1498k, pp. 1111-13.
Per diem and expenses of deputies.
The 30 deputies shall each receive a per diem to be fixed by the warden with the approval of the Governor. Said per diem shall be for such days as each deputy shall be under the direct order of the warden to perform services in the enforcement of the fish and game laws and upon the certificate that such services have been actually rendered under his direction.
They shall also receive their actual and necessary expenses incurred while working under the direction of the state warden, which shall be paid upon the vouchers approved by the Governor and countersigned by the state warden.

Ch. 312, sec. 4, L. 1899, amended by ch. 358, L. 1901.
Disposition of fines.
For disposition of fines collected by counties the laws referred to in margin should be consulted.

Wïs. Stats., sec. 1498h, p. 1112, amended by ch. 312, L. 1899.

Reports.
On 31st of December each year the state warden shall report to the Governor concerning the entorcement of the fish aud game laws.

Wis. Stats., sec. 1498L, p. 1113, amended by ch. 312, L. 1899.
Provision is made for an additional report.
Ch. 97 , L. 1901.
Preparation and issuance of.
Relates to the preparation and issuance of licenses to hunt to nonresidents.
Wis. Stats., secs. 1498 p-1498́q, p. 1115, amended by ch. 512, L. 18 30 , sec. 10 , amended by ch. 358, L. 1901.

Non-residents of state; fee.
For a license to hunt deer in the season therefor as fixed by law, which said license shall include permission to hunt any and all other kinds of game protected by law, in the several seasons fixed therefor, $\$ 25$; for the hunting of all kinds of game protected by the laws of the state, in the seasons or times fixed therefor by law, with the exception of deer, $\$ 10$. The application for either of these licenses shall state the residence of the applicant and answer such other questions or give such other information as may be required by the Secretary of State and the state fish and game warden, and be verified by the affidavit of the applicant that the residence stated and the answer made or information given are true.

Wiş. Stats., sec. 1498r, p. 1116, amended by ch. 312, L. 1899, sec. 12.
License for residents of state.
. Provides for county license for residents.
Wis. Stats., sec. 1498s., p. 1116, amended by. ch. 312, L. 1s99, sec. 13.

## Access to records.

The state warden or either of his deputies may, at any time, examine the records of licenses issued by county clerks.

Wis. Stats., sec. 1498t, p. 1117, amended by ch. 312, L. 1899, sec. 15.
Liability of state in compensation of wardens.
All license money received shall be set aside by the Treasurer and constitute a fund for the payment of special deputies. The liability of the state for per diem salaries and expenses of deputy game wardens appointed under this act or otherwise and for all services and expenses incurred, for any purpose under or in consequence of this act, shall be limited to the fees paid in pursuance of this act.

And said game warden shall not issue any voucher nor shall the Governor approve any voucher, if issued by the said warden, under the provisions of this act or otherwise for any such per diem, salary or other expenses of any kind unless the money to pay such voucher received for licenses issued under this act shall at the time be on hand to pay the same.

Ch. 312, sec. 29, p. 577, L. 1899.
The state fish and game warden, all special deputies and all county wardens are appointed and created fire wardens under the provisions of this act.

Ch. 408, L. 1901.
DISBURSE:MEN'TS ON ACCOUNT OF THE FISH AND 'GAME WARDEN
For the year ending Sept. 30, 1900.Salary and expenses of warden
Printing, including cost of paper and waste, per report Commission-ers Printing14246
Postage and expressage ..... 15222
Telephone and telegrams ..... 5463
Stationery, per report Superintendent Public Property ..... 1124
Total $\$ 3,05241$
Pages 173, 488 and 500 in the report of the Secretary of State for the year ending \$ept. $30,1900$.

## SPECIAL DISBURSEMENTS TO DEPUTY WARDENS

[^67]
## TREASURY AGENT.

This officer's duty is to superintend and enforce the collection of license fees provided by the state law.

His compensation is twenty-five (25) per cent. of the amount which he may cause to be collected. He is provided with an office in the capitol, with necessary blanks, advertising matter, postage and stationery.

For powers of the special agents serving under him consult section 1580 of the Wisconsin Statutes of 1898.

## TREASURY AGENT.

Appointment; oath; bond.
He shall be appointed by, and hold his office during the pleasure of, the Governor. He shall take oath and give $\$ 5,000$ bond with sureties approved by Governor, conditioned upon faithful discharge of his own duty and those employed by him, and that all moneys collected by him or his assistants shall be paid into the state treasury.

Wis. . Stats., sec. 1578, p. 1158.

## Fees of agent.

There shall be audited and paid out of the treasury the sum of 25 per cent. of the amount which the treasury agent may cause to be collected and paid into the state treasury as fees for licenses, which sums shall be compensation in full for his services and the services of his assistants and of all special treasury agents appointed by him or his assistant. Necessary blanks' and advertising for the performance of his duties shall be furnished by the state.

Wis. Stats., sec. 1582, p. 1159.

Postage; stationery; Blue Book.
He shall be furnished with necessary postage and stationery for his office and shall have one copy of the Blue Book.

Wis. Stats., sec. 121, p. 236; sec. 169, p. 258; sec. 290, p. 301.

His duties; report to the Governor.
He shall superintend and enforce collection of license fees.
General outline of duties.
Report to the Governor.-What report shall contain. . Wis. Stats., sec. 1579, p. 1158.

Provision for an additional report to Governor. Ch. 97, L. 1901.

S'pecial agents.
For powers of special agents this section should be consulted.
Wis. Stats., sec. 1580 , p. 1159.

## Oaths and bonds.

Bonds and oaths deliverable to the treasury agent. Wis. Stats., sec. 1581, p. 1159.

Duty of Attorney General.
Attorney General to advise him as herein required.
Wis. Stats., sec. 163, p. 255.
of pedalers.
Licensing peddlers and provides for payments into state treasury of fees.

Wis. Stats., secs. 1ã70-1576, pp. 1155-1157, secs. 1584e, 1584f, pp. 1160-1.

## DISBURSEMEN'TS IN THE DEPARTMENT OF THE STATE TREASURY AGENT. <br> For the year ending Sept. 30, 1900.

Treasury agent, 25 per cent. of receipts. \$2,725 09
Printing, including cost of paper and waste, per report Commissioners Printing 8434
Postage and P. O. box reut ........................................................ 9000
Telephone and telegrams ............................................................ 2477
Stationery, per report Superintendent Public Property ..................... 1645


Pages 173, 488 and 500 in the report of the Secretary of State for the year ending Sept. 30, 1900.

## STATE BOARD OF ARBITRATION. .

Appointment; vacancies; oath.
The State Board of Arbitration and Conciliation as heretofore established is continued. Two members shall be appointed by the Governor, one to be an employer of labor or to be selected from some association representing employers of labor, and the other shall not be an employer of labor but shall be selected from some labor organization. The third member of the Board shall be appointed by the Governor upon the recommendations of those previously appointed; provided that such recommendation is not made within 30 days after their appointment he may appoint any person. They shall be elected for a term of two years unless they are sooner removed by the Governor and vacancies shall be filled for the unexpired term. Each member shall take the oath of office before entering upon their duties and such oath shall be filed in the executive office.
The Board shall organize by choosing one member as chairman and another as secretary, and shall adopt rules of procedure and submit them to the Governor and Attorney General, which rules shall be in force on approval thereof by them. All requests and communications intended for said Board may be addressed to the Governor at Madison, who shall at once refer the same to the Board for their action.

Wis. Stats., sec. 1729 b, p. 1248.
Members' expenses and compensation.
The members of said Board shall be reimbursed the actual and necessary expenses incurred in the performance of their duties and be paid $\$ 5$ per day for every day actually and necessarily spent, which accounts, properly verified, shall be audited by the Secretary of State.

Wis. Státs., sec. $1729 \mathrm{~h}, \mathrm{p} .1250$.
Witnesses' fees.
Witnesses subpoenaed by the State Board shall be allowed for their attendance and travel the same fees as are paid witnesses in the circuit courts. Each witness shall certify under oath in writing the amount of his travel and the length of time of his attendance, and upon the approval of such statement by the Board and the presentation thereof to the Secretary of State a warrant therefor shall be drawn in his favor.

Wis. Stats., sec. 1729 g, p. 1250.

Report.
The Board shall make a biennial report to the Governor, which report shall contain a succinct statement of the decisions made by them during the two preceding years and such recommendations as they deem proper. Two thousand copies of such report shall be printed in the style other official reports are printed and shall be distributed in the same way.

Wis. Stats., sec. 1729i, p. 1250.

This act provides for an additional report to be made to the Governor before Jan. 10, each odd-numbered year.
As to procedure, arbitration, witnesses, books, notice, effect of decision, see secs. 1729 d and e, page 1249, Wis. Stats.

Ch. 97, L. 1901.

## DISBURSEMENTS ON ACCOUN'T OF THE STATE BOARD OF ARBITRATION

For the year ending Sept. 30, 1900.
Services of three members and expenses of three members................. $\$ 82678$
Page 173 in the report of the Secretary of State for the year ending Sept. 30, 1900.

## SUPREME COURT.

How constituted.
The chief justice and associate justices of the supreme court shall be known as justices of said court. The court shall consist of five justices.

Const., art. 7, sec. 1, p. 104.
Elections and vacanies.
When a vacancy shall occur it shall be filled by the Governor to continue until a successor is elected and qualified; such successor shall hold office for the residue of the unexpired term.

Const., art. 7, sec. 9, p. 107.
Terms of justices.
The term of office of each justice, when elected for a full term, shall commence on the first Monday of January next succeeding election, and when elected to fill a vacancy they shall hold office for the residue of term only, and shall take their oath of office on the first day of the next regular term of court after election.

Wis. Stats., sec. 2597, p. 1726.
Justice's oath.
Every justice shall before entering upon his duties take the constitutional oath and file the same with the Secretary of State.

Wis. Stats., sec. 2398, p. 1727.
Clerk of supreme court.
The justices shall appoint a clerk who shall hold his office at their pleasure. Such clerk shall take and subscribe the constitutional oath and file same with the Secretary of State.

Wis. Stats., sec. 2899 , p. 1727.
Fees and per diem of clerk.
The court shall fix such fees for the services of the clerk as to the court shall seem proper, except when otherwise provided by law. The clerk shall also receive from the state in addition to his fees, $\$ 5$ per day during the actual court sessions. The amount for per diem and for all allowed by law in criminal and state cases, accompanied by an itemized bill. of costs
in each case shall, on being fixed and allowed by a majority of justices, be paid semi-annually in the months of June and December from treasury.

Wis. Stats., sec. 2417, p. 1741.

## Duties.

It shall be the duty of the clerk:

1. To have and keep the custody of the seal of the court and all books, records and papers thereof, and all writs, proceedings and papers in any action.
2. To safely keep and pay over or deliver according to law or order of court, all moneys or property deposited in his possession as clerk.
3. To furnish any person requiring the same certified copies of papers, records, opinions and decisions in his office upon receiving his fees therefor.
4. To furnish to the reporter copies of all opinions required by him at a fee not to exceed 6 cents per folio.
5. To issue writs and process to persons entitled to the same by law or the rules and practices of the court.
6. To make a calendar of cases for argument at each term and arrange the cases by circuits and place the causes from the circuit which had precedence at the preceding term last upon the calendar.
7. To give certificates to attorneys on their admission to practice on receiving his fee therefor, but the fee for a certificate of admission of any graduate of the law department of the $U$. W. shall not exceed $\$ 1$.

Wis. Stats., sec. 2416, p. 1741.

## Stenographers and copyists.

Each justice may appoint a stenographer and copyist to render - assistance as may be required and may remove him at pleasure and appoint another. Each justice shall certify such appointment to the Secretary of State and shall also notify him of the termination of service. The compensation of such employee shall be fixed by the justice appointing him, but not exceed $\$ 100$ per month.

> Wis. Stats., sec. 2400, p. 1727.

Crier. | 11 | 1 |
| :--- | :--- | :--- |

The justices may appoint a crier who shall attend the terms thereof and perform all duties required of him by law or by said court or the justices. He shall be allowed $\$ 2$ for each day's
actual attendance upon such duties, to be audited upon the written allowance of the chief justice, or one of the justices and paid out of the treasury.

Wis. Stats., sec. 2401, p. 1727.

Terms of court; quorum; adjournments; no quorum.
There shall be held in the supreme court room two sessions in each year, to be called the January and August terms. The January term shall commence on the Tuesday next preceding the second Wednesday in January, and the August term on the second Tuesday in August.
Three of the justices shall constitute a quorum for hearing and deciding all cases, actions and proceedings and for all transaction of business.
The justices present less than a quorum in the absence of the ofhers may adjourn the court to a day in the same term. In. absence of all justices such adjournment may be made to a day appointed in an order signed by three or more and filed with the clerk. In case of the absences of all justices and their failure to make such order the clerk may adjourn the court from day to day for six days, and if the court shall not be opened then all matters pending therein shall stand continued until the next term.

Wis. Stats., secs. 2402, 2403, 2404, p. 1728.

## Postage; stationery.

All necessary postage and stationery is allowed.
Wis. Stats., sec. 169, p. 258; sec. 290, p. 801.

## Salaries.

The salaries of the judges is $\$ 6,000$ annually, and shall be payable in advance quarterly.

Wis. Stats., sec. 170 , p. 259 ; sec. 171, p. 263 , amended by ch. 138 , L. 1901.

Decisions to be in writing.
The state printer shall print for the use of the justices so many decisions and opinions and at such times as shall be directed by them.

Wis. Stats., sec. 2410 , p. 1740.

Judgment against the state.
Duty of clerk as to judgments against the state.
Wis. Stats., sec. 3203, p. 2207.

Court reporter and proof reader.
The court shall from time to time appoint, subject to removal, a competent person to report and publish such decisions and opinions of court as they may deem important and expedient to be reported and published at a salary of $\$ 3,000$ annually. Such reporter shall give a bond of $\$ 2,000$ as herein required.

The justices may appoint a proof reader or clerk to the court reporter, who shall receive such compensation as justices deem reasonable, not exceeding $\$ 125$ per month. Said appointment shall be made in writing and filed with the Secretary of State.

Wis. Stats., sec. 346, p. 318; sec. 170 , p. 259 , amended by ch. 226 , L. 1901.

Authority to employ additional nelp.
The justices are authorized to employ additional help for the reporter, the expense not to exceed $\$ 1,000$ annually.

Ch. 328, L. 1899.

## Publication of reports.

The court reporter shall as soon as practicable after court decisions are announced, publish same in volumes with a brief abstract of the case and briefs of counsel when necessary, with suitable notes of the points decided in each case and index. Each of said volumes shall contain at least 750 and not more than 800 pages, and of the same style and quantity as volume 39 of the Wisconsin reports, to be approved and accepted by a majority of justices.

Details for contract of printing same see 347 b , page 318 , as amended by Ch. 118, L. 1901.

Wis. Stats., sec. 347a, p. 318.
Trustees of.
The justices and Attorney General shall be ex-officio trustees of the staie library, and shall have full power to make and enforce by suitable penalties such rules and regulations for the custody, superintendence, care and preservation of the books and other property contained in said library, and for the arrangement thereof as to said trustees shall seem necessary and proper.

Wis. Stats., sec. 367, p. 324.
A messenger for law library may be appointed by the trustees who shall receive a compensation of $\$ 100$ per month, and one or more janitors for service in or about the library and rooms of the justices and fix compensation.

Such appointments and compensation shall be certified to the Secretary of State by the chief justice and paid on Secretary of State warrants.

Wis. Stats., sec. 2400, p. 1727.

## disbursements on account of the supreme court

For the year ending Siept. 30, 1900.


Pages 173, 174, 488 and 500 ith the report of the Secretary of State for the year ending Sent. 30, 1900.

## STATE LAW LIBRARY.

Trustees of.
The supreme court justices and the Attorney General are trustees of this library, and have full power to make and enforce such rules and regulations as they shall deem necessary and proper.

Wis. Stats., sec. 467, p. 324.
Librarian, bond, term and salary.
They shall appoint a librarian. His term of office is two years, from the first Monday in January in the year appointed. Before entering upon his duties he shall give a bond of $\$ 10,000$, approved by the trustees, as herein provided.
His salary shall be $\$ 2,000$ annually.

1. That said library shall be kept open every day during the sessions of the supreme court and of the legislature, and on other week days and during hours they may direct.
2. That books may be borrowed therefrom under proper restrictions, by any state officers or member or officer of the legisla. ture, subject to limitations herein provided.

Wis. Stats., sec. 369, p. 324.
Catalogue.
The trustees may direct that a catalogue thereof be printed.
Wis. Stats., sec. 370, p. 325.
Rules and regulations.
Trustees shall provide by rules:
Wis. Stats., sec. 368, p. 324.
Purchcse of books.
They shall procure for the library and for the justices of the supreme court law and reference books and works on political science and statistics, but no others.
There is appropriated to pay for same $\$ 3,500$ per year. The aicounts for such purchases shall be audited by the Secretary of State upon affidavits by the state librarian that the books have been received and upon approval of trustees. Any balance of money appropriated which remains unexpended at the close of any year shall be credited for the purposes specified, and may be used therefor in any subsequent year.
(See suldivision 7 of sec. 372 , next page.)
Wis. Stats., sec. 371, p. 325.

## Duty of librarian.

1. To give his personal attention at the library.
2. To keep an account of all books or pamphlets added to the library and of all lost; destroyed, worn out or sold during his term, specifying dates, cost, values and other material facts.
3. To keep a full and accurate catalogue of the library, noting all changes at the time when made; and when directed by the trustees, to cause same to be printed.
4. To keep a true account of every book or pamphlet taken from the library as herein provided.
5. To report to the presiding officers of legislature as herein provided the books taken out of the library by members and not returned. Such books shall be immediately returned.
6. To sue for every fine, penalty or forfeiture incurred by violation of the rules and regulations prescribed by the trusteos.
7. To forward to the library of congress one copy of the supreme court reports and two copies of the legislative journals, laws and public documents published by the state, and one copy of each such publications and of the Blue Book to the several states and territories which practice comity.
He may exchange statutes, laws and documents with libraries of foreign governments. His account for the expenses of transporting books when fixed by the Secretary of State to be paid ,out of the state treasury.

- Wis. Stats., sec. 372, p. 325.

Books to be delivered.
The acts of congress received to be deposited in library and be distributed as the trustees direct. Every officer of the state who. shall receive laws, reports or other documents of any other state or territory of the United States or of any officer thereof, shall immediately deliver the same to the state librarian.

Wis. Stats., sec. 37, p. 326.

## Stationery, postage.

The Superintendent of Public Property shall furnish the state librarian with necessary postage and stationery for his official correspondence.

Wis. Stats., sec. 20 , p. 30 ; sec. 169 , p. 258.
Appointees for library.
The trustees may appoint a messenger for such library, who shall receive a compensation of $\$ 100$ per month; and one or more janitors for service in and about the library and rooms of the
justices of the supreme court and fix his or their compensation. Such appointments shall be certified to the Secretary of State by the chief justice.

Wis. Stats., sec. 2400, p. 1727, amended by Laws, 1901.

State librarian authorized to certify copies of laws or opinions.
The iibrarian may make certified copies of the opinion of any court or of any statute, law, act or resolution of any state ur territory or' of any foreign country, contained in any book in the state library, and the same so made and certified shall be received as prima facie evidence of the contents of such opinion, statute, law, act or resolution. He shall receive therefor such fees as are provided by the rules of the supreme court for certified copies of opinions made by the clerk of said court.

Laws of 1890, ch. 351 , sec. 47 , p. 656.

## DISBURSEMENTS ON ACCOUNT OF THE STATE LAW LIBRARY.

## For the year ending Sept. 30, 1900.

Salaries of librarian and two employees ........................................ \$3,644 00


Books, law journals and reviews ............................................... 4,178 62
Stationery per report superintendent public property 3279

Total
$\$ 8,71609$
Pages 174, 175 and 500 in the report of the Secretary of State for the year ending Sept. 30, 1900.

## BOARD OF LAW EXAMINERS.

Duties; who admitted to practice.
The supreme court shall, as herein provided, appoint five competent resident attorneys who shall constitute a board of examiners of applicants for admission to the bar. Such board shall meet once or more each year at such times and places as the supreme court shall direct, for the purpose of examining such applicants. The board shall issue to such applicants as they find of sufficient legal learning and otherwise qualified a certificate of admission to the bar.
The residence and age of the applicant shall be shown. Satisfactory evidence shall be produced by applicants of good moral character having sufficiently pursued the stidy of law.
Three members shall constitute a quorum.
The examination papers shall be examined by the board; they shali mark the answer to each question upon the same with the percentage of standing, and within 30 days the papers shall be returned to him showing his standing.

Wis. Stats., 'sec. 2586-6, p. 1788.

## Compensation.

There shall be paid out of the treasury to each such examiner a compensation not exceeding $\$ 10$ per day and his actual and necessary expenses in going to and from such examination, also for time necessarily expended in the preparation of questions and the actual cost of procuring question books for oral examination, if they shall, in the judgment of the board, be necessary, to be fixed and certified by one of the justices of the supreme court.

## Printing.

The state printer shall print such questions as may be necessary for conducting examinations.

This act provides conditions under which the Secretary of State as auditor may approve vouchers for transportation.

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    DISBURSEMENTS ON ACCOUNT OF THE STATE BAR EXAMINERS.
    For the year ending Sept. 30, 1900.
Per diem and expenses of examiners ............................................41,793 07
Printing blanks, including cost of paper and waste, per report Commis-
    sioners Printing . .................................................................... }7944
        Total
        $1,872 52
```

Pages 175 and 488 in the report of the Secretary of State for the year ending Sept. 30, 1900.

## CIRCUIT COURTS.

Only the provisions in the Wisconsin Stats. which are of specral interest to the general public are here given.

Salaries.
Salaries of judges shall be $\$ 4,000$ annually and $\$ 400$ for expenses, payable quarterly in advance.

Wis. Stats., sec. 170 , p. 261; sec. 171, p. 263, amen'ded by ch. 138, L. 1901.

Terms of judges.
The term of office of the judges of the circuit courts, when elected for a full term, shall commence on the first Monday of January next succeeding their election; and when elected to fill a vacancy shall commence on the first Monday of June next succeeding their election, and they shall hold for the residue of the term only.

Wis. Stats., sec. 2418, p. 1742.
Oath of office.
Every person elected or appointed judge of the circuit court shall before entering upon the duties of his office take and subscribe the constitutional oath of office, and file the same, duly certified, in the office of the Secretary of State.

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Wis. Stats., sec. 2419, p. }1742
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## State tax on actions.

In each action in a court of record having civil jurisdiction there shall be levted a tax of $\$ 1$, which shall be paid to the clerk at the time of commencement thereof, which tax on suits in the circuit courts shall be paid into the state treasury and form a separate fund to be applied to the payment of the salaries of the circuit judges; and which tax in other courts of record the salaries of the judges of which are wholly paid by the counties or by any county and city jointly shall be paid to the county treasurer to create a fund to be applied to the payment of the salaries of such judges.

Wis. Stats., sec. 2939, p. 2069.

## Reporters.

Provides that judges may appoint reporters.
Wis. Stats., sec. ${ }^{2437}$, p. 1755.

Compensation of reporters.
Every reporter shall be allowed such daily compensation as shall be fixed by the judge, not over $\$ 10$ for each day's actual attendance upon the court when required by the judge to attend, which shall be certified, audited and paid in the manner provided by law for the payment of the sheriff for attending where he is not paid a salary.

But one such reporter shall be employed at the same time in the same court, except when two judges are holding court in the same county at the same time as is provided in section 2432, when the regularly appointed reporter of the circuit in which court is so held shall employ a reporter to attend upon the court held by the judge who is called in and who shall report the proceedings of the court held by such judge. The reporter appointed for such purpose shall receive $\$ 10$ for each day he shall attend court, which shall be paid by the county in the same manner as the regularly appointed reporter is paid.

Wis. Stats., sec. 2438, p. 1755.

When paid by the state.
If the compensation paid by the counties to the regularly appointed court reporter of any circuit shall not equal $\$ 2,000$ per year, the deficiency shal be paid out of the state treasury and a warrant shall be issued therefor to any such reporter on his filing with the Secretary of State a certificate, signed by the circuit judge, showing the amount of such deficiency.

## disbursements on account of circuit courts

| For the year ending Sept. 30, 1900. <br> Salaries of seventeen judges $\qquad$ <br> Salaries of reporters (fifteen), where fees inadequate............................ 869,67390 |
| :---: |
|  |  |
|  |  |
|  |  |

Page 175 in the report of the Secretary of State for the year ending Sept. 30, 1900.

## STATE HIṠTORICAL SOCIETY.

This society is a trustee of the state of Wisconsin and holds all its property as such. The state appropriation to this society beginning with its present fiscal year is $\$ 20,000$ annually besides $\$ 4,800$ for salaries to the secretary, librarian and assistant librarian. There is also furnished the secretary and paid by the state, postage, stationery, printing and binding, telephone and telegraph, freight and express which amounted in 1900 to $\$ 5,227.25$.

Salaries and expenses are paid also out of funds which have been entirely under the control of the society and which the Auditor has not passed upon. The new accounting system provided for by chapter 433 of the laws of 1901 will change the manner of doing business of this society and all other societies, boards, departments, commissions and institutions acting for or in behalf of the state, but as elsewhere explained the system therein provided is to be established by the governor and made applicable to the needs of all interests. See ante, page 368 .

## STATE HISTORICAL SOCIETY.

Powers of; executive committee; real estate.
The Society shall possess the powers conferred by the legislature. March 4, 1853, subject to this chapter (24) and laws hereafter enacted.
It is trustee of the state and shall hold all collections and property for the state. It shall not mortgage or dispose of any property without authority of law.

There shall be an executive committee of which the Governor, Secretary of State and State Treasurer are ex-officio members, and take care that the interests of the state are protected.

The Society may, on advice of its finance committee, sell or convey real estate.

Wis. Stats., sec. 374, p. 327.

Offcers of; salaries paid out of general fund; binding.
The Society shall have a secretary at $\$ 2,000$ annually, a librarian at $\$ 1,600$ annually; may employ assistant librarian not over $\$ 1,200$ annually.
Reports, newspaper file, circulars, blank periodicals and labels may be bound at state expense.
(Other salaries and expenses are paid out of funds in possession of the Society which the state auditor does not pass upon.)

Wis. Stats., sec. 375, p. 327; sec. 170, p. 261.
Printing for Historical Society.
Two thousand five hundred copies of the collections of the Society shali be printed not to exceed 500 pages and shall be bound in cloth.
One thousand two hundred copies of the report of the proceedings of the Society shall be printed.
The commissioners may authorize the printing of such special class catalogues as the library committee of such Society shall deem essential.

Wis. Stats., sec. 340, p. 316.
Duties of Society; appropriation.

1. To collect books, maps, charts and other papers and materials illustrative of this state and the west.
2. To procure narratives from early pioneers.
3. To procure facts and statements as herein set forth.
4. To purchase books, maps, charts and materials as herein provided.
5. To bind books, documents and newspaper files containing legal notices.
6. To catalogue entire collections.
7. To publish biennially a report of collections and other matters.
8. To keep its rooms open reasonable hours for reception of state's citizens.
The state appropriation is $\$ 15,000$ annually from the general fund. The executive committee shall keep a correct account of the manner of expenditure of the money so appropriated and report in detail to the Governor.

Wis. Stats., sec. 376, p. 327.
Appropriates $\$ 5,000$ annually to the Society for the purchase of books, periodicals, maps, etc. Ch. 155, L. 1901.

Historical reporls.
The reports of the transactions of the Society shall be delivered to the secretary of said Society.

Wis. Stats., sec. 361, p. 323.

## Postage.

The Society shall be furnished with postage and stamped envelopes for official correspondence.

Wis. Stats., sec. 169, p. 258.

## stationery.

It shall be furnished with necessary stationery by the Superintendent of Public Property.

Wis. Stats., sec. 290, p. 301.

## Meetings.

The State Historical Society may provide for annual or other meettings of officers or representatives of such auxiliary society, at times and places to be fixed by its Society.

Wis. Stats., sec. 376 e, p. 329.

## Reports of local societies.

Any local society may make a report of its work annually to the State Society, which, or portions of, may be included in the publications of said State Society, and upon application of any auxiliary society the State Society may become custodian of the records of such society.

Wis. Stats., sec. 376c, p. 328.

## disbursements of the state on account of the state historical society

For the year ending Slept. 30, 1900.
State appropriation, transferred to the treasurer of the society.......... $\$ 5,00000$
Salaries .. ........................................................................... 4,800 00
Etchings and printing, including cost of paper and waste, per report
Commissioners Printing ............................................................. 4,45191

Telephone and telegrams ............................................................ 6744
Expressage . ............................................................................ 15026
Stationery, per report Superintendent Public Property...................... 15664
Expenses of removal to new building (Ch. 204, L. 1899)...................... 83592

Pages 176, 488 and 500 in the report of the Secretary of State for the year ending Sept. 30, 1900.

[^68]
## FREE LIBRARY COMMMSSION.

Note.-This Commission is embraced within the provisions of the centralized accounting contemplated by Ch. 433, L. 1901. See ante, p. 368.

How constituted; officers; appropriation.
Two persons appointed by the Governor, with the President of the University, State Superintendent and the secretary of the Historical Society, shall constitute a state library commission. They shall be appointed for five years and vacancies shall be filled by the Governor for the unexpired term. The officers of the board shall be a chairman, elected from their own number, for a term of one year, and a secretary not from their own number, to be appointed by the commission and who shall serve at the will of the commission. Commission may also engage other clerks and such assistants as may be required. The commission shall give advice to all free libraries and to all communities which may propose to establish them. No member of the Commission shall receive compensation-but shall be reimbursed actual and necessary expenses in traveling. There is annually appropriated to the Commission $\$ 7,500$ and any balance not expended in any one year may be added to the expenditure for any ensuing year.

Wis. Stats., sec. 373a, p. 326, as amended by ch. 161, L. 1899.

This act appropriates $\$ 1,500$ to the Commission for the purpose of special cataloguing public documents.

Ch. 168, L. 1901.

Office ; printing.
The Commission shall be allowed a suitable office in the capitol or Historical Library building, and the Secretary of State shall audit the certified bills of the Commission, and the state printer shall print such circulars, labels and blanks as may be required.

Wis. Stats., sec. 373b, p. 326.
The report of the Commission shall be limited to fifty (50) pages.
Wis. Stats., sec. 335b, p. 314.

To conduct summer school.
The Free Library hereby has the power to conduct a summer school of library science in connection with the summer school of the U. of W., and to hold librarians' institutes in various parts of the state.

Ch. 161, sec. 1, p. 236, L. 1899.

## Postage; stationery.

It shall be furnished with necessary postage and stationery.
Wis. Stats., sec. 169, p. 258; sec. 290, p. 301.
This act provides for the cataloguing and distribution of public documents and adds to the Stats. the new sections, 373c, 373d, $373 \mathrm{e}, 373 \mathrm{f}, 373 \mathrm{~g}, 373 \mathrm{~h}, 373 \mathrm{i}$.

$$
\text { Ch. 168, L. } 1901 .
$$

This act defines the duty of the Commission in connection with the distribution of the public documents of the state to libraries throughout the state, and to keep on file for the use of the legislature, state departments, etc., a working library of public documents co-operating with the State Historical Society, as herein provided.
The Commission shall receive a copy of the report of the free libraries.

Ch. 96, L. 1901.

DISBURSEMENTS ON ACCOUNT OF TH்E FREE LIBRARY COMMISSION
For the year ending Sept. 30, 1900.


Postage and P. O. box rent ..................................................................... 38290
Telegrams and expressage 9252
Printing and binding, including cost of paper and waste, per report
Commissioners Printing . .......................................................... 58640
Cartage and lumber ............................................................. 8917
Stationery, per report Superintendent Public Property........................ 5407
Total
$\$ 8,75156$
Pages 177, 488 and 500 in the report of the Secretary of State for the year ending Sept. 30, 1900.

## GEOLOGICAL AND NATURAL HISTORY SURVEY.

By this law of 1897 there is constituted a geological and natural history survey of the state.

Ch. 297, secs. 1-6, pp. 637, 638, 629.
Object.
The completion of the geological survey of the state, and especially the examination of rocks,, with reference to the occurrence of iron ores, building stones and other valuable mineral products, and in reference to their value as material for road construction.
A study of the soils of the state.
A study of the plants of the state and especially of the forests with reference to their cultivation and preservation.
A study of the animal life of the state and especially the occurrence, distribution and production of fish in the lakes and streams of " the state and a study of foods and energies of fish.
The preparation of an account of the physical geography and natural history of the state, in such form as to serve as manuals for the public schools, and of special reports of economic importance. The completion of the topographic map of the state begun by the U. S. Geological Survey; but no money shall be expended for topography unless an equivalent amount be expended for this purpose in the state by the U. S. government.
This survey shall be governed by a Board of Commissioners, consisting of the Governor, State Superintendent, President of the University of Wisconsin, President of the Commissioners of Fisheries and the President of the Wisconsin Academy of Science and Arts.
The Commissioners shall meet at such time and places as they may prescribe. A majority is a quorum. They receive no compensation, but each shall be reimbursed their actual expenses incurred in the performance of their duties.
Their officers shall be as their by-laws prescribe:
They have general charge of the survey and appoint a superintendent and such assistants as they deem necessary.
They shall fix the compensation of all persons employed and re. move them at pleasure.

They shall prepare a report before the meeting of each legislature, showing progress and condition of survey, an account of money spent, together with such other information as herein required.
If approved by the Commissioners special reports of the superintendent shall be transmitted to the Commissioners of Public Printing, who may have them published as reports, as bulletins of the University, or in the transactions of the Wisconsin Academy of Sciences and Arts. If published as independent re ports, the Commissioners of Printing shall decide as to the number of copies. Five copies of each report shall be delivered to each member of the legislature.
The Commissioners shall be furnished with all necessary postage and stationery.
The remainder of the independent reports may be sold by the Commissioners as the interest of the state and science demands.
After material collected shall have served the purpose of the survey, it shall be distributed to the University, the colleges of the state, the state normal schools and the free high schools of the state under the approval of the Commissioners in such a manner as to be of the greatest advantage to education in the state.
There is annually appropriated for two years to the Commissioners $\$ 5,000$, the first appropriation to be paid in the current fiscal year (1897).
This act appropriates $\$ 5,000$ annually to this survey.
Ch. 375, L. 1901.
The Wisconsin statutes of 1898 contain no reference to this Commission for the reason that the revisors considered its work done.

[^69]
## SUPERINTENDENT OF PUBLIC PROPERTY.

The duties and responsibilities of this officer differ essentially from those of any other official of the state. He has charge of the capitol grounds, capitol buildings and personal property connected therewith belonging to the state, also the executive grounds, residence and personal property therein contained.

He is charged with the purchase of stationery for the state officials and departments and distribution thereof to the legislature and various officials of the capitol building.

His appointments are largely employed for the general good of all state business done in the capitol building. Employes in his own department are limited to a chief clerk and messen- ${ }^{\text {. }}$ ger.

## SUPERINTENDENT OF PUBLIC PROPERTY.

Appointment, term, oath, bond.
He is appointed by the Governor, term commencing at same time as elective state officers, continuing two years and until successor qualifies unless sooner removed. Governor shall fill any vacancy for balance of term.
Before entering upon duties he shall take required oath and give $\$ 15,000$ bond with four sureties to be approved by the Governor. Bond and oath to be deposited in the executive.office.

Wis. Stats., sec. 286, p. 299.
salary.
His salary shall be $\$ 2,000$, including his services as purchasing agent.

Wis. Stats.; sec. 170, p. 260.
What to have charge of.
He has charge of capitol and public grounds, executive residence, movable state property not by law in charge of some other officer. He shall not interfere with rooms appropriated for the use of the legislature while so occupied. This act authorizes the superintendent in connection with repairing the capitol building for which is appropriated $\$ 8,000$.

Wis. Stats., sec. 287, p. 299.
Ch. 350, L. 1901.

Provides for changes in the capitol building for the convenience of the legislature.

Ch. 452, L. 1901.
Appoiniments he may make; salaries; improvements and purchases.
He shall, with the approval of the Governor, appoint:
An assistant clerk, at $\$ 1,400$ annually, and employ-
One chief engineer, at $\$ 1,200$ annually.
One assistant engineer, at $\$ 1,080$ annually.
One second assistant engineer, at $\$ 960$ annually.
One state carpenter, at $\$ 1,000$ annually.
One assistant carpenter, at $\$ 900$ annually.
One second assistant carpenter, $\$ 780$ annually.
Two firemen, at $\$ 780$, each, annually.
One painter, at $\$ 900$ annually.
One assistant painter, at $\$ 780$ annually.
One gas fitter and plumber, $\$ 840$ annually.
One receiving and shipping clerk, at $\$ 900$.
Eight policemen at $\$ 744$, each, annually.
Two nightwatchmen, at $\$ 744$, each, annually.
One elevator operator, at $\$ 744$ annually.
Twelve janitors at $\$ 744$, each, annually.
One carpetman, at $\$ 744$ annually.
One cuspidor cleaner at $\$ 660$ annually.
Fourteen regular laborers, at $\$ 660$, each, annually.
Five scrub women, at $\$ 1.25$ per day when employed.
One stenographer for his own office at $\$ 720$ annually; for his own and Railroad Commissioner's office.

Wis. Stats., sec. 288, p. 300 ; sec. 270 , p. 260 , amended by ch. 418 , L. 1901.

He may employ additional help not to exceed $\$ 6,000$ per year.
Ch. 419, L. 1901.

He shall keep the capitol, grounds and exesutive residence in proper condition, make improvements authorized by law under direction of the Governor, purchase all supplies, except stationery, and furniture, fixtures, required for state use in and about the capitcl. When the purchase of furniture exceeds $\$ 100$ he shall receive three proposals and let to lowest bidder.

Stationery, proposals and contract for.
He shall provide for inspection, samples of necessary stationery, and furnish specimens thereof to prospective bidders for furnishing such stationery.

Advertise for proposals for stationery, two papers each in Madison, Milwaukee and Chicago, weekly for four weeks, and let the contract to the lowest bidder furnishing satisfactory security.
Preference shall be given to a state bidder, if cost is as low as others.
Purchase of stationery shall be within appropriation, and an itemized bill therefor filed with the Secretary of State.

Wis. Stats., sec. 289, p. 300.
stationery, who entitled to.
He shall have charge of and distribute state stationery, charge himself with its actual cost; keep separate accounts with each officer, body or institution to whom furnished; furnish stationery as provided by law to the legislature and the Lieutenant Governor, and to the following officers for their offices on written order:
To Governor or private secretary.
Secretary of State or his assistant.
Chief clerk of land office.
. State Treasurer or his assistant.
Treasury Agent.
Attorney General or assistant.
State Superintendent or assistant.
Clerk of Supreme Court.
Secretary or Librarian of State Historical Society.
Adjutant General or assistant.
Quartermaster General or assistant.
Secretary of Board of Agriculture.
Railroad Commissioner or deputy.
Secretary of Board of Control.
State Librarian.
Commissioner of Labor Statistics.
Superintendent of Public Property.
Dairy and Food Commissioner.
Commissioners of Fisheries.
State Fish and Game Warden.
Secretary of Free Library Commission.
Bank Examiner or his deputy.
Wis. Stats., sec. 290, p. 301.
Corımissioners of Taxation. Ch. 206, I. 1899.

No clerk or any state officer, or any department of the state, shall be permitted to receive any stationery unless on a writter order of some of the persons above described.

How stationery charged; report.
He shall charge to each state officer, to supreme court, to the leg. islature and to every other officer and institution all stationery furnished at the cost price of the same, and he shall annually, on Sept. 30, make a report to the Governor of the affairs of his office.
He shall file with the Secretary of State a duplicate of report herein provided, and the Secretary shall cause a summary of it to be published in connection with his biennial report.

Wis. Stats., sec. 291, p. 301.
This act provides for an additional report to be made to the Governor before Jan. 10, each odd-numbered year.

Ch. 97 , L. 1901.

## Stationery; provision exclusive.

He shall furnish at the opening of every session of the legislature stationery to the Lieutenant Governor, to the chief clerks, upon their written request, specifying the quantity and kinds required and the purpose, as much as shall be necessary for the business of the legislature.
No other stationery than is above provided for shall be furnished any officer or employee of the legislature except pursuant to law.

Wis. Stats., sec. 114, p. 236; sec. 115, p. 236.

This act appropriates $\$ 8,000$ for the purchase of stationery for the state officers of departments for the years 1901 and 1902.

Ch. 216, L. 1901.

## Postage.

He is entitled to necessary postage stamps and stamped envelopes for the use of his department for official correspondence.

Wis. Stats., sec. 169, p. 258.
Purchases, who to make.
The Superintendent only shall purchase for the state stationery to be used about the state offices or institutions, by which law he is authorized to furnish, or contract for the state fuel, fixtures, carpets, furniture, gas or other article or thing to be used in man about the capitol, executive residence or public grounds. mañ about the capitol, executive residence or public grounds.
All claims and demands for payment from the state on such account shall, when presented for payment, be accompanied with a certificate of said Superintendent.

Wis, Stats., sec. 292, p. 301,

Supreme court reports and digest.
He shall purchase so many copies of the Wisconsin Digest of Reports, and such volumes of reports as may be required to complete such sets as may be called for to supply new courts and counties and also such reports as may be required by state librarian to make exchanges with other states and territories.

$$
\text { Wis. Stats., sec. } 292 \mathrm{a}, \text { p. } 302 .
$$

Claims, how made and paid.
All claims and demands against the state under the provisions of this chapter, accompanied by the certificate required in the preceding section, certified to as correct and necessary by the said Superintendent and approved by the Governor, shall be paid out of the state treasury.

Wis. Stats., sec. 293, p. 302.
Sale of unused property.
At his request the Governor, Secretary of State and State Treasurer shall examine any chattel property not in use at any time, and they shall direct sale or disposal of same.

Wis. Stats., sec. 294, p. 302.
Proceeds of sale.
He shall pay the money received for property disposed of under the preceding section to the Treasurer, and his receipt duly countersigned, together with a copy of the order of sale and an account of sale, approved by the board, shall be the voucher for the Superintendent representing the articles sold.

Wis. Stats., sec. 295 , p. 302.

## Delivery and custody of paper.

All paper purchased shall be delivered to the Secretary of State and by him delivered to the Superintendent of Public Property who shall, upon receipting for it, be custodian, and shall issue it to the State Printer upon order of the Secretary of State.

Wis. Stats., sec. 310 , p. 307.
Distribution of reports.
The transactions and reports provided for in section 335e, page 315 , shall be distributed by the Superintendent of Public Property as follows:
Each member of the legislature, 15 copies.
State Historical Society, 50 copies.
Each county agricultural society`and district industrial association, which embraces two or more counties and furnishes the State Board of Agriculture copy of its proceedings, 10 copies.

Each of the societies and the board therein named, 50 copies each of the transactions of the others.
Library of the University and each elective state officer, 25 copies.
Superintendent of agricultural institutes, 50 copies.
Superintendent of Public Property, 10 copies.
Commissioner of Labor Statistics, 10 copies.
Adjutant General, 10 copies.
Quaartermaster General, 10 copies.
State Board of Health, 10 copies.
Each public library, 2 copies.
Each normal school, 2 copies.
Each charitable, reformatory and penal institution, 1 copy.
The remaining copies shall be delivered to said board and the respective societies for distribution by the proper officers.

Wis. Stats., sec. 336, p. 315. .
Custodian of public documents and supreme court reports.
All public documents and supreme court reports shall be delivered to the Secretary of State and receipted for by him, and he shall deliver the same to the Superintendent of Public Property, who shall be custodian thereof and shall distribute the same in the manner provided by law, keeping such records as shall be necessary to show the number, date and to whom such documents were delivered.

Wis. Stats., sec. 348, p. 320.
To procure seal for supreme court when required.
Wis. Stats., sec. 2415, p. 1741.
The Superintendent of Public Property shall deliver to the state librarian as many copies of supreme court reports, legislative journals, laws and documents as may be required for purposes specified in secs. 352 and $372-7$ of Wis. Stats.

Wis. Stats., sec. 349, p. 320.
Laws, etc., for members and officers of legislature.
He shall send, as soon as issued, at state expense, one copy of Senate and Assembly journals, of the bound volumes of the public documents, and of the laws, to each member of the legisinture which enacted such laws, and of the proceedings of which such journals are the records, and also one copy of each of the above to the Lieutenant Governor and the chief clerk and sergeant-atarms of each house.

Wis. Stats., sec. 350, p. 320.
How distribution of Blue Book is to be made.
Wis. Stats., sec. 121, p. 237.

Documents for institutions, etc.
One copy each of all documents published by the state shall be delivered to the several state institutions, State University and normal schools, and also to each college, incorporated academy and literary institution of Wisconsin having a library of 300 volumes.
The several state officers shall be furnished with such documents as may be necessary for their respective offices.

Wis. Stats., sec. 351, p. 321.

For the legislature.

- There shall be delivered to the legislature for use of the members the number of copies of the reports of state officers, departments and boards herein specified.

Wis. Stats., sec. 353, p. 321.
Bound documents.
The Superintendent shall distribute one copy of the bound volumes of public documents to each state institution and to each county clerk and one to each free high school.

Wis. Stats., sec. 354, p. 321.
Distribution of session laws.
Wis. Stats., sec. 355, p. 322.

The Superintendent of Public Property shall have one copy of the laws, and such further copies as shall be necessary for transaction of business.

Ch. 351, L. 1899, sec. 9, p. 651.

Distribution of supreme court reports.
Wis. Stats., sec. 357, p. 322.

## Duty of county clerk.

Each county clerk shall notify the Superintendent of the number of officers in his county entitled to receive copy of the laws.

Wis. Stats., sec. 359, p. 323.

Sale of documents, etc.
The Superintendent may sell to any citizen of Wisconsin a copy of each publication printed by State Printer at the cost price and he shall keep an accurate account of such sales and pay the amount into the state treasury at the end of each quarter.

Wis. Stats., sec. 360, p. 323.

Reports of Academy of Sciences, etc.
Distributions of the transactions of the Academy of Sciences, Arts and Letters.

Wis. Stats., sec. 365, p. 323̀.
Distribution, expenses of.
Provision made for distribution of books and packages too large or cost too much to be sent by mail.

Wis. Stats., sec. 366, p. 323.
Office supplies.
He shall furnish postage, stationery and office supplies to the tax commission.

Ch. 206, L. 1899, sec. 8, p. 343.
Distribution of books.
At the opening of each regular session of the legislature the Secretary of State shall deliver to the Superintendent of Public Property 137 copies of the Blue Book who shall then distribute the same to the members and elective officers thereof.

Wis. Stats.; sec. 121, p. 237.
He shall procure the supreme court seal.
Wis. Stats., sec. 2415, p. 1741.
Injury to capitol, park, etc.; arrest; killing dogs; his duty regarding.

Wis. Stats., sec. 4444, p. 2704.
He is authorized by these acts to suitably furnish the new commit-tee rooms for the legislature and provide new chairs for the 'Senate.

Ch. 1, 5, L. 1901.
He shall provide a Memorial Hall to be located in rooms 204, 205, and 207 in the capitol building to be dedicated to the soldiers and sailors of the Wisconsin regiments in the civil war.
Provision is made in this act at state expense of pens, ink, stationery and other supplies necessary for the use of the G. A. R. A janitor shall be appointed by the Governor, whose duty shall be to take proper care of the said rooms and said janitor shall be paid by the state.
Provision is made for the return of the battle flags to the capitol and for properly labelling each flag or banner and a concise history placed thereon.
$\$ 15,000$ is appropriated by this act.
Ch. 125, L. 1901.

> This act authorizes him to contract for telephone and telegraph service for the use and business of the state.

$$
\text { Ch. 158. L. } 1901 .
$$

Section 373 g contained in this act directs the Superintendent to furnish the free library commission with necessary cards, shelving, library cases and other supplies.

$$
\text { Ch. 168, L. } 1901 .
$$

He shall provide the Superintendent of Inspectors of Illuminating Oils with necessary instruments and apparatus for examining oils, to be paid for out of general fund.

Ch. 466, L. 1901.
DISBURSEMENTS ON ACCOUNT OF THE SUPERINTENDENT OF PUBLIC PROPERTY
For the year endịng Sept. 30, 1900.
Salaries of sixty-nine (69) officials and employees ..... $. \$ 52,30525$
Salaries of twenty (20) and services of eight. (8) persons. ..... 8,282 76
Total wages, salaries and services ..... 60,588 01
Printing, including cost of paper and waste, per report Commission- ers Printing ..... 4470
Postage and P. O. box rent
19400
19400
Telephone and telegrams ..... 4882
Expressage ..... 28907
Stationery, per report Superintendent Public Property ..... 9107
Incidental expenses and repair of closets ..... 19,392 52
Cost of fuel and advertising for bits ..... 3,303 09
Cost of electric light and gas ..... 3,161 10
Total ..... $. \$ 87,11238$

Pages 179, 184, 191, 488 and 500 in the report of the Secretary of state for the year ending Sept. 30, 1900.

## WISCONSIN NATIONAL GUARD.

The legislature of 1901 , by chapter $22 \dot{8}$, repealed chapter 200 of the laws of 1899 which repealed chapter 34 of the Wisconsin statutes of 1898. In a compilation of this character it has not been thought wise to incorporate the details of the duties of the governor, adjutant general, quartermaster general and other officers of the guard.

If more specific information, particularly in relation to the powers and duties of the executive is desired, the act itself which is issued in pamphlet form by the adjutant general should be consulted.

## WISCONSIN NATIONAL GUARD.

Adjutant General and Quartermaster General departments.
The Wisconsin National Guard consists of not over 40 companies of infantry, one battery of artillery, one troop of cavalry, an Adjutant General department, a Quartermaster and ordnance department, a subsistence department, a medical department, a pay department and such other officers as may be required.

Ch. 228, L. 1901.

## Military Staff.

The military staff appointed by the Governor is as follows:
One Adjutant General, with rank of Brigadier General.
One Quartermaster General, with rank of Brigadier General.
One Surgeon General, with rank of Brigadier General.
One assistant adjutant general, with rank of Colonel.
One inspector of small arms practice, with rank of Colonel.
Five aides-de-camp.
One Quartermaster, with rank of Major.
One Paymaster, with rank of Major.
One Commissary of Subsistence, with rank of Captain.
One additional paymaster, with rank of Captain.
And such other officers as he may require. Each of the staff must have had previous military experience.

The Adjutant General is chief of staff and Inspector General, with an office in the capitol. He has charge of all military records, correspondence and documents not required to be filed with the Governor or Quartermaster General. He shall report to the Governor Oct. 1, each even-numbered year, setting forth the number and condition of the guard. An additional report is provided by this act to be made to the Governor each odd-numbered year. He shall transmit annual returns to the President required by U. S. laws and furnish the Governor a copy thereof. He shall assist Wisconsin claimants in attaining pensions, bounty or back pay, acting as attorney of record for them, for which service neither he nor his clerks shall have any compensation.

Ch. 97, L. 1901.
He shall pass upon all military accounts (which shall also be approved by the Governor before payment) and shall cause to be prepared all books, blanks and forms required by the W. N. G.
The Commissioners of Public Printing shall print, and Adjutant General shall distribute, 1,000 copies of the annual convention of National Guard officers.
The Adjutant General may purchase traveling libraries of military text books for each regiment.
The Quartermaster General is Commissary General and chief of ordnance, with an office in the capitol. His bond is $\$ 20,000$ with sureties approved by the Governor. He has charge of all Quartermaster stores, ordnance and ordnance stores, money and property belonging to the state. He has charge of all military property and must preserve and account for same and for moneys received and expended in such manner as the Governor may direct. He shall report Oct. 1 each even-numbered year to the Governor.
Provides for an additional report to be made to the Governor before Jan. 10, each odd-numbered year.

$$
\text { Ch. 97, L. } 1901 .
$$

He may make contracts for troops, arms, etc., stores and other property under the direction of the Governor.
Compensation of Adjutant General is $\$ 2,000$ annually and necessary expenses, not exceeding $\$ 500$ annually; assistant adjutant general, $\$ 1,400$ annually; clerk and stenographer, $\$ 1,200$ annually; bookkeeper, $\$ 840$ annually; pension clerk, $\$ 1,380$ annually; Quartermaster General, $\$ 1,000$ annually; Assistant Quartermaster General, $\$ 1,400$ annually; quartermaster clerk, $\$ 1,200$ annually.

Wis. Stats., sec. 170, p. 261.

The following is a subject index of the laws affecting the Wisconsin National Guard:

Organization of militia.
Ch. 228, secs. 1, 24, 29, L. 1901.

Military staff of Governor.
Ch. 228, secs. 2, 3, L. 1901.
General powers and duties of Adjutant General.
Reports.
Ch. 228, sec. 4, L. 1901.
Adjutant General in charge of military accounts. (This section to be construed in connection with ch. 433 of L. 1901.)

Ch. 228, sec. 5., L. 1901.

He may procure from the Commissioners of Printing printed copies of report of National Guard convention.

Ch. 228, sec. 6, L. 1901.
He may procure traveling libraries.
Ch. 228, sec. 7, L. 1901.
He shall assist the Secretary of State in the preparation of blanks and instructions for enrollment of those liable to military duty when census is taken.

Ch. 228, sec. 8, L. 1901.

Quartermaster General. General powers and duties.
Bond.
Ch. 228, sec. 9, L. 1901.

His accounts; how kept. Reports. Subsistence.
Ch. 228, secs. 10, 16, L. 1901.
Arms and ordnance stores and supplies; issue of. Ch. 228, secs. 11, 13, L. 1901.

Transportation to officers.
Ch. 228, sec. 12, L. 1901.
Labor on military reservation; provision for; issue of.
Ch. 228, sec. 14, L. 1901.

Custody of flags and colors.
Ch. 228, sec. 15, L. 1901.
Medical department; how organized; officers of; powers and duties of officers. Examination fees.

Ch. 228, sees. 17-22, L. 1901.

Pay department. Paymaster; powers and duties. Provisions affecting them.

Ch. 228, see. 23, L. 1901.

Officers; powers, duties, compensation, penalties. Ch. 228, secs. 30-47, L. 1901.

Enlisted men. Enlistments and re-enlistments. Terms; pay, discharge.

Ch. 228, secs. 48-51, L. 1901.

Company, band, troop and battery. Ch. 228, secs. $54-61$, L. 1901.

Encampments; provisions for. Ch. 228, secs. 62-65, L. 1901.

Rules of discipline.
Ch. 228, secs. 66-75, L. 1901.

This act permits the use of money received from the U. S. government for improvements on the state military reservation at Camp Douglas. Ch. 62, L. 1901.

Authorizes counties and cities to erect armories for the use of the W. N. G.

Ch. 241, L. 1901.
DISBURSEMEN'TS ON ACCOUNT OF THE WISCONSIN NATIONAL GUARD.
For the year ending S'ept. 30, 1900.
Department of Adjutant General:Salaries and traveling expenses\$8,943 07
Mèrchandise ..... 4025
Printing, including cost of paper and waste, per report Commission- ers Printing ..... 44614
Telephone and telegrams ..... 12231
Postage and P. O. box rent ..... 77350
Expressage ..... 7737
Payment of troops in camp, uniform fund, armory rent and "com- pany commanders" ..... 78,423 91
Stationery, per report Superintendent Public Property - ..... 12891
Total ..... $\$ 88,75546$
Pages 184, 188, 488 and 500 in the report of the Secretary of State for the yearending Sept. 30, 1900.
Department of Quartermaster General:
Salaries, services and traveling expenses ..... $\$ 5,57400$
Printing, including cost of paper and waste, per report Comm ssion- ers of Printing ..... 20134
Telegrams and postage ..... 11637
Freight ..... 3,068 59
Transportation ..... 8,388 14
Expressage ..... 9915
Uniforms and other cloth:ng ..... 9,716 71
Lumber and insurance, and merchandise and services of surgeons. ..... 1,737 54
Building telephone line and miscellaneous expenditure ..... 3,225 99
Stationery, per report Superintendent Public Property ..... 1382
Total ..... $\$ 32,20165$
Pages 188, 190, 488 and 500 in the report of the Secretary of State for the yearending Sept. $30,1900$.Total of W. N. G. for the year, $\$ 120,957.11$.
DISBURSEMENTS ON ACCOUNT OF THE SPANISII-AMERICAN WAR
For the year ending Sept. 30, 1900.
Adjutant General's department: ..... $\$ 12573$
Quartermaster General's department:
Services at Camp Harvey ..... 615
Total ..... $\$ 12183$
U. S. war claims, 1861-1865:
Per diem and expenses ..... $\$ 96566$
Page 190 in the report of the Secretary of State for the year ending Sept.30, 1900.Total d'sbursements, $\$ 122,054.65$.

## ACADEMY OF ARTS AND SCIENCES.

## Report of.

There shall be printed biennially by the State Printer in pamphlet form 2,000 copies of the transactions of the Wisconsin Academy of Arts and Sciences, uniform in style with the volumes heretofore printed for said society.

Wis. Stats., sec. 341, p. 317, amended by ch. 197, L. 1901.

## Distribution of reports.

One copy of the transactions shall be distributed to each member of the legislature, one copy to the librarian of each institution, 100 copies to the State Agricultural Society, 100 copies to the State Historical Society, 100 copies to the State University and the remainder to the Academy.

Wis. Stats., sec. 365, p. 323.

## Distribution, expense of.

In the distribution of books and packages too large or cost too much to be sent by mail, they shall send them by freight or express and the accounts for such, properly certified to, shall be paid out of the state treasury.

Wis. Stats., sec. 366, p. 323,

The Secretary of State may authorize the State Printer to bind in

- suitable binding.all periodicals which the society shall receive, at a cost not exceeding $\$ 150$, and shall audit the accounts therefor.

Ch. 186, L. 1901.



Pages 192 and 488 in the report of the Secretary of State for the year ending Sept. 30. 1900,

## UNIVERSITY OF WISCONSIN.

Established in 1838-9.
This institution is governed by a Board of Regents of fourteen members, two of whom (the President and the State Superintendent of Public Instruction) being ex-officio regents.

The income of the University and Agricultural College during the year ending September 30, 1900, was as follows:

Direct state appropriations in money for current expenses and buildings
$\$ 424,79848$

Income from gifts and interest on productive fund gifts...... 5,230 00
29,05646
Miscellaneous sources, including bills payable, collections from students, rents, material sold, insurance, sales of agricultural college farm and creamery products, etc.

181,220 75
Printing, illustrating, publishing, paper waste, etc., paid for by the state out of general fund, not included in above.

6,022 11
$\$ 641,09780$
Total income other than from the U. S.........................................
40,00000
Aid given by the United States
$\$ 681,09780$
Total income as shown by Regents' report, plus $\$ 6,022.11$ (see above)
Deducting difterence between interest on productive funds reported by the Secretary of State, and the same reported by the Regents...

Total income of University for one year, including $\$ 79,000$ bor-
rowed, as compiled from pages 192, 216, 217, 219 and 488 of Sec-
retary of State's report and transfers deducted
Chapter 433 of the laws of 1901 provides that all of the money collected by any officer or at any department or institution of the state, including the University, shall be deposited at least weekly or oftener if required by the Governor at the state treasury and that all disbursements must be made by warrant of the state Auditor after an itemized voucher therefor showing the details of the debt contracted has been filed with that officer.

For about thirty (30) years the Secretary of State acting as State Auditor has transferred legislative appropriations in round sums to the exclusive control of the Board of Regents and has exercised no supervision over the University disbursements.

During this period payments have been made by warrants signed by the Secretary of the Board of Regents upon the State Treasurer as treasurer ex-officio of that Board.

By the adoption fully of the unified accounting system the Auditor will pass upon all expenditures which must be certified to him by the Regents and will know from his records from day to day the receipts and expenses of each department, school or college and the condition of each fund.

## UNIVERSITY OF WISCONSIN.

Proposition submitted to convention.
Among the propositions submitted to the constitutional convention was the following:
That the 72 sections, or two entire townships of land set apart and reserved for the use and support of a University by an act of Congress, approved June 12, 1838, entitled, "a seminary," are hereby granted and conveyed to the state to be appropriated to the use and support of such university, in such manner as the legislature may prescribe.

Wis. Stats., enab. act, sec. 7, subdiv. 2, p. 49.
State University-University fund.
Provision shall be made by law for the establishment of a state university at or near the seat of government, and for connecting with the same, from time to time, such colleges in different parts of the state as the interests of education may require. The proceeds of all lands that have been or may hereafter be granted by the United States to the state for the support of a university shall be and remain a.perpetual fund to be called "the university fund," the interest of which shall be appropriated to the support of the state university, and no sectarian instruction shall be allowed in such university.

Const., art. 10, sec. 6, p. 120.
Commissioners of school and univiersity lands.
The Secretary of State, Treasurer and Attorney General shall constitute a board of commissioners for the sale of the school and university lands and for the investment of the funds arising therefrom: Any two of said commissioners shall be a quorum for the transaction of all business pertaining to the duties of their office.

Const., art. 10 sec. 7, p. 120.

All moneys paid into the state treasury on account of the capital of the university fund shall be and remain a separate and perpetual fund as required by the constitution; and the interest derived therefrom and from unpaid balances of purchase money on sale of university lands and all other revenues derived from the university lands shall constitute the university fund income.

Wis. Sitats., secs. 248, 249, p. 287.
Agricultural College fund.
Location and name of.
There is established at the city of Madison, Wis., an institution of learning by the name and style of "University of Wisconsin."

Wis. Stats., sec. 377, b. 330 .
Board of regents; standing committees.
The government of the University shall vest in a Board of Regents, to consist of one member from each congressional district and two from the state at large, one of whom shall be a woman, appointed by the Governor.
The 'State Superintendent and the president of the University shall be ex-officio members of said board; said president shall be a member of all standing committees of board, having right to vote only in case of a tie. Regents' term of office is three years from the first Monday in February in year appointed unless sooner removed by the Governor, but appointments to fill vacancies shall be for residue of term only.
('This section was derived from sec. 5, ch. 114, L. 1866.) This law provided that the Secretary of State should be secretary of regents and State Treasurer should be the treasurer of regents. Ch. 13 of the Laws of 1869 amended by dropping the provision that the Secretary of State should be secretary of regents. Ch. 80, L. 1870; Ch. 135, 1872; and 378, Ann. Stats.

Wis. Stats., sec. 378, p. 330, amended by ch. 255, L. 1901.

Powers of board; officers' duties.
The Board of Regents and their successors are a body corporate by name of the "Regents of the University of Wisconsin," possessing all powers necessary or convenient to accomplish the objects and perform duties prescribed by law and have custody of books, records, buildings and other property of the University.
The Board of Regents shall elect a president and secretary and they shall perform duties prescribed by by-laws and board. Secretary shall keep faithful record of all transactions of Board or Executive Committee. State Treasurer shall be treasurer of
board and shall perform duties of such office subject to such regulations of board as are not inconsistent with his official duties; and he and his sureties shall be liable on his official bond as State Treasurer for faithful discharge of such duties.
(This section was derived from section 6 and part of sections 7,10 , ch. 1i4, 1866, and sec. 1, ch. 13, 1869.)

Wis. Stats., sec. 379, p. 330.
Note to above section.
The regents, as a corporation, have no powers except such as are conferred by statute, either expressly or by fair implication. 54 Wis., 159.

Meetings; quorum.
The board may determine by its by-laws the time for electing president and secretary and the duration of their respective terms, also the times for holding meetings and the manner of notifying the same. A majority of board constitutes a quorum, but a less number may adjourn from time to time.

Wis. Stats., sec. 380 , p. 331.
Duties of regents; additional powers.
The board shall enact laws for government of the University in all its branches; elect a president and requisite number of professors, instructors and officers and employees and fix salary and term of office and determine qualifications of applicants for admission to instruction; but no sectarian or partisan shall be allowed in any department, and no sectarian or partisan tests shall be allowed or exercised in the appointment of regency or the election of professors, teachers or officers or in the admission of students. The board has power to remove president or any professor, instructor or officer when they think the interests of the University require it. The board may prescribe rules for management for libraries, cabinet, museums, laboratories, and its departments, with penalty of forfeiture of violation, which may be sued for in name of board.
'they shall employ a preceptress for Ladies' Hall, who shall have charge and general supervision thereof, at a salary of not more than $\$ 1,500$ per year, provided said preceptress shall perform such other duties as the board may require.
(Section is derived from sec. 7 , ch. 114,1866 ; sec. 10 , ch. 21, R. S., 158 ; sec. 2 , ch. 229, 1876; last sentence is from secs. 389 a, 389 b of Ann. Stats.)

Wis. Stats., sec. 381, p. 331.

## Use of income-Addition of other colleges.

The board is authorized to expend such portion of the income of the University fund as they deem expedient for erection of buildings, purchase of apparatus, library, cabinets and additions thereto.
They may receive, in connection with the University, any colleges upon application of its board and trustees, and such college so received shall become a branch of the University.
(This section is derived from secs. 33,16 , ch. 10, R. S., 1858.)
Wis. Stats., sec. 382, p. 331.
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## Reports and printing.

At the close of each biennial fiscal term the regents, through their president, shall make a report in dletail to the Governor and the legislature exhibiting the progress, condition, aad wants of each of the colleges embraced in the University, the course of study in each, the number of instructors and students, the amount of receipts and disbursements, together with the nature, cost and results of all important investigations and experiments and such other information as they may deem important, one copy of which shall be transmitted free by the Secretary of State to all colleges endowed under the provisions of the act of Congress entitled, "An act donating land to the several states and territories which provide colleges for the benefit of agriculture and the mechanic arts," approved July 2, 1862, and also one copy to the Secretary of the Interior, as provided in said act. The board shall also report to the Governor, as often as may seem desirable, the more important results of investigations conducted by the director of Washburn Observatory and by other investigators connected with the University, and also the results of such experiments therein relating to agriculture or the mechanic arts as said board may deem to be of special value to the agricultural and mechanical interests of the state. With the approval of the Governor such number of copies as he shall direct, and of the Washburn Observatory reports, not more than 700 copies may be printed by the State Printer in separate form on good paper and with such appropriate quality of binding as the Commissioners of Public Printing shall order; 800 copies of each of said reports, when so directed by the Governor, except those of Washburn Observatory, shall be delivered to the legislature and the remainder be used in exchange for the publications of other institutions and for such other public purposes as the regents may order.

Wis. Stats., sec. 383 , p. 331.

The regents shall make and deliver to the Governor in tabular form a complete, concise and detailed report of the expenses of conducting the University for each year of the fiscal term ending the first Monday in January of each odd-numbered year preceding the date of such report. The report also shall include detailed statements or reports of receipts of conducting the University for the two preceding fiscal terms.

$$
\text { Ch. 97, L. } 1901 .
$$

Accounts, how made, etc.
No claim or account against the Board of Regents of the University shall be paid unless it state the nature and particulars of the services rendered or materials furnished and be verified by the affidavit of the claimant or his agent and approved by an indorsement in writing thereon by the officer, member or committee of said board authorized thereby to certify. claims and accounts for payments.
(This section was derived from part of ch. 296, 1895.)
This provision is affected by ch. 433, L. 1901.
Wis. Stats., sec. . 383 a, p. 332.

The president's powers-Faculties.
The president of the University has authority, subject to the regents, to give general direction to the instruction and investigation of the several colleges, and so long as the interests of the institution require it. He shall be charged with the duty of one of the professorships. The government of the several colleges shall be intrusted to their respective faculties, but the regents have power to regulate their instruction and books or works to be used; also to confer degrees and grant diplomas and confer the power to expel students.
(This section derived from sec. 10, ch. 114, 1866; sec. 1, ch. 13, 1869 ; sec. 11, ch. 114, 1866.)

Wis. Stats., sec. 384, p. 332.

Relates to diplomas granted by the University which shall have the effect of legal license to teach in public schoois when countersigned by the State Superintendent.

Wis. Stats., sec. 458 h , amended by ch. 171, L. 1901.

Object and departments.
The object of the University shall be to provide the means of acquiring various branches of learning and shall consist of the following colleges and departments:

1. The College of Letters and Science.
2. The College of Mechanics and Engineering.
3. The College of Agriculture.
4. The College of Law.
5. Such other colleges, schools and departments as may be added thereto or added therewith.
(This section was derived from sec. 1, ch. 21, R. S. 1858; ch. 114, 1866; ch. 87, 1869; sec. 385, Ann. Stats.)

Wis. Stats., sec. 385 , p. 332.

Departments, what embraced in.
Details of instruction for the various departments and colleges outlined in this section.

Wis. Stats., sec. 386, p. 333.

Open to both sexes-Military instruction-Diplomas may be countersigned.

The university shall be open to both sexes. All able-bodied male students in a college may receive instruction in military tactics, the requisite arms being furnished by the state. Diploma of a graduate, having been countersigned by the State Superintendent, has the effect of a limited state certificate, subject to the exercise of the power vested in the State Superintendent to - revoke the right given by his signature to such diploma.

W却. Stats., sec. 387, p. 333.

Tuition.
No student who has been a resident of the state for one year next preceding his admission shall be required to pay tuition fees, except in the law department and for extra studies. Regents may prescribe tuition for pupils in the law department and for those who shall not have been a resident as aforesaid and for extra studies.
(This section is derived from section 5, 8, 8, chapter 114, 1866; Chapter 63, 1873.)

Wis. Stats., sec. 388, p. 333.

Funds for support of-Gifts, bequests, etc.
For the support and endowment of the University there is annually and permanently appropriated:

1. The University Fund income and all other sums of money appropriated by law to such fund.
2. The Agricultural College Fund income.
3. All contributions derived from public bounty. The entire income of these funds to be at the disposal of the Board of Re gents. Funds to be transferred to the treasurer of the board (who is also the State Treasurer) and to be separate and distinct from the accounts of the state.
(This section is derived from section 3 , chapter 114,$1866 ; 2$, chapter 80,$1870 ; 30$, chapter 18,1883 ; chapter 198, 1891; 389a, 389b, Annotated Statutes are in section 381.)

Wis. Stats., sec. 389, p. 334.
Tax for and appropriation of part-loans.
As amended by chapter 170 , ' 99 , there shall be levied and collected annually a tax of $\$ 289,000$ which is annually appropriated to the University Fund income to be used as herein provided. Out of which amount however $\$ 40,000$, annually is to be applied to the use of the College of Agriculture and $\$ 22,500$, annually, to uses of the College of Mechanics and Engineering; $\$ 3,500.00$ to new School of Commerce; $\$ 2,000$ to summer school authorized by section 392 a , and $\$ 1,000$ for the purchase of lawbooks and $\$ 13,000$ for establishing courses in railway and electrical engineering,
Loans may be made to the University Fund income by the Commissioners of Public Lands. This section provides how loans shall be repaid. (Section is derived from sections 1, 3, chapter 117, 1876; chapter, 300,1883 ; chapter 29, 1891; sections 2 , 3 , chapter 241,1895 ; 1, 2 , chapter 284,1897 ; section 386 a $^{\circ}$, Annotated Statutes.)

Wis. Stats., sec. 390 , p. 335, amended by ch. 170, L. 1899, amended by ch. 322, L. 1901.

The Commissioners of Public Lands are authorized by this act to direct the loan of $\$ 75,000$ from the trust fund to be repaid to the trust fund as herein provided. Ch. 322, L. 1901.

There is appropriated for the new engineering building $\$ 150,000$ and for the new agricultural building $\$ 30,000$ provided that the plans for the construction of any building provided for by this act shall be submitted to the Governor who shall satisfy himself by a personal examination that' such building can be erected and completed by the money hereby appropriated. Ch. 322, L. 1901.

## The observatory.

The sum of $\$ 3,000$ shall be set apart annually from the receipts of the tax first mentioned in the preceding section for the maintenance of the astronomical observatory on the University
grounds, to be expended by the regents in astronomical work and instruction. And a like sum is annually appropriated out of the general fund to the Board of Regents for the purpose of enabling said board to employ and maintain a director of the Washbưrn Observatory.
(This section is derived from sec. 4, ch. 117, 1876; sec. 391a, Ann. Stats.; secs. 391b, 391c and 391d, Ann. 'Stats., are in sec. 392a.)

Wis. Stats., sec. 391 p. 335.

## Regents' expenses.

The regents shall each receive the actual amount of his expenses in traveling to and from and in attendance upon all meetings of the board or incurred in the performance of any duty in pursuance of any direction of the board; accounts for such expenses, duly authenticated, shall be audited by the board and be paid on their order by the treasurer out of the University fund income. No regent shall receive any pay, mileage or per diem except as above prescribed.
(This section was derived from sec. 1, ch. 107, 1866.)
Wis. Stats., sec. 892, p. $3 £ 5$.

## Summer school:

The Board of Regents may maintain the summer school of science, literature, language and pedagogy heretofore established in connection with the University; provided, that all teachers shall be designated by the State Superintendent and the president of the University.

Wis. Stats., sec. 392 a, p. 335.
It was the opinion of the committee of revision, 1898, that the appropriation of $\$ 2,000$ for the summer school made by sec. 390 was intended to take the place of the $\$ 1,000$ appropriation contained in sec. 391b, Ann, Stats.

Note to sec. 392a.
Institutes, instruction at; fund for.
The regents may hold institutes for the instruction of citizens of Wisconsin in agriculture as herein provided, making such rules as they may deem necessary. They may employ agents to perform such work as they may direct. There shall not be used in any one year more than $\$ 12,000$ in paying the expenses of, and such as are incident to, such institutes, which sum shall be paid from the general fund. (Section was derived from sec. 1494c, Ann. Stats.)

Wis. Stats., sec. 1494b, p. 1105.

The Governor may authorize the Dairy and Food Commissioner or his assistants, when not engaged in the performance of other official duties, to give such aid to the farmers' institutes, dairy and farmers' conventions, and the agricultural department of the state University as may be deemed advisable.
W.s. Stats., sec. 1410d, p. 1060.

Commercial fertilizers, labels on; samples; analysis; fee; license.
This section emphasizes the duty of the director of the experimental station of the university in connection with making analysis of samples of fertilizers offered for sale for $\$ 10$ per ton.

Provision is made for certain fees to be chargea by said director, which "shall be paid into the treasury of such station." (This section is derived from secs. $1,2,3,4,5$, of Ch .87 , '95.)

Wis. Stats., sec. 1494c, p. 1106; sec. 1494d, p. 1106.
Samples, how sealed; publication of result of analysis.
Further provides as to the duty of said director of said station in connection with fertilizers; samples, how sealed; publication of analysis.

Wis. Stats., sec. 1494e, sec. 1107.
Nursery stock diseases.
Provides that it shali be the duty of the director of the agricultural experiment station to enforce this act to prevent diseases to the nursery stock. Nursery shipping companies shall report to said directors, who may demand lists of saies.
Provision is'made for certain official labels and tags.
The agent of the director may receive not over $\$ 3$ per day for time actually and necessarily expended. The said director shalĩ receive no compensation for carrying out the provisions of this act and he shall make a report to the Secretary of State in the last week of May of each year, and shall turn over all moneys received by him to the State Treasurer to be credited to the general fund.

All expenses to be approved by the director of said station and audited by the Secretary of State, who shall draw his warrant for the same upon the State Treasurer, who shall pay the same out of the general fund, and for this purpose the sum of $\$ 300$ or as much thereof as may be necessary is appropriated.

Ch. 180, L. 1899, pp. 263-266.

By this act there was appropriated $\$ 35,000$ from general fund to the University fund income for increase in dairy herd and enlargement of dairy building, with changes in heating apparatus; $\$ 100,000$ for new building for College of Engineering; $\$ 16,000$ for water tower; all to be expended in accordance with the judgment of the Board of Regents, provided, however, that no plan or plans shall be adopted, and no contract shall be entered into by the Board of Regents of the University for the construction or erection of any building or structure or thing, specified in this act, until such plans and contracts, with estimates of the total costs thereof, shall first have been submitted to and in writing approved by the Governor of the state, who shall withhold such approval until he shall satisfy himself by a personal examination of the same, and by such other means as he in his discretion may adopt, that any such building, structure or thing can and will be erected and fully completed according to such plans or contracts, for a sum of money not exceeding the amount hereby appropriated for such particular purpose.

Ch. 2£9, L. 1899, pp. 397, 398.

The regents may appoint three of the nine committees of the new library building.

Ch. 298, L. 1895; ch. 296, L. 1899.

State sealer and seal.
The custody of the public standards of weights and measures is given to the department of engineering of the University, subject to the control of the board of regents thereof, and the professor of engineering shall be the state sealer of weights and measures.

Wis. Stats., sec. 1659, p. 1196.

## Printing.

The report of the regents of the $U$. W. shall be limited to 50 pages, and 1,000 copies shall be printed.

Wis. Stats., sec. 335b, p. $\delta 14$.
DISBURSEMENTS OF THE BOARD OF REGEN'S OF THE UNIVERSITY OF WISCONSIN
For the year ending Sept. 30, 1900.
Salaries ..... \$237,770 08
Apparatus ..... 11,762 92
Furniture ..... 2,601 69
Heat, light and water ..... 23,871 78
Library ..... 7,149 34
Repairs, insurance, etc. ..... 11,979 77
Postage, printing, adverttsing, freight and express ..... 13,81069
Institute workers ..... 5,785 00
President's contingent and office expenses ..... 3,256 46
Expenses of Regents ..... 78779
Expenses of visitors ..... 50540
Contingent clerk and office expense ..... 7,450 34
Live stock, seeds, tools, feed and farm expense ..... 31,461 96
Labor ..... 10,438 63
Armory, traveling and incldental expenses ..... 2,887 84
Janitors ..... 11,118 07
Miscellaneous ..... 210,21020
Total, per Regents' report ..... \$592,797 46
Illustrating and printing furnished by the state, including cost of paper and waste (see pages 192 and 488 in the report of the Secre- tary of State for 1900) ..... 6,022 11
Total disbursements ..... $\$ 598,81957$
Note.-The total receipts of the Regents of the University for same period, including $\$ 79,000$ borrowed, are shown to be $\$ 680,476.97$, the difference being accounted for by the balance on Regents' hands at the beginning and at the end of the fiscal year.

(This item, is Inserted because the work is in charge of the Director of the Agricultural Experiment Station of the University, though not an expense chargeable to the University.)

## NORMAL SCHOOLS.

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BOARD OF REGENTS.
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Prior to 1897 the Secretary of State as State Auditor signed all warrants upon the treasury for payments of money on account of Normal Schools, but chapter 98 of that year by amendment provided that this power shall be vested in the Secretary of the Regents. From that time until the present the Secretary of State as State Auditor has transferred money in lump sums to the exclusive control of the Regents who have kept their own accounts and disbursed all money without supervision of the Auditor.

As shown the Regents' accounts and statements are kept with reference to a different fiscal year from that established by law for all'departments and institutions, making it impossible readily and definitely to harmonize the current accounts of the Board with those of the Auditor.

Chapter 433 of the laws of 1901 provides that the receipts and expenses of the Normal Schools and the Regents thereof shall be embraced in the centralized accounting system provided to be established by the Governor. The system provides that all receipts of money at the schools or by any officer or employe thereof or the Regents or employes thereof will be paid into the treasury. The Secretary of State as Auditor will sign all warrants for the payment of money from the treasury.

## NORMAL SCHOOLS.

. Residue of school fund.
"The residue of the 'school fund,' as provided in section 2, Art. 10, of the constitution, shall be appropriated to the support and maintenance of academies, normal schools and suitable libraries and apparatus therefor."

Const., art. 10, sec. 2, p. 119.

Normal school and drainage funds.
All swamp-lands and moneys in lieu thereof received from the . United States and all moneys received as purchase-money for swamp-lands, including loans and investments of moneys due upon certificates of sale of swamp-lands, shall constitute two separate funds which are respectively denominated the normal school fund and the drainage fund.
Division of swamp-land and funds based upon Ch. 437, L. 1865, Ch. 151, L. 1869, and also sec. 251.

Wis. Stats., sec. 250, p. 288.
Swamp-land funds.
The proceeds of the sale of the lands conveyed to this state by the United States shall be paid one-half into the drainage fund and the balance into the normal school fund.

Wis. Stats., sec. 251a, p. 288.

## Normal school fund income.

The normal school fund income shall, under the direction and management of the Board of Regents, be applied and is hereby appropriated to the establishment and support of the state normal schools and the purposes directed in this chapter. See section 250 , page 288. (This section was derived from part of sec. 5 . ch. 151,1869 ; sec. 1 , ch. 29,1870 ; and part of sec. 3 , ch. 151 , 1869.)

Wis. Stats., sec. 409, p. 341.
Board of Regents, terms and vacancies.
The State Superintendent as ex-officio regent and ten regents appointed by the Governor, one of whom shall be a woman, shall constitute a board called the "Board of Normal School Regents." The term of office shall be three years, commencing with the first Monday of February in the year appointed, and qualification of respective members. No more than one male member shall reside in any one congressional district and they shali be divided into five classes so that the term of office of two regents shall expire each year.
(This section was derived from sec. 24, ch. 151; sec. 2, ch. 29, 1870 ; sec. 1, ch. 17, 1876.)

Wis. Stats., sec. 393, p. 336, amended by ch. 79, L. 1899, ch. 260 , L. 1899, and ch. 166, L. 1901.

Powers of Regents.
The Board of Regents shall possess all powers necessary or convenient to accomplish the objects and perform the duties prescribed by law.

They shall not borrow money or contract indebtedness except as herein provided. The entire income of the normal school fund shall be at the disposal of the Board of Regents to transfer to the Treasurer of the state, and shall be distinct and independent from the accounts of the state.
(This section was derived from sec. 1, ch. 116, 1866; sec. 26, ch. 151, 1869; ch. 227, 1878.)

Wis. Stats., sec. 394, p. 336.
Provided that the Secretary of State should draw warrants for accounts allowed. Ch. 98, L. 1879, does away with the supervision of disbursements by the Secretary of State and allowing the secretary of the Board to sign warrants. By the unified accounting system adopted by the laws of 1901, the Secretary of State as auditor must sign all warrants.

Ch. 116, L. 1866, secs. 3 , 5 ; ch. 5 , L. 1875 , sec. 1 ; ch. 151, L. 1869 , sec. 27.

Officers of Board.

- The officers of the Board shall be a president, vice president, and a secretary, and their terms of office shall be one year. The State Treasurer shall be ex-officio treasurer of the Board, but the Board may appoint suitable persons to receive any tuition fees or other moneys that may be due from any student ot other person, to disburse any part thereof and pay the balance to the treasurer.
(This section was derived from sec. 24 , ch. 151, 1869 ; sec. 2, ch. 29, 1870 ; sec. 1 , ch. $13,1876$.

Wis. Stats., sec. 395, p. 337.
The words in italics were added by the revisors in 1898, but the accounting system provided by Ch. 433, L. 1901, makes such payments illegal.

Ch. 433, L. 1901.

Meetings; quorum.
The Board of Regents of the normal schools shall hold an annual meeting at the capitol on the second Wednesday in July in each year. Special meetings may be called by the Governor.

Wis. Stats., sec. 396, p. 337.
Removal of Regents; disqualification of officers.
Any Regent may be removed from office for cause upon reasonable notice by a vote of two-thirds of all the regents.
Conditions upon which Regent may be expelled.
Wis. Stats., sec. 397, p. 337.

Model schools.
The Board of Regents shall establish a model school or schools for practice in connection with each state normal school, and shall make all the regulations necessary to govern and support the same.

Wis. Stats., sec. 403, p. 338.
Powers of Board as to schools.
The Board shall have the government and control of all of the normal schools and shall have power therefor.

Wis. Stats., sec. 404, p. 339.

## Compensation of Regents.

Compensation may be allowed to any member of the Board for any specific service rendered under the direction of the Board, and such compensation shall be paid out of the normal school fund income into the state treasury on accounts presented to and adjusted by the Board and certificate signed by the secretary and president thereof.
(This section was derived from part of sec. 3 , ch. 116, 1866 ; sec. 27, ch. 151, 1869; sec. 1, ch. 5, 1875.) (See ch. 433, L. 1901, providing for auditing by Secretary of State.)

Wis. Stats., sec. 398, p. 337.
Other normal schools; alteration, etc., of buildings.
The Board of Regents may establish other state normal schools and when, in their opinion, the educational interests may require it, they may erect buildings and enlarge, alter or repair any normal school building.
The Secretary of State shall draw a warrant for the expenses incurred for the same and it shall be paid from the normal school fund income.
(This section was derived from sec. 15 , ch. 94,1859 ; sec. 4 , ch. 116 , 1866 ; sec. 28 , ch. 151,1869 ; sec. 5 , ch. 116,1866 ; sec. 29 , ch. 151, 1869; sec. 1, ch. 5, 1875.)

Wis. Stats., sec. 399, p. 337.
Donations, collection and application of.
The Board shall demand and receive sums of money donated and subscribed to aid in the erection of the necessary building for the normal schools, and shall apply the same to the erection and completion of said building and other expenses incurred by the said Board, and if. any surplus shall remain they shall apply the same to the expenses of conducting said schools. Any deficit which may arise in the erection and completion of said buildings, shall be paid out of the normal school fund income.
(This section was derived from part of sec. 27, ch. 151, 1869; sec. 1 , ch. 5,1875 ; ch. 19,1897 .)

Wis. Stats., sec. 400, p. 338.

Accounts, etc.
All claims and accounts shall be verified by the oath, affidavit or affirmation of the claimant or his agent, in writing, and shall be certified in writing thereon by the oflicer or member of said Board-before payment.
(This section was derived from part of sec. 27, ch. 151, 1869; sec. 1, ch. 5, 1875; ch. 98, 1.879.)
By the centralized accounting system provided by ch. 433, L. 1901, the Secretary of State now audits all bills and signs all warrants.

Wis. Stats., sec. 401, p. 388, ch. 296, L. 1895.
Board of visitors.
There shall be appointed by the State Superintendent three suitable persons, not members of the Board of Regents, who shall examine thoroughly into the condition, organization and management of the normal schools. Such visitors shall be appointed annually.
('This section was derived from sec. 34, ch. 151, 1869, and sec. 4066, Ann. Stats.)

Wis. Stats., sec. 406 , p. 340 .

Appropriation for and loans to normal school fund income.
There shali be levied and collected annually a state tax of $\$ 215,000$, which amount is hereby annually appropriated to the normal school fund income.
Commissioners of public lands may loan to Board such part of the normal school fund as they deem prudent, not to exceed $\$ 60,000$. Such loan shall be repaid from the fund of the normal school and from any appropriation made to the support as herein provided.
(This original section was derived from sec. 406a, Ann. Stats., sec. 2, ch. 91,1895 ; ch. 53 , 1897.)

Wis. Stats., sec. 406a, p. 340, amended by ch. 370, L. 1901.
Appropriation for building, etc.
This act appropriates $\$ 25,000$ out of the general fund to the normal school fund to be expended for the repairs and heating apparatus.

Ch. 154, L. 1901.

Teachers' institutes; appropriation for.
The Board may use as it may deem necessary $\$ 14,000$, of which not exceeding $\$ 7,000$ shall be paid from the normal school fund income and not exceeding $\$ 7,000$ from the general fund, for the purpose of providing public lectures in connection with such institutes by the professor of the theory and art of teaching.
Secretary of State shall draw his warrant for that amount expended for the purpose mentioned in this section upon presentation to him of the certificate of the president and secretary of Board.
(This original section was derived from sec. 40, ch. 151, 1859; sec. 4, ch. 18, 1871; ch. 462, 1891; sec. 408a, Ann. Stats.)

Wis. Stats., sec. 408, p. 340 , amended by ch. 371 , L. 1901.

Institute instructors.
No money shall be paid for services rendered as an instructor in any institute to any person unless he holds a certificate signed by the State Superintendent certifying that the committee approves of said person as a competent institute instructor.

Wis. Stats., sec. 461i, p. 372.
Regents report.
The president of the Board shall make a biennial report to the Governor on Aug. 31 of the year in which biennial fiscal term closes.
(This section was derived from sec. 35 , ch. 51, 1869.)
Wis. Stats., sec. 410, p. 341.

Printiag.
The report of the Regents of the Normal Schools shall be limited to 50 pages, and 1,000 copies shall be printed.

Wis. Stats. sec, 335a, p. 314.

During the year ending September 30, 1900, \$339,689.69 was transferred from the state treasury to the Board of Regents of the Normal Schools and $\$ 1,340.00$ was paid Institute Conductors as per report of the Secretary of State for that year. (Pages 193-224.)

The classified disbursements by this Board have not been reported for this same period as the accounts kept and statements rendered by the Board cover the year ending July 3, 1900, instead of September 30.

For the school year ending July 3d, the disbursements reported by the Board were as follows:

| Apparatus and cabinet | \$2,132 64 |
| :---: | :---: |
| Building | 9,999 52 |
| Fuel | 13,703 04 |
| Furniture | 2,481 11 |
| Light | 1,164 69 |
| Miscellaneous | 7,446 27 |
| Printing | 1,792 61 |
| Reference books | 3,789 53 |
| Repairs | 14,079 53 |
| Salaries | 207,655 25 |
| Stationery | 2,645 69 |
| Text books | 5,569 93 |
| Water rent | 1,647 28 |
| Administration, etc.. | 19,523 37 |
| Total disbursement | \$293,630 45 |

Chapter 433 of the laws of 1901 provides (see ante, page 368) for a centralized accounting system which when established by. the Governor will embrace the receipts and disbursements of the Normal School Regents and show from day to day the exact financial condition of each fund of each Normal School in a manner free from doubt or misconception.

The state aids the following associations which, however; are not included with the state departments and societies whose disbursements are to be audited by the Secretary of State. The legislative intent seems to have been to assist but not to control such organizations: Firemen's associations, Cheesemakers' association, Cranberry Growers' association.

## ST'ATE FIREMEN'S ASSOCIATIONS.

Appropriations.
There is hereby appropriated to the Wisconsin state firemen's association the sum of $\$ 750$ out of any money in the state treasury not otherwise appropriated. This appropriation is for the years 1901 and 1902, and said sum so appropriated shall be paid to said association in two equal payments to be made on or before the first day of June in each of said years.

Ch. 279, L. 1901.

This act appropriates $\$ 250$ annually for the years 1901 and 1902 to the Eastern Wisconsin Firemen's Association as herein provided.

Ch. 242, L. 1901.

[^70]
## WISCONSIN CHEESEMAKERS' ASSOCIATION.

There is hereby appropriated to the Wisconsin Cheesemakers' Association annually out of any money in the treasury, not otherwise appropriated, the sum of $\$ 400$.

Ch. 259, sec. 1, p. 429 , L. 1899.

## Printing of report.

Four thousand copies of the report of this Association shall be printed, 1,000 to be bound in cloth, the remainder in pamphlet form, provided that the whole number of printed pages shall not exceed 200 , and the same shall be distributed by the officers of the Association.

Ch. 314, sec. 1, p. 580.
disbursements on account of the wisconsin cheiesemakers' For the year ending Sept. 30, 1900.
Appropriation to the treasurer of the association ....................... $\$ 40000$
Printing, including cost of paper and waste, per report Commissipn-
$\qquad$ 46852
Total . ......................................................................... $\$ 86852$

Pages 197 and 488 in the report of the Secretary of State for the year ending Sept. 30, 1900.

## WISCONSIN CRANBERRY GROWERS', ASSOCIATION.

State aid to; meetings; report, etc.
There shall be paid annually out of the state treasury to the proper officer of the Wisconsin Cranberry Growers' Association \$250, which shall be used exclusively for the purposes of obtaining and publishing information relative to the cultivation and production of cranberries.

The society shall hold semi-annual meetings in August and January at such places as it shall determine. The secretary thereof shall report to the Governor immediately after each January meeting an itemized and verified account of all disbursements made during the previous year, and shall then publish in pamphlet form, not to exceed 250 copies of 50 pages each, of the transactions of the Association and a summary of the information collected during the previous year relating to the cultivation and production of cranberries, which pamphlets he shall cause to be distributed among the growers of cranberries.

Wis. Stats., sec. 1479a, p. 1096.

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    DISBURSEMENTS ON ACCOUNT OF THE WISCONSIN CRANBERRY GROWERS' ASSOCIATION
For the year ending Sept. 30, 1900.
Appropriation to treasurer of association \(\$ 25000\)
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Page 197 in the report of the Secretary of State for the year ending Sept. 30, 1900.

## STATE DAIRYMEN'S ASSOCIATION.

This association in its relation to the state is similar to that of the State Horticultural Society (see page 614), the amount of the annual appropriation, $\$ 2,000$, being paid over to the association, an audit of final disbursements not being required.

Eight thousand copies of the biennial report of the transactions of the association, including the report of the Treasurer, are printed and distributed at the expense of the state.

## STATE DAIRYMEN'S ASSOCIATION.

Appropriation to Dairymen's Association.
There is hereby annually appropriated out of any money in the treasury not otherwise appropriated the sum of $\$ 4,000$ to the Wisconsin State Dairymen's Association, provided that $\$ 1,000$ be given for the South Wisconsin Cheesemakers' Association.

Wis. Stats., sec. 1459 b, p. 1089, amended by ch. 421, L. 1901.
Printing.
There shall be printed annually 8,000 copies of the transactions of this Association, provided that the whole number of printed pages shall not exceed 200.

Wis. Stats., sec. 335e, p. 315.

DISBURSEMENTS TO WISCONSIN DAIRYMENS' ASSOCIATION


Pages 197 and 488 in the report of the Secretary of State for the year ending Sept. 30, 1900.

## STATE HORTICULTURAL SOCIETY.

The state aids this society, which is created to promote the horticultural interests by an annual appropriation of $\$ 1,750$ which is transferred to the exclusive control of the society with the limitation only that $\$ 250$ shall be for maintaining experiment stations.

The finances of this organization are not regarded as under the control of the state in a general sense but its Secretary is required by law to make a report to the Governor in October of each even-numbered year and include therein an itemized account of expenditures since the last report of the proceedings of the society.

This report, to the number of 7,000 copies ( 4,000 in cloth and 3,000 in paper), is printed and distributed at the expense of the state.

## STATE HORTICULTURAL SOCIETY.

Purposes of ; appropriation.
This Society is a body corporate, with the general powers and privileges of a corporation so far as applicable. It shall be the duty of the Society to aid in the formation and maintenance of county and local horticultural societies, to promote the horticultural interests of the state by holding meetings for discussion thereof, by the collection and dissemination of information in regard to the cultivation of fruits, flowers, trees, adapted to the soil and climate of this state, and in other proper ways to advance the fruit and tree growing interests thereof; and for such purposes only it may take, hold and convey real and personal property, the former not exceeding $\$ 5,000$. For the purpose of aiding in the accomplishment of such objects the Society shall be entitled to receive $\$ 2,250$ annually from the state treasury, $\$ 250$ of which shall be for the maintenance of experiment stations.

[^71]Executive committee; secretary's report.
The officers shall be a president, secretary and treasurer. The saíd officers and one member from each congressional district in the state shall constitute the executive committee. The executive committee may fix the time and place for holding the annual meeting of the society, if the last meeting thereof failed to do so, and may call such meeting by giving at least 30 days' notice to each member. Said committtee may also fill all vacancies in the society. The secretary of the society shali make, in October of each even-numbered year, a report to the Governor of the transactions thereof including an itemized account of all moneys expended since the last report was made.

Wis. Stats., sec. 1459a, p. 1689.

## Printing.

There shall be printed annually upon the approval of the Commissioners of Public Printing 7,000 copies of the transactions of the said society; 4,000 to be bound in cloth; provided that the whole number of pages shall not exceed 250 .

Wis. Stats., sec. 335 e, p. 315 , amended hy ch. $3 E 9$, L. 1901.

DISBURSEMENTS FOR WISCONSIN HORTICULTURAL SOCIETY
For the year endinf Sept. 30, 1990.
State appropriation to the treasurer of the society
Printing, including cost of paper and waste, per report Commission-
ers Printing . ...........................................................................046 18
Total . ............................................................................ \$2,796 18
Pages 197 and 488 in the report of the Secretary of State for the year ending Sept. 30, 1900.

## STATE INSPECTOR OF APIARIES.

Appointment, duties and compensation.
The Governor may appoint for a term of two years a State inspector of apiaries. The Inspector shall, when notified of the existence of the disease known as foul brood among apiaries, examine all such as are reported and all others in the same locality and ascertain whether or not such disease exists, and if satisfied of its existence shall give the owner or person who has the care of such apiaries full instructions as to the manner of treating them. Within a reasonable time after such examination the Inspector shall make another examination thereof, and if the condition of any of them is such as in his judgment renders it necessary he may burn all the colonies of bees and all the comb necessary to prevent the spread of the disease.

He shall before such burning give the notice provided for in and otherwise proceed pursuant to the provisions of section 1492b. He shall at the close of each calendar year report to the Governor stating the number of apiaries visited, the number of those diseased and treated, the number of colonies of bees destroyed and of the expenses incurred.

He shall receive $\$ 4$ for each day actually and necessarily spent in the performance of his duties and be reimbursed the money expended by him in defraying his_expenses provided that the total expenditure for such purposes shall not exceed $\$ 500$ per year.

Wis. Stats., sec. 1494f, p. 1107.

## DISBURSEMENTS OF INSPECTOR OF APIARIES

For the year ending Sept. 30, 1900.
Per diem and expenses of Inspector $\$ 37343$

Page 198 in the report of the Secretary of State for the year, ending Sept. 30, 1900.

## SUPERVISOR OF INSPECTORS OF ILLUMINATING OILS.

The provisions of the centralized accounting system provided to be established by chapter 433 of the laws of 1901 will apply to this officer and his deputies.
Appointment; salary.
The Governor shall appoint by and with the advice of the senate, a suitable person who shall not be pecuniarily- interested, either directly or indirectly, as state supervisor of inspectors of illuminating oils, whose term of office shall be two years.

Wis. Stats., sec. 1421a, p. 1068.
The Governor may remove such person from office and fill any vacancy arising from such removal or other cause from the unexpired portion of the term.
His salary is $\$ 1,500.00$ annually.
Ch. 466, L. 1901.
Oath and bond.
The supervisor shall take the constitutional oath of office before entering upon his duties and execute a bond to the state of $\$ 5,000$ with such sureties as shall be approved by the Secretary of State and shall be filed in the office of the Secretary of State.

Wis. Stats., sec. 1421b, p. 1068.
His dutiés; deputies.
He shall devote all his time to duties of his office and under the direction of the Governor shall oversee all deputy inspectors, instruct them in the performance of their duties, keep a record of their reports to him and make a report to the Governor on the first of October of each year.

Wis. Stats., sec. 1421c, p. 1068, amended by ch. 466, L. 1901.
He shall make an additional report to the Governor before January 10, each odd-numbered year.
He shall make rules and regulations for their guidance not inconsistent with the provisions of this chapter.
He may appoint with the advice of the Governor such deputies as shall be necessary for the prompt and faithful performance of duties required under this chapter and define inspection districts with the assistance of the Governor.

Ch. 97, L. 1901.

Deputy's oath and bond; duties, salary.
Bonds of the deputies, fixed by the Supervisor and approved by the Governor, shall be filed in the office of the State Treasurer. Sureties to be approved by the County Judge.
On the first day of each month the Supervisor shall receive from the deputies a full statement of the number of barrels of oil inspected during the preceding month, the result of such inspection and an account of the actual receipts of his office and the deputy shall at the same time remit to the State Treasurer all fees he has received for inspecting oils. Said fees to be set aside by the Treasurer as a fund to be used for paying the salaries and expenses of Supervisor and deputies, which shall be paid when approved by the Governor.
Balance remaining in such fund expended at end of fiscal year to revert to general fund.
Deputies salaries shall not exceed $\$ 100.00$ per month, to be fixed by the Governor but salary and traveling expenses not to exceed 8 cents per barrel on oil inspected in his district during the month.

Wis. Stats., sec. 1421d, p. 1068, amended by ch. 466, L. 1901.
The provisions as to details inspection and standard of oil to be maintained should be obtained from a reference to the laws cited as they can not be condensed to the limits of this pamphlet.

Wis. Stats., secs. 1421e, 1421b, 1421g, 1421h, 1421i, 1421k, $1421 \mathrm{l}, \mathrm{p}$. 1069, amended by ch. 466, L. 1901.

Deputy inspector to demand and receive 10 cents per every sample of oil tested.

Wis. Stats., sec. 1421j, p. 1071, amended by ch. 466, L. 1901.
Printing.
The report of the Supervisor of Inspectors of Illuminating Oils shall be limited to 25 pages and 800 copies shall be printed.

Wis. Stats., sec. 335b, p. 314.

Heretofore there has been no expense to the state in connection with this department, the fees having been paid by the dealers in oil.

## STATE BOARD OF MANAGERS OF THE PANAMERICAN EXPOSITION AT BUFFALO.

Provides for a board of five citizens of Wisconsin. Ch. 318, sec. 1, p. 585, L. 1899.

Members of, how appointed.
Members to be appointed by the Governor. They shall elect officers, make by-laws, etc., as herein provided.
Members may be removed and vacancies filled by the Governor.
Ch. 318, sec. 2, p. 586, L. 1899.
To have no compensation.
Members of board shall receive no compensation for their services, but their actual expenses for transportation and subsistence when they are necessarily absent from their homes, shall be paid from the moneys appropriated by this act.

Ch. 318, sec. 3, p. 586, L. 1899.
Treasurer of, to give bond.
The treasurer of the board shall, before he shall be entitled to receive the moneys hereby appropriated, execute and deliver to the Governor a bond in the sum of double the amount of the appropriation, with at least two sureties who shall justify their responsibility, which bond shall be approved by the Governor and conditioned for the faithful performance of the duties of said treasurer and the faithful accounting to the state of Wisconsin for all moneys which shall come into his hands.

Ch. 318, sec. 4, p. 586, L. 1899.
Moneys how expended.
Provides how the money shall be expended by the treasurer of said board.

Ch. 318, sec. 5, p. 586, L. 1899.

## Report of Treasurer.

Provides for the report of the Treasurer and the closing up of the business.
The last two sections are affected by the unified accounting system provided by chapter 433, laws of 1901.

Ch. 318, sec. 6, p. 587, L. 1899.

## Duties of board.

The duties of said board shall be to provide suitable building or builuings, to be erected upon such space as may be allotted to the state of Wisconsin for its use upon the ground of said exposition, and to the performance of such details relating to the representation of citizens of the state of Wisconsin in the exposition as may be from time to time necessary, and said board shall have charge and control of all buildings and other property of the state when erected, purchased or otherwise acquired or placed in its custody.

Ch. 318, sec. 7, p. 587, L. 1899.

## Appropriation.

There is hereby appropriated out of any money in said treasury not otherwise appropriated, $\$ 25,000$, or so much thereof as may be necessary to carry out the provision of this act. The said board shall cause from time to time, estimates to be made of the expenses to the payment of which the money is to be applied, which estimate shall be signed by the President, by the Secretary of the Board and be filed with the Governor and if the Governor shall approve thereof, shall endorse his approval thereon and file the same with the Secretary of State, and thereupon the Secretary of State shall audit the same and draw his warrant upon the treasury of the state for the payment of the same, and such estimates shall not exceed in all the sum hereby appropriated to the treasurer of said board for the purpose of carrying out the provisions of this act. (The unified accounting plan adopted by chapter 433, laws of '1901, will modify the above section.
Ch. 318, sec. 8, p. 587, L. 1899.
Liability of members and state.
No member, whether'an officer or otherwise shall be personally liable for any debt or obligation which may be created or incurred by said board, and nothing in this act shall be so construed as to create any liability of the state, direct or indirect, for any obligation incurred, nor for any claim for aid or for pecuniary assistance from this state, in support or liquidation of any debts or obligations created by said board in excess of the appropriation made by this act.

Ch. 318, sec. 9, p. 588, L. 1899.

DISBURSEMENTS IN PAN-AMERICAN EXPOSITION COMMISSION
For the year ending Sept. 30, 1900.

## STATE BOARD OF COMMISSION FOR ST: LOUIS WORLD'S FAIR, 1903.

The commissioners of such board shall be appointed by the Governor. Its first meeting shall be held at such time and place as the Governor shall appoint.
Provision is made for the usual officers, adoption of by-laws and regulations being necessary.
No compensation is provided but the actual expenses of members for transportation and subsistence when they are necessarily absent from their homes shall be paid out of the money appropriated.
The treasurer of the board shall receive the moneys hereby appropriated. He shall execute and deliver to the Governor a bond in double the sum of appropriation with sureties approved by the Governor. Money shall be paid out by the Treasurer only on the order of the President of the board countersigned by the Secretary, and showing the proper cause for which the same was paid out.
Accounts for traveling expenses and subsistence shall have attached thereto the affidavit of the claimant that such expenses have been actually incurred and the Treasurer shall from time to time make a report to the Governor of the expenditures of the board and the receipts at any time upon the written request of the Governor. The Secretary of State shall audit all receipts and expenditures within six months after the close of the World's Fair.

Ch. 297, L. 1901.
Sec. 7. This act outlines the duties of the commissioners in connection with providing a building or buildings for the state of Wisconsin upon the exposition grounds. $\$ 25,000$ is appropriated by this act to carry out its proposition.

Sec. 7, Ch. 297, L. 1901.
Sec. 9. Relates to the amount of appropriation herein made.
Sec. 9, Ch. 297, L. 1901.
Ch. 433 , L. 1901, will modify the provisions of this act with respect to the auditing and accounting. See ante, p. 368.

## BOUNTY ON WILD ANIMALS KILLED.

Section 1628, page 1182: This section directs the Secretary of State to audit claims made by counties in accordance with the provisions of law for refund of money paid in bounties.

The disbursements on this account during the year ending September 30, 1900, were $\$ 9,786.00$, per report of Secretary of State, page 198.

## STATE BOARD OF AGRICULTURE.

While there has been some question in the past as to whether this Board was a state board in the strict sense whose disbursements must be audited by the Secretary of State, it is assumed that it is embraced within the provisions of chapter 433 of the laws of 1901 and that after the system therein adopted has been established, all expenditures must be, after itemized vouchers have been filed with and approved and warrant signed by the Secretary of State as Auditor.

Heretofore the State Auditor has transferred to the Treasurer of the Board the entire appropriation made by the legislature and has not audited the final disbursements.

## STATE BOARD OF AGRICULTURE.

## Appointment, terms, vacancies.

The department of agriculture as heretofore established is continued. Its objects shall be the promotion of the interests of agriculture, dairying, horticulture, manufactures and domestic arts. The department shall be managed by a board to consist of one member from each congressional district and two from the state at large to be appointed by the Governor for a term of three years from the first day of January in the year of their appointment. Not more than two-thirds of the members of the board shall be of the same political party.
Vacancies shall be filled by the Governor for the unexpired term only:

Wis. Stats., sec. 1456, p. 1087.
Members' expenses.
The members of said board shall serve without compensation, but shall be reimbursed out of any funds set apart for their use by the state or otherwise received by them the sums actually, expended in the performance of their duties,

Wis. Stats., sec. 1457, p. 1087;

Annual meeting; officers.
The said board shall hold its annual meeting on the first Tuesday of March and at such meeting shall elect one of its members as President and one as Vice-President, and some person not a member as Secretary, who shall hold his office for one year unless sooner removed by the board. The State Treasurer shall be ex-officio treasurer of the board. Such officers shall perform such duties as usually pertain to such offices and such as the board may direct.
Wis. Stats., sec. 1458, p. 1087.
Rooms, fairs; by-laws; report.
The board may occupy such rooms in the capitol as may be assigned for that purpose by the Governor. They shall have sole control of the affairs of the department of agriculture and of all state fairs, and state ground fairs and may make such by-laws, rules and regulations in relation to the management of the business of such department and said fairs and the offering of premiums thereat as they shall from time to time determine. The board shall make a report of their action to the Governor on or before the first day of December in each year.

Wis. Stats., sec. 1458a, p. 1088; amended by Ch. 48, L. 1899.
Use of funds; liability of state.
Whatever money shall be appropriated or otherwise received by said board for the department of agriculture shall be paid to the State Treasurer and be disbursed by him on orders signed by the President and Secretary of the board for such purposes, as in the judgment of the board, will best promote the interests committed in their charge.
No officer, clerk or employee of said board shall have any claim upon the state for any salary or expenses, except such as may be allowed by the board and paid from any appropriation or funds under their control; and the boárd shall not in any manner whatever be liable for any debt or obligation incurred or contract made by said board.

Wis. Stats., sec. 1458b, p. 1088.

## Appropriation.

The Secretary of State shall issue his warrant for the amount paid by the board for premiums at their last annual fair, on the presentation to him of the sworn statement of the Secretary of said board. On the presentation of such a statement, signed by the President and Secretary of the board, certifying that the sale of intoxicating liquors has been prohibited and prevented upon the fair grounds thereof during the last preceding fair, he shall annually draw his warrant for $\$ 4,000$.

Wis. Stats., sec. 1458c, p. 1088.

## Postage.

The board may procure necessary postage stamps and stamped envelopes for their official correspondence.

Wis. Stats., sec. 169, p. 258.
Stationery.
The Superintendent of Public Property shall issue to the Secretary of the board the necessary stationery for the board.

Wis. Stats., sec. 290, p. 301.

## Printing.

There shall be printed biennially 5,000 copies of the report of the board bound in cloth, provided the whole number printed shail not exceed 400 pages.

Wis. Stats., sec. 335e, p. 315; amended by Ch. 339, L. 1901.
The Secretary of the board is authorized to collect information as to crops as herein provided. Also condition of health and value of farm animals and all other information which he deems of practicable value to the interest of the state.
He shall report biennially, statements of which report shall be distributed to the farmers and others interested in the state.
The Commissioners of Public Printing shall in connection with the other printing of this board, supply the Secretary with necessary blanks for this work and cause to be published in pamphlet form the report provided that not more than 5,000 copies of any part are printed.

Ch. 79, L. 1901.
This act appropriates to the State Board of Agriculture $\$ 25,000$ without specifying for what purpose the money is to be expended but requiring the board to account to the Governor. Ch. 355, L. 1901.

## DISBURSEMENTS TO STATE BOARD OF AGRICULTURE

For the year ending Sept. 30, 1900.
Appropriation paid to the treasurer ........................................... $\$ 4,00000$
Ten per cent. premiums paid to the treasurer..............................2,038 78
Printing, including cost of paper and waste, per report Commissioners of Printing

1,581 94

Expressage . .................................................................................... 19434
Stationerý, per report Superintendent Public Property $\ldots \ldots \ldots \ldots \ldots \ldots$.
Total . ................................................................................ $\$ 8,574$ 41•
Pages 204, 488 and 500 in the report of the Secretary of State for the year ending Sept. 30, 1900.

## NORTHERN WISCONSIN STATE FAIR.

The Northern Wisconsin State Fair, the La Crosse InterState Fair and county agricultural societies are aided by the state but are not state organizations and their disbursements are not regarded as under the control of the Auditor.

NORTHERN WISCONSIN STATE FAIR.

State aid to; conditions of.
Upon the presentation to him of the sworn statement of the President and Secretary of the Northern Wisconsin State Fair, heretofore established at Chippewa Falls, that said organization at its last annual fair or exhibition prohibited and excluded from its fair grounds and premises over which it had control all gambling and gambling devices, and that said organization had not authorized or allowed any spirituous, malt, ardent or intoxicating liquors or drinks to be sold on said grounds during the year, the Secretary of State shall draw his warrant in favor of the Treasurer of the society for $\$ 3,250$ and 10 per cent. of the amount of premiums actually paid by the said fair at its last preceding annual fair; in computing the amount on which such percentage is to be paid there shall not be included more than $\$ 1,000$ of premiums or prizes for trials or exhibitions of speed of all classes in any year; provided, that no other agricultural society in Chippewa county shall receive any money from the state.

Wis. Stats., sec. 1458d, p. 1088, amended by ch. 356, L. 1901.

## DISBURSEMENTS TO NORTHERN WISCONSIN STATE FAIR

For the year ending Sept. 30, 1900.


Page 204 in the report of the Secretary of State for the year ending Sept. 30, 1900.

## COUNTY AGRICULTURAL SOCIETIES.

State aid to; conditions of.
There shall be paid within ten (10) days after February first out of the treasury to each organized agricultural society and industrial association, other than the Wisconsin state fair, 40 per cent. of the total amount of premiums paid thereby during the preceding year; provided, no society, which received from the state in $1888 \$ 200$ and 10 per cent on the amount paid for premiums, shall receive less than $\$ 200$, that 40 per cent. shall not be paid on more than $\$ 3,000$ for premiums to one society or association and that in computing the amount on which it is to be paid there shall not be included more than $\$ 1,000$ of premiums paid on trials or exhibitions of speed of all classes in any one year:

1. Such society or association shall have held an annual fair or exhibition during the previous year.
2. There shall be presented to the Secretary of State a sworn statement of its President and Secretary that said society at its annual fair, had prohibited and excluded from its fair grounds and all adjacent lands under its authority all gambling devices whatsoever.
3. It shall have received into its treasury in cash during the preceding year not less than $\$ 200$ from the sale of membership, admission tickets, subscriptions and other sources than from the state.
4. It shall have published in some newspaper in the county a condensed statement of its principal acts and doings for the year, etc. Such report shall be verified by the oath of the Secretary and a certified copy thereof be deposited with the Secretary of State and one with the Secretary of the board of agriculture on or before February 1 of each year. All money shall be paid to the Treasurer of the society and only upon the receipt of the Treasurer of each countersigned by the Secretary thereof.

Wis. Stats., sec. 1463, p. 1091, amended by ch. 274, L. 1901.
disbursements to county agricultural societies
For the year ending Sept. 30, 1900.
Paid to various societies and associations . $\$ 52,25853$

Page 201 in the report of the Secretary of State for the year ending Sept. 30, 1900.

## LA CROSSE INTER-STATE FAIR ASSOCIATION.

Upon presenting to the Secretary of State a sworn statement of the officers of this association that it prohibited and excluded from its fair grounds at the last exhibition all gambling whatsoever and that it did not authorize any intoxicants to be sold on the said fair grounds during the said fair, the Secretary of State shall during the first ten days of February draw his warrant for the Treasurer of the society for $\$ 2,000$ and 10 per cent. of amount of premiums paid at last preceding fair.

In computing the amount on which such percentage is to be paid only $\$ 1,000$ of prizes for speed exhibition shall be included. This aid is in lieu of what said association might otherwise be entitled to by law, provided that no money shall be paid under this act in any year in which an exhibition is not held.

$$
\text { Ch. 337, L. } 1901 .
$$

## THE COMMISSION OF THE INTER-STATE PARK OF THE DALLES OF THE ST. CROIX.

The Governor is authorized to appoint a commission of three persons to be known as the Commission of the Inter-state Park of the Dalles of the St. Croix.
Within ten days after their appointment they shall take oath and file with the Secretary of State and their terms shall be two years.
They shall organize and elect a chairman from their number.
They shall continue the work of acquiring title to lands as herein provided in an inter-state park.
They may make contract for the purchase and donations of lands - as provided in section 5.

Each commissioner shall receive $\$ 5$ per day and actual expenses for time actually served not exceeding 20 days in any one year.
$\$ 7,500.00$ is hereby appropriated.
Ch. 305, L. 1901.
Note.-Chapter 102, laws of 1899 provides for the progress of work of acquiring lands for an Inter-state Park making an appropriation of $\$ 6,500$ therefor. See page 139 of the session laws of 1899.

## BOARDS OF MEDICAL EXAMINERS, DENTAL EXAMINERS, AND PHARMACY.

These Boards are authorized by law to exist for the purposes named in the acts creating them but are not an expense to the state as all expenditures are made out of fees which the Boards are empowered to collect for making examinations, etc. While they are required to report to the Governor, the state does not seek to supervise their disbursements or otherwise control their business operations.

## STATE BOARD OF MEDICAL EXAMINERS.

Appointment, terms, vacancies.
The Governor shall appoint a board of medical examiners consisting of seven (7) members to be known as the "Wisconsin Board of Medical Examiners." Such appointments shall be made from three separate lists containing ten names each presented every second year to him, one list by the Wisconsin State Medical Society, one by the Homeopathic Medical Society of the State of Wisconsin, and one by the Wisconsin State Eclectic Medical Society. In case any one of said societies fail to present such list of names, the Governor may fill the vacancies by the appointment of a sufficient number of reputable practitioners of medicine who shall be graduates of a recognized medical college and representative of the different schools of medicine as hereinafter provided. All appointments shall be made for four years and until their successors are appointed; and vacancies may be filled by appointments from the lists last filed previous to the occurrence thereof, preserving the proportion of the different schools of medicine as herein required. No person shall be appointed to serve more than two terms in succession and no member of any medical college shall be appointed on said board. Three of the appointees shall be allopathic, two homeopathic and two eclectic physicians.

Wis. Stats., sec. 1435, p. 1075.

Officers, meetings and records.
The board shall elect a President, Secretary and Treasurer who may administer oaths as herein provided.

This section further provides for regular and other meetings and how records and registers shall be kept.

Wis. Stats., sec. 1435a, p. 1075.

Examinations; tees.
Provisions for examinations and fees therefor.
Wis. Stats., sec. 1435b, p. 1075, amended by ch. 306, L. 1901.

## Registration.

Physicians and surgeons to register with the board.
Ch. 87, sec. 1, p. 122, L. 1899.

Provision as to books of registration.

Ch. 87 , sec. 1, p. 122, L. 1899.

When registration made and fee for same.
Registration when to be made.
Fee of $\$ 2.00$ to be paid by the applicant, then to issue certificate of registration. Said certificate to be filed with the county clerk.

Ch. 87, sec. 2, p. 122, L. 1899.

Disposition of fees received for filing.
All money received by the said board in payment of the registration fees herein required shall be kept by the treasurer thereof. Out of the funds so coming into their possession, the members of said board may receive all legitimate and necessary expenses, and for their services a sum to be determined by the board not exceeding $\$ 5.00$ each for each day actually spent in attending to the business of the board. The secretary of the board shall receive, in addition to his present salary, a compensation for the work herein required of him to be fixed by said board, not to exceed $\$ 500$, such compensations and expenses shall be paid from the fees received by the board and no part thereof shall be paid out of the state treasury.
It shall be the duty of the said board to make a report of the proceeding under this act to the Governor at the end of each biennial period, together with an account of all moneys received and disbursed by them.

Ch. 87, sec. 5, p. 124, L. 1899.
U. S. army and navy surgeons exempt.

Provides for exemptions of army and navy surgeons, etc.
Ch. 87, sec. 3, p. 123, L. 1899.

District attorneys and board to institute actions.
Provides how actions under this act are to be brought.
Ch. 87 , sec. 7, p. 124 , L. 1899.

# STATE BOARD OF DENTAL EXAMINERS. 

Appointment ; terms; vacancies.
The State Board of Dental Examiners, as heretofore constituted, is hereby continued. It shall consist of five practicing dentists, at least three of whom shall be members of the Wisconsin State Dental Society.
The members of such board shall be appointed by the Governor for the term of five years and until their successors are appointed.
Vacancies shall be filled by the Governor for the unexpired portion of the term. It shall be the duty of said board to enforce the provisions of this chapter.

Wis. Stats., sec. 1410e, p. 1061.

Officers; meetings; record.
The officers of the board shall be a President and Secretary, who shall be chosen from the members thereof in such manner and for such terms as may be provided by the by-laws. At least one meeting of the board shall be held each year at such time and place as may be fixed; other meetings may be held when and where the board may determine. A majority of the members shall constitute a quorum. The Secretary's record of the proceedings of the board shall be open to public inspection at all reasonable times.

Wis. Stats., sec. 1410f, p. 1061.

Registration; list of persons registered.
Every person who was engaged in the practice of dentistry in this state on the 30th day of September, 1885, may continue such practice without incurring any of the liabilities imposed by this chapter by annually causing his name and residence or place of business to be registered by said board, who shall keep a book for that purpose.

Wis. Stats., sec. 1410 g, p. 1061.
Examination; license.
Any person who may desire a license may appear before the Board of Dental Examiners at any regular meeting and be examined with reference to his knowledge and skill in dental surgery;
if such examination shall be satisfactory the board shall issue a license to practice dentistry; provided that the board shall li. cense without examination, upon the payment of $\$ 1$, any regular graduate of an incorporated and reputable dental college which requires that candidates for graduation shall attend two full courses of lectures of five months each, the last of which courses shall be attended in the college which issued the diploma. All licenses shall be signed by a majority of the board and be attested by the President and Secretary. Every license shall be prima facie evidence of the right of the licensee to practice dentistry.

Wis. Stats., sec. 1410h, p. 1061.
Fees; expenses; report.
The board may charge each person applying or appearing for examination for license to practice dentistry a fee of $\$ 10$ and for each registration $\$ 1$. Out of the funds which may be so received the members of the board may be reimbursed their legitimate and necessary expenses incurred in attending their meetings and in discharging their duties.

The excess of receipts over the disbursements shall be held by the Secretary to meet future expenses of the members.

The board may require the Secretary to give a bond in such terms as they may direct.

An annual report of the proceedings of the board, containing an account of all moneys received and disbursed pursuant to this chapter, shall be made to the Governor on the 30th of September.

Wis. Stats., sec. 1410j, p. 1062.

## STATE BOARD OF PHARMACY.

Appointments, members, terms, and vacancy.
The board as heretofore constituted, is continued and the rules, regulations and by-laws thereof, not inconsistent with this chapter shall continue in effect. Such board consists of five members, resident pharmacists; they shall be appointed for five years and until successors qualify.

The' Wisconsin Pharmacy Association shall annually elect three pharmacists, who shall be certified to the Governor from which number or those previously certified, the Governor shall fill vacancies.

Wis. Stats., sec. 1495 b, p. 1055.

Meetings; officers; prosecutions.
The board shall hold an annual meeting in March. Three members constitute a quorum. At such meeting a President, Secretary and Treasurer shall be elected for one year. The Secretary and Treasurer may or may not be members of the board. By-laws may be made by the board. Meetings shall be held at least once in three months for the examination of applicants and pharmacists and assistants and other business. Thirty day's public notice of meetings held for such examination shall be given.

Applicants who make application in accordance herewith, shall be examined, and if found competent shall be granted certificates. The board shall prosecute all persons violating this chapter, report annually to the Governor and Wisconsin Pharmacy Association and give therein a record of its proceedings, the receipts and disbursements and the names of all persons as pharmacists or assistants. The Secretary shall keep a record of board proceedings in a book in which he shall enter names and places of business of all persons. He shall receive salary fixed by board and the amount expended for traveling and other expenses on official duties and shall give such bond as the board may require.

The members shall receive $\$ 5.00$ for every day they are actually engaged and their actual expenses.

All disbursements of whatever nature or for whatever purpose shall be made from the fees received by the board. No part thereof shall be paid out of the state treasury. The Treasurer shall hold all moneys received in excess of the amount necessary to meet claims allowed as a fund from which to pay the expenses.

Wis. Stats., sec. 1409c, p. 1055.

Registration as pharmacist; registration as assistant.
Provides for registration and certificates for pharmacists and assistants.

Wis. Stats., sec. 1409 d, p. 1056 , amended by ch. 340 , L. 1901 ; sec. 1409e, p. 1057.

Actions, prosecutions of.
Provides how actions for penalties,etc. shall be brought.
Wis. Stats., sec. 1409h, p. 1058.

No disbursements paid by the state.

## FINANCIAL STATEMENT.

In exhibiting the classified receipts and disbursements of the state which follow, the fund accounts are not specified because those unfamiliar with the subject, reference to money being paid into or out of certain funds has proved to be confusing.

The entire net receipts and payments of money is therefore given after all transfers between funds have been eliminated.

## RECEIPTS IN THE STATE OF WISCONSIN

For the year ending Sept. 30, 1900.
Available for maintaining the state government and state institutions.

| Taxes: |  |  |
| :---: | :---: | :---: |
| A. | Annual tax levied for free high schools, charitable, reformatory and penal institutions....... | \$489,223 94 |
| A. | Suit tax | 5,130 00 |
| B. | One-mill tax for common schools. | 625,000 00 |
| C. | Special tax for University | 268,000 00 |
| D. | Special tax for normal schools | 190,000 00 |
|  |  | \$1,577,353 94 |
| E. | Legacy tax | 5,109 73 \$1,582,463 67 |
| Licens |  |  |
| F. | Railways | \$1,547,141 64 |
| F. | Palace and sleeping car companies | 16,900 31 |
| G. | Freight line companies | 1,150 99 |
| G. | Express companies ................................. | - 7,247 01 |
| G. | Telegraph companies | 11,312 15 |
| H. | Telephone companies | 21,426 73 |
| K. | Street railways and electric light companies.... | 8,322 06 |
| K. | Loan and trust companies | 2,261 50 |
| K. | Log driving and boom companies ................. | 1,292 72 |
| K. | Plank road companies | 52485 |
| L. | Insurance companies ............................... | 386,947 62 |
| M. | Hawkers' and peddlers' licenses | 10,900 45 |
| N. | Hunting licenses | 30,259 56 |

Interest, not including certificates of indebtedness:

| O. On school funds | \$82,458 13 |
| :---: | :---: |
| P. On University funds | 8,197 54 |
| Q. On Agricultural College funds | 8,197 54 |
| R. On normal schools fund | 53,394 34 |

Sundry items:
S. Charitable, reformatory and penal iinstitutions (contract work and sales)
\$83,812 76
T. U. S., by Governor (Wis. Veterans' Home and refunds Spanish-American war)
31,676 26
T. Notary fees . ........................................... 2,81300
T. Incorporation and office fees ,.................. . 31,18365
T. Insurance Commission fees .......................... 44,277 85
T. Bank Examiner's fees ................................ 6,715 00
T. Sales of books .......................................... 4, 488 ह0
T. Land department, sales and fees .................. 35,93210

$$
\$ 240,65912
$$

U. Tuition from normal schools ....................... $\$ 2,50354$
V. Tuition, farm sales, etc., University .............. 106,575 75
V. U. S. appropriation for University and Agricultural College
40,00000
$3,776,07236$
$\$ 389,73841$
W. Miscellancous
12,658 92
Total . ..................................................................... $84,178,46969$
The pages in the report of the Secretary of State for the year 1900, from which these figures have been taken, are here given:
A-142, 143; B-210, 211; C-215, 216; D-221, 222; E-152; F-144; G-145; H-145, 146; K-147; L-148, 152; M-153; N-229, 230; O-211, 212; P-216, 217; Q-219; R-222, 223, 224; S-152; T-153; U-223; V-216; W-153, 154.

## disbursements in the state of wisconsin

For the year ending Sept. 30, 1900.
The classification of expenses and references to pages in the report of the Secretary of State will be found under each of the departments in previous pages.

Executive Department . .......................................................... $\$ 15,78151$
Secretary of State and Auditor ...........................................................522 75

Treasury Department . ............................................................ 18,778 24
Attorney General's Department .................................................... 12,420 56
State Superintendent of Public Instruction ................................ 25,52547
Railroad Commissioner Department ............................................ 7,129 74
Insurance Commissioner Department ...................................................21,245 06


Advertising lands . ............................................................................................. 23880

Publishing bank reports .................................................... 29639
Bureau of Labor and Industrial Statistics ................................... 10,149 63
Factory Inspection Department ....................................................... 12,342 21
Dairy and Food Commissioner's Department.......................... 12,216 46

B. Reformatory, charitable and penal institutions .................... 694,746 32

Maintaining chronic insane in county asylums....................... 375,86062
Industrial School for Girls at Milwaukee ...................................... 13,000 00
Wisconsin Veterans' Home at Waupaca ................................. 93,989 40
State Board of Health ........................................................ 10,016 05
State Veterinarian and Veterinarian Sur'y....................................... 8,548 08
Commissioners of Fisheries .......................................................... 31,180 69
Fish and Game Warden .......................................................... 3,05241
Treasury Agent .......................................................................... 2,940 65
State Board of Arbitration and Conciliation ............................ 82678
Supreme Court ..... 39,307 55
State Law Library ..... 8,716 09
State Bar Examiners ..... 1,87252
Circuit Courts (judges and reporters). ..... 79,524 70
C. State Historical Society ..... 15,863 17
Free Library Commission ..... 8,751 56
W. N. G.-,
Adjutant General's Department $\$ 88,75546$
Quartermaster General's Department ..... 32,201 65
120,957 11
Spanish-American war items ..... 13188
U. S. war claims 1861-65, expense ..... 96566
Publishing Pub. printing notices ..... 69253
Deaf Mute Institution in cities ..... 25,749 64
Academy of Sciences and Arts ..... 539 65
County Training Schools for teachers ..... 2,500 00
Free high schools ..... 97,371 80
Manual training in high schools ..... 3,500 00
Wisconsin Dairymens' Association ..... 2,520 43
State Firemen's Association ..... 50000
Wisconsin Cheesemakers' Association ..... 86852
Wisconsin Cranberry Growers' Association ..... 25000
Wisconsin Horticultural Society ..... 2,796 18
Inspector of Apiaries ..... 37343
Prevention of San Jose scale ..... 29419
Miscellaneous ..... 162,939 60
D. Pan-American Exposition Commission ..... 3,000 00
Bounty on wild animals killed ..... 9,786 00
State Board of Agriculture ..... 8,574 41
E. State Board of Immigration ..... 5,207 71
Making statement of R. E. sales ..... 1,262 42
County agricultural societies ..... 52,258 53
Northern Wisconsin State Fair ..... 2,813 41
F. Expert Accountants under ch. 183, L. 1899-
G. D. Bartz, per diem and expenses ..... $\$ 1,79061$
S. W. Gilman, per diem and expense ..... 48806
G. Stationery account (being excess of purchases over distribution) ..... 76640
2,28771
Legislature
Geological and Natural History Survey ..... 7,769 23
Superintendent Public Property ..... 87,112 38
Common schools $\$ 844$ S0
109,459 00
$\$ 110,30380$
691,500 32
H. University and Agricultural College ..... *6,022 11*164,568 48*4,242 00
*418,446 84
*8,107 छ4
\$93,791 81
\$93,791 81
245,897 88
245,897 88
$\$ 601,47697$
$\$ 601,47697$
$\$ 601,47697$
Normal schools
Normal schools
\$339,689 69
\$339,689 69
\$339,689 69$\$ 801,80412$
Institute lecturers ..... 1,340 00
Deputy Fish and Game Wardens ..... 37,762 56 ..... 37,762 56
Total cost, including paper and stationery ..... $\$ 4,042,73603$
K. Less excess of "paper distributed" over paper purchased during the year ..... 5,738 04
Total net expenditures during the year. ..... \$4,036,997 99
*These sums are from pages 192, 193, 216, 217 and 488 of the report of the Secretary of State for 1900 , excluding transfer entries.

## Explanatory Notes.

A. This includes Land Protection, Forest Warden, Draughtsman, etc.
B. The difference between this total and that given by the Secretary of State is accounted for by the fact that certain bills are included in the accounts by the Board of Control the closing days of the fiscal term that do not get into the accounts of the Secretary of State until later.
C. This is what the state aid amounted to in 1900 for this society. Now the state appropriation is $\$ 10,000.00$ annually.
The society has an income other than that voted by the Legislature, though it is admitted that such additional income is the property of the state, the State Auditor has no report of it.
D. Included in this miscellaneous account shown by the report of the Secretary of State for 1900 , page 198 , is $\$ 150,000.00$ appropriation to the new Historical Library and $\$ 12,000.00$ to Sanborn and Berryman, "balance due on Statutes."
E. No appropriation was made for the Board of Immigration by the last Legislature and its work was terminated in January, 1901.
F. The plan of centralized accounting recommended by the expert accountants, under authority of Ch. 13, L. 1899, was adopted by the Legislature in the enactment of Ch. 433, L. 1901. The expense under Ch. 133, L. 1899, terminated in April, 1900.
G. In showing the cost of each department the stationery distributed by the Superintendent of Public Property has been considered, and this item shows the expense purchase of stationery; over and above the amount shown is distributed. (See page 500 in the report of the Secretary of State for 1900.)
H. This does not include $\$ 79 ; 000$ borrowed by the University.
K. In the cost of each department the paper used and waste sustained in printing reports, etc., and furnished to the State Printer by the Commissioners of Printing, has been considered, and this item is necessary to harmonize the value of paper distributed from paper room with purchases of paper during the year ending Sept. 30, 1900. (See pages 191 and 488 in the report of the Secretary of State for 1900.)
Paper (and waste thereon), as distributed, paper purchased and advertising bids for same, $\$ 5,738.04$.

The foregoing compilation was prepared by Stephen W. Gilman, attorney-at-law, Madison,' Wis., while holding the position of Deputy Commissioner of this Bureau.

## PART VI. ${ }^{1}$

## Women Employed in Factories.

During the past year this bureau has been endeavoring to gather such data as might tend to show in a general way the wage-earning capacity and the working environment of the women and girls employed in the factories of Milwaukee and certain other cities of the state. The information so obtained is presented herewith in both tabular and descriptive form and it is believed that it covers the subject in a fairly comprehensive way, though with an industrial life so extensive and varied as that which máy be found in Wisconsin it proved impossible in the time allowed and with the present resources of the department to encompass the whole field or to dwell in particular upon any special portion of it. The report is rather the beginning of a proposed series of studies or investigations into the lives of the working women of Wisconsin and should be read in that light. No attempt has been made to solve any problem or to offer any remedy for existing ills. That which is given is merely a statement of what was seen and heard in the course of many hours spent in factories. The entire investigation was personally conducted and nothing appears in the report that has not received individual attention. The method by which the data was gathered was the simple and direct one of going to the workers themselves. Certain printed blanks with questions pertinent to the worker's life were prepared and on the

[^72]replies to these the tables that form part of the report are based. The descriptive matter is taken from personal notes. The two supplement each other, though for various reasons the descriptive portion covers a wider range of territory than do the tables. This is largely due to the difficulty experienced in getting the workers to fill out the blanks. In no case was a blank filled out by any one else than the worker herself accepted and this lessened the number obtained to those made out by workers who had been personally interviewed. In all 769 blanks, representing that number of girls employed in 34 different lines of factory work were thus obtained, while personal notes were taken of forty-five kinds of employment. In all 112 establishments were visited, many of them several times, and all of them at least twice. The plan pursued was to make an inspection of each place in company with the manager or foreman or someone delegated to the task of guide. In this way the work actually being done was noted and at the same time the views of those in authority were obtained with more or less definiteness. This inspection was followed by a visit at the noon hour when, relieved from their duties, the workers were generally found willing to discuss matters relative to their work and their lives. It is believed that in this way something of each point of view was secured, and that the report can not be accused, therefore, of leaning too much to either one side or the other. In addition to information gathered in both these ways much was gained in personal visits to workers outside of their business hours, though not enough of this was done to make it seem wise to draw any conclusions as to the home life of the factory class. The investigation has been strictly confined, therefore, to what women are doing in factories, what they are being paid for doing it and what they themselves believe regarding their work and its possibilities for advancement. An effort was made to gain some idea of their ambitions and also of their attitude towards certain other lines of work. As it is generally believed that to the extension of factory life for women is due the lack of workers in domestic service, an endeavor was made to reach the factory worker's point of view regarding housework. That particular portion of
the work, taken in connection with the special report on domestic service which appears in the present volume, is believed to be of unusual interèst.

In selecting the employments considered in the report no effort was made to pick out the most arduous or the smallest paid. It was intended rather to reach as many varying lines of work in which women are engaged as possible, and to present the facts so that they might truthfully reflect the actual conditions. Most of the work was carried on in Milwaukee, since the greatest number of factories are centered there, but certain other cities in the state, such as Sheboygan, Kenosha, Oshkosh, Appleton, Neenah and Menasha were visited, as in each of these places factory life for women presents certain distinctive aspects. It must be remembered that only factory work was considered. Such employments as millinery, dressmaking, laundry work, telephone service, hotel service and so on were reserved for later inquiries, and the present one was confined to factory work exclusively.

The lines of employment in which schedules were obtained were:

1, bag factories; 2, box factories; 3, blind factories; 4, book binderies; 5 , brass foundries; 6 , breweries; 7, candy factories; 8, chair factories; 9, cigar box factories; 10, clothing factories; 11, enameling works; 12, envelope factory; 13, foundries; 14, fur garment factories; 15 , glove factories; 16 , grass twine factory ; 17, hammock and fly net factories; 18, hosiery factory; 19, knitting factories; 20, lace paper factory; 21, paint factory; 22, paper bag factory; 23, paper mills; 24, papier mache factory; 25 , shirt factories; 26 , shoe factories; 27 , soap factory ; 28, straw works; 29, tin ware factories; 30, tobacco packing factories; 31, underwear factories; 32, toy factories; 33, trunk factory; 34, woolen mills.

In addition to these the employments covered by the notes include: 1, artificial flower and feather factory; 2, casket factory ; 3, cotton batten mill; 4, dyeing and cleaning works; 5, lye works; 6 , leather works; 7 , match factory; 8 , pearl button factory; 9, pipe covering factory; 10, rag shops; 11, watch factory.

Some of these have been combined under one head, and as in each factory a number of different employments were carried on, the investigation really represents a much larger field than would appear by the figures quoted above.

That part of the data which was thus obtained on the schedules and which admitted of tabulation, has been compiled into about forty tables, and these tables, together with a brief analysis of each, are presented first in order in this part. That part again which was obtained through personal observations and which did not admit of tabulation is given under "Personal Observations," immediately after the tables. The notes in this case have been classified by industries, and may be regarded as supplementary to the tables.

BIRTHPLACE OF EMPLOYES.

| Classification. | Number. | Per cent. |
| :---: | :---: | :---: |
| Wisconsin | 549 | 71.69 |
| Other U. S. States |  |  |
| Germany . . . ${ }^{\text {a }}$ | $\stackrel{98}{5}$ | 12.74 |
| Russia . | ${ }_{9}$ | 1.17 |
| England | 8 | 1.04 |
| Other European countries | 14 | 1.82 |
| Total | 769 | 100.00 |

It is interesting to note that in spite of the large foreignborn population of Wisconsin, over three-fourths of the wageearning women reported in the present investigation were native born. Of the total of 769 coming under the scope of this inquiry, 549, or 71.39 per cent., were born in Wisconsin, and 86 , or 11.19 per cent., in other states of the union, making a total of 635 , or 82.58 per cent., who are Americans by right of birth. The proportion would probably have been still higher if a larger number of those industries calling for a higher degree of technical skill had been included in the investigation, instead, as was the case, of the inquiry being confined almost exclusively to those trades in which comparatively little skill is required. Such occupations offer the most profitable field for girls and women of the emigrant class, since the tasks are easily learned, and it would not have been surprising if a
predominance of foreign-born workers had been found among those reporting. As it proved, but 134, or 17.42 per cent., were born outside this country, and it is significant that of this number 98 , or 12.74 per cent. of the total number reporting, were born in Germany, a proportion higher by 12, or 1.55 per cent., than that borne the whole by the number of those born in all the other states. Russia claims the next largest number, 9 , or 1.17 per cent., and, curiously enough, 8 , or 1.04 per cent., were born in England. But 5, or . 65 per cent., were born in Poland, but this can scarcely be taken as indicative of actual conditions since many occupations are almost wholly in the hands of Polish born girls and women, while in nearly every industry included in the investigation Poles are to be found. The small proportion represented in the table is due rather to the fact that greater difficulty was experienced in obtaining information from Polish girls than from any other class. In many cases where the native born and German girls readily answered inquiries, not a girl of Polish birth could be persuaded to even examine the schedules, much less respond to their questions. Fourteen of the whole number of 1.82 per cent. were born in countries other than those cited, including Switzerland, Hungary, Wales, Holland, Norway, Austrịa and Canada.

BIRTHPLACE OF FATHERS OF EMPLOYES.

| Classification. | Number. | Per cent. |
| :---: | :---: | :---: |
| Wisconsin | 103 | 13.39 |
| Other U. S. States | 52 | 6.76 |
| Canada ${ }^{\text {Denmare }}$ | 9 | 1.17 |
| England. | 15 | . 91 |
| Germany . .... | 465 | 1.95 60.08 |
| Holland. | 4 | 1.04 |
| Ireland. | 25 | 3.25 |
| Norway | 7 | ${ }^{3} .91$ |
| Poland | 21 | 2.73 |
| Russia. | 9 | 1.17 |
| Other European countries | 51 | 6.64 |
| Total | 769 | 100.00 |

BIRTHPLACE OF MOTHERS OF EMPLOYES.

| Classification. | Number. | Per cent. |
| :---: | :---: | :---: |
| Wisconsin | 115 | 14.96 |
| Other U. S. States | 58 | 7.54 |
| Canada. ....... | 8 | 1.04 |
| England. | 7 | . 91 |
| Germany | 454 | 59.04 |
| Holland . | 7 | . 91 |
| Ireland. | 22 | 2.86 |
| Poland | 22 | 2.86 |
| Russia | 97 | ${ }_{8} .17$ |
| Other European countries | 67 | 8.71 |
| Total | 769 | 100.00 |

Comparing the table showing the nativity of parents of the workers reporting with that showing the birthplace of the workers themselves, it will be seen that the figures as to native and foreign born are reversed, a large proportion of the parents having immigrated to this country. Taking up the table relating to the nativity of the fathers of employes reporting it will be seen that only 103 , or 13.39 per cent., were born in Wisconsin and but 52 , or 6.76 per cent., in other states of the union, making a total of 155 , or 20.15 per cent., native born as contrasted to the 614 , or 79.85 per cent., born in foreign lands. Of this latter number, 462 , or 60.08 per cent., are natives of Germany, 25 , or 3.25 per cent., of Ireland, 21, or 2.73 per cent., of Poland, and 15, or 1.95 per cent., of England. Nine of the fathers were born in Russia, and the same number are Canadians, while eight, or 1.04 per cent., were born in Holland. Denmark and Norway have the same representation, 7, or 91 per cent. Fifty-one, or 6.64 per cent., came from other European countries. A greater proportion of the mothers were native born, 115, or 14.96 per cent., having been born in Wisconsin, and 58 , or 7.54 per cent., in other states, making a total of 173 , or 22.50 per cent., born in the United States. This makes 18, or 2.35 per cent., more native born mothers than native born fathers. Four hundred fifty-four, or 59.04 per cent., of the mothers were born in Germany, this being 8 , or 1.03 per cent., less than the number of fathers hailing from the Fatherland. Ireland and Poland are the birthplaces of an equal number of mothers, 22 , on 2.86 per cent., this being less
in each case than the number of fathers coming from those two countries. The number of workers reporting Russia as the birthplace of their mothers is the same as those giving that country as the birthplace of their fathers. Eight, or 1.04 per cent., of the mothers came from Canada, and 7 , or .91 per cent., from England, the last named number being the same for Holland. Other European countries were the birthplaces of 67 , or 8.71 per cent., of the whole number.

MACHINE OR HAND LABOI, ETC.

| Classification. | Number. | Per cent. |
| :---: | :---: | :---: |
| Operating machine | 245 | 31.86 |
| Hand labor, or mostly so | 495 | 64.37 |
| Forewomen | 27 | 3.51 .26 |
| Total | 769 | 100.00 |

Inquiry as to the kind of work done in the factory by women and girls shows that the largest number are employed in hand labor of one kind and another. Of the 769 employes reporting, 495 , or 64.37 per cent., were engaged in tasks that were either wholly, or in part done by hand, while 245 , or 31.86 per cent., operated machines. Twenty-seven, or 3.51 per cent., held positions as forewomen, and 2 , or .26 per cent., were inspectors. In many cases, however, the work of forewomen and inspectors was similar, as the forewoman herself is often merely an inspector with a few' additional duties as monitor. She in her turn is under the authority of a foreman. The percentage of forewomen and inspectors responding to the schedules is comparatively small, as many refused to fill out the blanks on the ground that they were intended for the workers, not for those in places of authority.

TIME EMPLOYED WITH PRESENT EMPLOYER.

| Classification. | Number. | Per cent. |
| :---: | :---: | :---: |
| 15 years or over ..................................... ${ }^{\text {a }}$ |  |  |
| 10 but under 15 years. | 32 | ${ }_{4}{ }^{.1 .16}$ |
| ${ }^{3}$ but under 5 years. | ${ }_{157}^{136}$ | 17.68 20.42 |
| $\frac{1}{1}$ but under ${ }^{\text {Under }}$, years. | ${ }_{210}^{157}$ | ${ }_{27}^{20.42}$ |
|  | 227 | 29.52 |
| Total | 769 | 100.00 |

Perhaps the most striking deduction to be made from the table dealing with the length of time in which the workers had been in the employ of the establishments where they were found at the date of the inquiry, is that there is a lack of permanency in the service they render. Of the whole number, 227, or 29.52 per cent., had been at work less than one year, while 210, or 27.31 per cent., had been at work over one year, but less than three years. This goes to substantiate, in a measure, the statement frequently made by employers to the effect that while women workers are more conscientious in the discharge of the tasks assigned them, they do not always have the ambition which leads a man to stay in a position until he has mastered its demands. Such complaint was not made, however, by employers of skilled labor, but by those depending upon the unskilled class for the performance of work more or less monotonous. It was asserted that in such line of employment girls drift from one place to the other, apparently seeking a relief from irksome routine. Where a higher degree of skill was necessary before a fair wage could be earned this was not the case and it can be said safely that the lower the skill required and the more monotonous the task, the greater is the impermanency in the service of the worker.

From these two numbers, which represent 56.83 per cent. of the whole, the scale rapidly falls. But 157 , or 20.42 per cent., had been at work three years but less than five; 136, or 17.68 per cent., five years, but under ten, and 32 , or 4.16 per cent., ten but under fifteen years. The classification ends with those who had worked for the same employer over fifteen, and these numbered 7 , or but .91 per cent., of the entire number reporting.

OCCUPATIONS IN WHICH PREVIOUSLY EMPLOYED.

| Classification. | Number. | Per cent. |
| :---: | :---: | :---: |
| Dressmaking, sewing | 12 | 1.56 |
| Factory work ...... | 237 | 30.82 |
| Housework (domestic) | 148 | 19.25 |
| Miscellaneous | 58 | 7.54 |
| Office work | 25 | 3.25 |
| No previous occupation | 289 | 37.58 |
| Total | 769 | 100.00 |

The sources of supply from which the factory draws its women workers are indicated in the table above, which deals with the various occupations in which the women and girls concerned in this report were employed previous to engaging in that in which they were found at the time of the inquiry. The most noticeable fact, here demonstrated, is that the greatest number of workers responding to the schedules had had no previous occupation. They numbered 289, or 37.58 per cent., of the whole. This may seem to contradict the inference of instability of service, drawn from the preceding table, but such a conclusion could not be reached with any surety from the data on hand. It rather indicates that a very large number of those responding were young girls, often fresh from the lower schools and at the threshold of their working career. This can not be accurately proved, as no record of the ages was taken, but by far the greater number of respondents were in their teens. What really serves to strengthen the impression of the factory girl's wandering proclivities is the fact that 237 , or 30.82 per cent., had worked in other factories than the ones in which they were found, almost as large a number as those who had done no work at all.

Next in point of number to those coming from other factories are the girls who were engaged in housework before going into the factory, and who number 148 , or 19.25 per cent. Twenty-five of 3.25 per cent. had done office work, and 12 , or 1.56, had been seamstresses or dressmakers. The remaining 58 , or 7.54 per cent., had been engaged in a variety of occupations, including laundry work, teaching, millinery, clerking, telephone operating and nursing.

DO PRESENT DUTIES REQUIRE SPECIAL SKILL AND ARE THEY DIFFICULT TO LEARN'?

| Classification. | Number. | Per cent. |
| :---: | :---: | :---: |
| Special skill is required $\qquad$ Little special skill but some practice required | 240 | 31.21 |
|  | 529 | 68.79 |
|  | 769 | 100.00 |

TIME REQUIRED TO BECOME FAMILIAR WITH PRESENT DUTIES.

| Classification. | Number. | Per cent. |
| :---: | :---: | :---: |
| 1 year or more | 57 | 7.41 |
| 6 months but less than 1 year | 42 | 5.46 |
| 1 month but less than 6 months | 159 | 20.68 |
| 1 week but less than 1 month | 170 | 22.11 |
| A nominal time only | 341 | 44.34 |
| Total | 769 | 100.00 |

The two tables immediately preceding are so closely related that it has been deemed best to consider them together rather than separately. They have to do with the quality of the work done by women and girls in factories and with the time required for the workers to master the details of the special tasks assigned to them. The statement heretofore made in this report that a large proportion of those responding to the inquiry belonged to the unskilled class is further borne out by the table in which the replies to the question, "Do your present duties require special skill and are they difficult to learn?" have been classified. But 240 , or 31.21 per cent., lay claim to doing skilled work, the other 529 , or 68.79 per cent., being employed in occupations that, while requiring more or less practice, call for the exercise of but little skill, a fact corroborated by the observation of the inspector who conducted the inquiry.

This is further shown by the table presenting the various lengths of time required to attain proficiency. Nearly one-half the girls-in exact figures, 341 , or 44.34 per cent.-gave a merely nominal time. Many of these replied to the question, "How long did it take you to become familiar with your present duties?" by the statement "No time at all," and others put the time at from half a day to one week. All these replies were classified under the head of "nominal time." Those who had spent over a week, but less than a month, in learning their tasks
numbered 170, or 22.11 per cent. One hundred and fifty-nine, or 20.68 per cent., had spent over one month, but less than six months, in mastering the details of their work, and 42 , or 5.46 per cent., had put in over six months, but less than one year. Only 57 , or 7.41 per cent., were doing work that had required a service of one year or more before skill could be acquired. Under this latter classification were several who, after working two and three years, replied that they were "still learning."

ARE DUTIES TIRESOME OR EXHAUSTING?

| Classification. | Number. | Per cent. |
| :---: | :---: | :---: |
| Tiresome or exhausting | 164 | 21.33 |
| Not very exhausting ... | 104 501 | 13.52 65.15 |
| Not exhausting | 501 |  |
| Total | 769 | 100.00 |

In endeavoring to ascertain the worker's opinion of her task, the question "Are your duties tiresome or exhausting?" was asked ard it is rather surprising to note that 501 , or 65.15 per cent., answered this in the negative, and that but 164, or 21.33 per cent., admitted that the work required of them was in any way hard. The remaining 104, or 13.52 per cent,. qualified their" replies by saying that their duties were "not very exhausting." It is undoubtedly true that tasks that to the on-looker seem onerous are not deemed so by the workers themselves. Much depends upon the point of view. The factory worker, accustomed from childhood to a life of toil, accepts certain things as inevitable. Bodily weariness becomes so much a part and parcel of life that its absence would be more remarkable than its presence. Moreover, constant repetition tends to lighten the immediately exhausting effects of a task, whatever its effects may be in the end. Many girls, when personally questioned, said that their work was "not hard now," or that they had "grown used to it." Another fact to be taken into consideration is the girl's reluctance to put down on paper what might, if her employer should see it, be construed into a criticism of her job. Work is not so easily obtained that many risks can be taken and it is likely that many girls who might to themselves admit that their work demands too heavy a drain upon their strength, would not make such a statement to anyone else.

## ACTUAL WEEKLY EARNINGS OF EACH EMPLOYE; TOGETHER WITH THE TOTAL EARNINGS PER WEEK FOR ALL IN EACH CLASS, AND THE AVERAGE WEEKLY EARNINGS TO EACH EMPLOYE AT THE TIME OF REPORTING.

| Classification. | Number. | Total Wages. |
| :---: | :---: | :---: |
| Average of $\$ 11.70$ per week | 13 | \$152 10 |
| \$9.00 per week | 9 | 8100 |
| 8.50 per week | 4 | 3400 |
| 8.00 per week | 10 | 8000 |
| 7.50 per week | 14 | 10500 |
| 7.00 per week | 30 | 21000 |
| 6.75 per week | ${ }_{8}^{6}$ | 4050 |
| 6.50 per week | 8 | 5200 |
| 6.00 per week . | 65 | 39000 |
| 5.50 per week | 17 | 9350 |
| 5.00 per week | 76 | 11500 |
| 4.75 per week. | 46 | 21850 |
| 4.50 per week | 67 | 30150 |
| 4.25 per week | 36 | 15300 |
| 4.00 per week | 67 | 26800 |
| 3.75 per week | 35 | 12125 |
| 3.50 per week . | 57 | 19950 |
| 3.25 per week . | 32 | 10400 |
| 2.00 per week . | 91 | $\begin{array}{r}27300 \\ 57 \\ \hline\end{array}$ |
| 2.50 per week | 26 | 6500 |
| 2.25 per week | 5 | 1125 |
| 2.00 per week | 10 | 2000 |
| 1.75 per week | 2 | 350 |
| Total | 769 | \$3,528 85 |
| Average weekly wages to each employee |  | 4.59 |

ACTUAL HIGHEST WEEKLY EARNINGS EVER RECEIVED BY THOSE INCLUDED IN THIS INVESTIGATION, TOGETHER WITH THE TOTAL GARNINGS PER WEEK AND THE AVERAGE WEEKLY EARNINGS TO EACH PERSON.


ACTUAL LOWEST WEEKLY EARNINGS EVER RECEIVED BY THOSE INCLUDED, TOGETHER WITH THE TOTAL WEEKLY EARNINGS AND THE AVERAGE WEEKLY EARNINGS TO EACH EMPLOYE.

| Classification. | Number. | Total <br> Wages. |
| :---: | :---: | :---: |
| \$6.75 per week | 3 | \$20 25 |
| 6.00 per week | 4 | 2400 |
| 5.00 per week | -11 | 5500 |
| 4.75 per week | 13 | 6175 |
| 4.50 per week | 20 | 9000 |
| 4.25 per week . | 12 | 5100 8400 |
| 3.50 per week | 63 | 22050 |
| 3.zo per week | 26 | 8450 |
| 3.00 per week | 77 | 23100 |
| 2.75 per week | 32 | 8800 |
| ${ }_{2.25}^{2.50}$ per week | 97 | 23750 |
| 2.20 per week | 54 110 | 12250 |
| 1.75 per week | 52 | 9100 |
| 1.50 per week | 107 | 16050 |
| 1.25 per week | 24 | 3000 |
| 1.00 per week | 35 | 3500 |
| Total | 769 | \$1.905 50 |
| Average weekly earnings to each employee |  | 2.48 |

The three tables preceding show the wage-earning history of the 769 women and girls under consideration. The first table presents the actual weekly earnings of each employe at the time of the investigation, together with the total weekly earnings for all in each class and the average weekly earnings for each employe. The second table presents the actual highest weekly earnings ever received by these same persons, together with the total highest earnings per week for each class and the highest average weekly earnings for each individual. The third table covers the same thing from the standpoint of the lowest point in the wage earning history of each person, and the three, taken separately or together, offer some unusual and valuable information.

It will be seen that the greatest number of persons in any one class of the table dealing with the weekly earnings which were received at the time of the investigation are the 91 who were making $\$ 3.00$ a week, while the smallest number were the two who were receiving but $\$ 1.75$ for a week's services. It is interesting to note that in a scale which runs from $\$ 1.75$ to $\$ 11.70$, which is the average of the thirteen persons who received over $\$ 9.00$ a week, the greatest number of individuals is massed about midway between the two extremes, 611 being concentrated between the $\$ 6.00$ and $\$ 3.00$ points. The average weekly earnings for the 769 at the time of inquiry were $\$ 4.59$.

Somewhat significant is the fact that the second table, which deals with the highest weekly earnings ever received by the individuals under consideration, gives the average for each person as $\$ 4.74$, which is slightly above that of the average earnings at the time of the inquiry. This might be taken to indicate a depreciation in the wage earning capacity of the workers or a falling in the scale, though being but .15 per cent. it is not so large as to be alarming. It does, however, corroborate the informal statements of many of the older workers who, looking back over working careers of from ten to thirty years, declared that there has been a steady decline in wages in that time. The figures in the two tables would seem to justify their point of view. It will also be seen that the range of the scale in the second table is greater than that of the first, beginning with the same $\$ 1.75$ but going to $\$ 13.50$, which is the average of the twenty-five workers who at some previous period in their careers had earned over $\$ 9.00$ a week. The concentration between the $\$ 3.00$ and $\$ 6.00$ class is not so large, being 523.

Thz average for the lowest wages ever received by the 769 workers, as will be seen from the third table of this series, was $\$ 2.48$ a week, while the scale runs from $\$ 1.00$, which was received by thirty-five, to $\$ 6.75$, the latter being the lowest figure at which three of the workers began their careers. The greatest number in any one class in this table is the 110 who started at $\$ 2.00$ a week, although there are almost as many in the $\$ 1.50$ class, 107 having begun work at those wages. The concentration here is between the $\$ 1.50$ and $\$ 3.50$ points, 615 being included between those amounts, showing how very small is the wage paid girls at the beginning of their working careers.

[^73]

CLASSIFIED HIGHEST WEEKLY EARNINGS EVER RECEIVED, AS REPORTED BY THE EMPLOYES.

|  |  |  | Classification. | Number. | Pe. cent. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Less than $\$ 3.00$ | 36 | 4.68 |
| \$3.00 | but under | \$4.00 |  | 175 | 22.76 |
| 4.00 | but under | 5.00 |  | 222 | 28.87 |
| 5.00 | but under | 6.00 |  | 125 | 16.26 |
|  | but under | 7.00 |  | 89 | 11.57 |
| 7.00 | but under | 8.00 |  | 57 | 7.41 |
| 8.00 | but under | 9.00 |  | 23 | 5.99 |
| 9.00 | and over . |  |  | 42 | 5.46 |
|  | Total |  |  | 769 | 100.00 |

CLASSIFIED LOWEST WEEKLY EARNINGS.

| Classification. |  |  |  | Number. | Per cent. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Under $\$ 3.00$ per week |  |  |  | 519 | 67.49 |
|  |  |  |  | 166 | 21.59 |
| \$3.00 | but under | 5.00 |  | 66 | 8.58 |
| 5.006.00 | but under | 6.00 |  | 11 | 1.43 |
|  | but under | 7.00 |  | 7 | . 91 |
| 6.00 | Total |  |  | 769 | 100.00 |

In the three tables above the same facts have been reduced to smaller compass for the sake of easier study and comparison. Instead of giving the actual wages received by the workers, they are divided into approximate classes, all those making less than $\$ 3$ a week being classed together and all those making $\$ 9$ and over forming a separate class, while those earning various amounts between these two figures are separated into, six classes, viz.: those making $\$ 3$ but less than $\$ 4$ a week; those making. $\$ 4$ but less than $\$ 5$; those making $\$ 5$ but less than $\$ 6$; those making $\$ 6$ but less than $\$ 7$; those making $\$ 7$ but less than $\$ 8$, and those making $\$ 8$ but less than $\$ 9$.

Taking up, first of all, the table giving the earnings at the time of the investigation, it will be seen that the largest class is that making $\$ 4$ but less than $\$ 5$ a week. It numbers 216 , or 28.09 per cent., which is but a trifle more than the class making $\$ 3$ but less than $\$ 4$, the latter numbering 215 , or 27.96 per cent. of the total. The smallest class is that included under the head of those making $\$ 8$ but less than $\$ 9$, which forms but 1.82 per cent. of the whole. Those makng $\$ 9$ and over come to 2.86 per cent.

In the table giving the highest wages ever received by the workers, the largest class is that which made $\$ 4$ but less than
$\$ 5$ a week. It numbers 222 , or 28.87 per cent., while the smallest class, as was the case in the table giving present earnings, is that included under the head of those who made $\$ 8$ but less than $\$ 9$ and who numbered 2.99 per cent. Those $\cdot$ who made $\$ 9$ or over formed 5.46 per cent.

Grouped into the same classes, the facts presented in the third table, which gives the lowest wages received, are unusually interesting. The most significant, perhaps, is the great proportion of workers who started at less than $\$ 3$ a week. The actual number of the individuals is 519 and they form 67.49 per cent. of the whole or almost three-fourths of the whole. Those who began in the the $\$ 6$ class number but 7 , or .91 per cent.

COMPARISONS OF WEEKLY EARNINGS.

| Classification. | Time of Reporting. |  | Highest Wage. |  | Lowest Wage. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number. | Per cent. | Number. | Per cent. | Number. | Per cent. |
| Less than $\$ 3.00$ per week | 64 | 8.32 | 36 |  | 519 | 67.49 |
| Less than 5.00 per week | 495 | 64.57 | 433 | 56.31 | 7,1 | 97.66 |
| Less than 6.00 per week $\$ 6.00$ and over $\ldots . . . . . . .$. | 610 159 | 79.33 20.67 | 558 211 | 72.57 27.43 | 762 | 99.09 |
| \$6.00 and over ........... | 159 | 20.67 | 21 | 27.43 | 7 | . 91 |

In the last table of the series dealing with weekly earnings, the facts heretofore presented are still further reduced for the purpose of comparison. All the returns have been brought into four classes: Those making less than $\$ 3.00$ a week; those making less than $\$ 5.00$ a week; those making less than $\$ 6.00$ a week and those making $\$ 6.00$ a week and over. U̇nder these heads are arranged the figures showing the number of those reporting the wages they were receiving at the time of the inquiry as well as the highest and lowest wages they had ever received. The inferences are so obvious that there is no need of drawing far fetched deductions. The figures speak for themselves, but each class is worthy of separate and special analysis.

It will be seen that at the time of the inquiry there were but G4, or 8.32 per cent. receiving less than $\$ 3.00$ a week. Thirtysix, or 4.68 per cent., had never made any more than that and for 519 , or 67.49 , that amount was the lowest they had ever received. There is a uniform increase in all the figures of the next group which includes those making less than $\$ 5.00$ a week. At
the time of the inquiry these numbered 495 , or 65.37 per cent. For 433, or 56.31 per cent., the highest wage point ever reached was less than $\$ 5.00$ and 751 , or 97.66 , had started at less than that figure. The third group comprises those who had received less than $\$ 6.00$ a week. Out of the 769 reporting, there were 610 receiving less than $\$ 1.00$, a day at the time of the inquiry, or 79.33 per cent., which is more than three-fourths of the whole. The highest wages ever received by 558 , or 72.57 , came to less than $\$ 6.00$ a week and 762 , or 99.09 per cent., had begun below the $\$ 1.00$ a day point. Those who received $\$ 6.00$ a week or over at the time of reporting numbered 159 , or 20.67 per cent. The highest wages received by 211 , or 27.43 per cent., came to $\$ 6.00$ a week or over. The number beginning work at $\$ 1.00$ a day.or over was very small, being but 7 , or .91 per cent.

It will be seen readily that by far the greater number of women wage earners make less than $\$ 1.00$ a day and that a very large proportion come under the classification of less than $\$ 5.00$ a week. How few occupations offer women workers an opportunity of working up from the $\$ 1.00$ a day scale is intimated by the very few who gave that figure as their starting point. Usually, it will be seen, the $\$ 1.00$ a day, from being the starting point, is the goal which over three-fourths never reach.

YEARLY EARNINGS OF EACH EMPLOYE INCLUDED AND AVERAGE YEARLY EARNINGS TO EACH.

| Classification. |  |
| :---: | :---: | ---: | ---: |

The preceding table is devoted to net yearly earnings as distinguished from weekly wage rates. A wage earner's theoretio income, based on a given weekly wage, may be a very different thing from what the wage earner actually receives in the course of a year. Continuity of wage in factory work depends upon continuity of service, and the slightest deviation from the stipulated hours of work is likely to be reflected in the Saturday night envelope. When the factory closes down for repairs or when it is overtaken by the dull season that is likely to occur in every trade the worker's wages stop. They stop, too, when through her own or her family's sickness or misfortune she is kept at home. Many causes tend to contribute to the amount of lost time charged to her account during the year and though in many cases she can not be held responsible she is obliged to pay the penalty in the shape of a decrease in her annual income. This accounts for the difference between the amounts given by the workers under consideration as their yearly incomes and the amounts that could be obtained by multiplying the weekly wage rates by the number of weeks in a year.

In the table the actual yearly earnings as given by the workers themselves appear. It will be noted that the amounts run from $\$ 10$, which was the estimate of the incomes of four beginners who had been at work but a few weeks, to an average of $\$ 507$ for the seven workers who went over the $\$ 500$ mark. There were only seven also in the $\$ 450$ class, but the $\$ 400$ mark was reached by twenty-eight. Forty-four made $\$ 350$; sixtyseven, $\$ 300$; eighty-one, $\$ 250$, and ninety, $\$ 200$, the latter being the largest number in any one class. From there on there is a decrease in the number, though eighty-seven give $\$ 150$ as their yearly incomes and sixty-three, $\$ 125$. The average yearly income for each employe is $\$ 212.21$. This would give a weekly rate of $\$ 4.08$. The average weekly wage, it will be remembered, was $\$ 4.59$. In view of the explanation given above the disparity between the two rates is not remarkable. It shows, however, that what a workingwoman is supposed to make is not always what she actually receives.

CLASSIFIED YEARLY EARNINGS:

| Classification. | Number. | Per cent. |
| :---: | :---: | :---: |
| Under $\$ 100$ per year | 81 | 10.53 |
| $\$ 100$ but under $\$ 200$ | 254 | 33.02 |
| $\begin{array}{ll}200 & \text { but under } \\ 300 & 300 \\ \text { but under }\end{array}$ | 242 | 31.47 |
| 400 but under 500 | 139 | 18.08 |
| 500 and over | 46 7 | 5.98 .91 |
| Total . | 769 | 100.00 |

To present the same information in a more condensed form, the yearly incomes of these 769 workers have been classified and arranged in a shorter table which can be more readily studied. The unit of $\$ 100$ has been used for the classification, those receiving less than that amount forming one group, and those receiving $\$ 500$ and over, another. These represent the two extremes in the yearly incomes under consideration, and between them are four other groups: those receiving $\$ 100$, but under $\$ 200$; those receiving $\$ 200$, but less than $\$ 300$; those receiving $\$ 300$, but less than $\$ 400$, and those receiving $\$ 400$, but less than $\$ 500$. This covers in succinct form all the information given in more detail elsewhere. It will be noted that the largest number in any one group comes under the head of those making $\$ 100$, but less than $\$ 200$ a year, 254 being so classified. Almost as many, however,--in exact figures, 242 -made over $\$ 200$, but less than $\$ 300$. Between the $\$ 100$ and $\$ 300$ points almost twothirdsi of the entire number of workers responding, or 496 , are concentrated. The next highest number is that included in the group which made $\$ 300$, but less than $\$ 400$, and which numbers 139. Only seven made over $\$ 500$ and eighty-one fell below the $\$ 100$ mark.

## CLASSIFIED WEEKLY EARNINGS OF WOMEN EMPLOYED IN MANUFACTURING, AS REPORTED BY EMPLOYERS.

$\quad$| Industries. |
| :--- |

CLASSIFIED WEEKLY EARNINGS OF WOMEN EMPLOYED IN CERTAIN MANUFACTURING INDUSTRIES, AS REPORTED BY 'THE EMPLOYERS.


COMPARISON OF THE EMPLOYERS' AND EMPLOYES' REPORTS OF 'THE WEEKLY EARNINGS OF WOMEN' EMPLOYED IN CERTAIN MANUFACTURING INDUSTRIES.

| Classification. | Employer's Report. |  | Employees' Report. |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Number. | Per cent. | Number. | Per cent. |
| Under $\$ 5.00$ per week | 6,613 | 60.68 | 245 | 57.38 |
| \$5.00 but under \$6.00 | 2,162 | 19.84 | 56 | 13.11 |
| ${ }_{7}^{6.00}$ but under ${ }^{7.00}$ | 916 | 8.40 | 54 | 12.65 |
| 8.00 but under ${ }^{8}$ | 471 | $\stackrel{4.32}{2}$ | 33 | 7.73 |
| 9 and over ..... | 485 | 4.45 | 27 | 2.81 6.32 |
| Total | 10,899 | 100.00 | 427 | 100.00 |

To gain still another view of the wage conditions, certain typical industries were selected for a comparison of the wage scale as reported by both employers and employes. Employers in these industries reported on a total of 10,899 workers, taking their figures from their payrolls, while in the same industries 427 workers were personally interviewed as to the wages they were receiving. The facts as given by each side are presented separately in the first two tables and in the third are reduced and further classified for a closer comparison. In spite of the wide difference in the number reported by the employers and those who were seen personally it is interesting to note that there is no great variance in the facts themselves and that the percentage of those receiving the lowest class of wages is even higher in the returns from employers than from employes. For example, the employers report 60.68 per cent. as receiving wages below $\$ 5$ a week, while among the employes reporting, 57.38 received wages below that amount. For those between the $\$ 5$ and $\$ 6$ points the percentage from the employers' returns is slightly higher than as given by the employes, being 19.84 to the latter's 13.11 per cent.. The variance in the next two classifications is about 2 per cent., the employers reporting 12.72 per cent. as receiving wages between $\$ 6$ and $\$ 8$ a week and the employes 10.38 per cent. For the class between the $\$ 8$ and $\$ 9$ points the percentage is almost the same, being 2.31 for the employers and 2.81 for the employes. It is noticeable, also, that in reporting on those receiving the highest division of wages, $\$ 9$ and over, the employers report but 4.45 per cent. and the employes 6.32.

CHANGES IN WAGES.

|  | Classification. | Number. | Per cent. |
| :---: | :---: | :---: | :---: |
| Increase. |  | 430 | 55.92 |
| Decrease |  | $\begin{array}{r}59 \\ 280 \\ \hline\end{array}$ | 7.67 |
| No change |  | 280 | 36.41 |
| Total |  | 769 | 100.00 |

In reporting on changes of wages within their personal experience, 430 , or 55.92 per cent., said that in their opinion wages
had a tendency to constantly increase, while 59 , or 7.67 per cent., thought there was a movement in the opposite direction. Among those who held to the last named opinion were the older workers who had lived through financial panics with their subsequent depressions and who said that such events were always felt most keenly by the wage earners, whose incomes going down at such times did not speedily resume their former figure. On the other hand, 280 , or 36.41 per cent, said that they could see no change in either way.

COST OF BOARD ${ }^{1}$ AND ROOM PER WEEK.

| Classification. | Number. | Total per week. |
| :---: | :---: | :---: |
| Average of $\$ 4.25$ per week | 43 | \$182 75 |
| 3.50 per week | 28 | 9800 |
| 3.25 per week | 27 | 87.75 |
| 2.75 per week | 112 | 32600 |
| 2.50 per week | ${ }_{95}$ | 12375 |
| 2.25 per week | 45 | 24000 |
| 2.00 per week | 64 | 12800 |
| 1.75 per week | 14 | 2450 |
| 1.50 per week | 12 | 1800 |
| 1.25 per week | 5 | 625 |
| 1.00 per week | 6 | 600 |
| Total | 497 | \$1,352 25 |
| Weekly average to each employee |  |  |
| Yearly average to each employee |  | \$141 44 |

${ }^{1} 272$ persons did not report as to the cost of board.

In endeavoring to ascertain the cost of room and board for these workers it speedily developed that many could give no definite information on that point as they lived at home, paying no stated sum, but relinquishing all their earnings to their parents. Consequently replies were received from only 497 persons. It is safe to conclude that the other 272 lived at home, paying no board, at least in the ordinary way, and hence felt that the question did not apply to them. Wherever a girl had made a definite arrangement, by which she paid a stated sum for board and lodging, either under her parents' roof or in the home of a stranger, she readily made known the terms on which she secured them, so that the 272 who failed to reply would have done so,
presumably, if they had not been living at home. The table above shows the actual cost of board and lodging for the 497 reporting, and also the average cost of board for each person. The scale runs from $\$ 4.25$ a week, which was the average rate paid by 43 workers who regularly paid over $\$ 3.50$ a week, to $\$ 1.00$ a week, which six paid. The most popular rate seemed to be $\$ 3.00$, which 112 persons paid, and next to this came $\$ 2.50$, which 96 paid. Sixty-four paid $\$ 2.00$ and $45, \$ 2.25$. From there the scale runs down to $\$ 1.00$. The smaller amounts represent as a rule the girls' contributions toward the family maintenance rather than actual rates, for where girls were not bound by the custom of turning over their entire wages to their parents, they almost invariably paid down a certain proportion of their earnings, calling it the cost of their board and lodging, though in some cases it could not, of course, cover the actual expenses.

The average rate for the 497 was $\$ 2.72$ a week, or $\$ 141.44$ a year, and it is believed that these figures fairly represent the actual expense for the typical factory worker.

CLASSIFIED COST OF BOARD AND ROOM.

| Classification. | Number. | Per cent. |
| :---: | :---: | :---: |
| Under $\$ 2.00$ per week | $\begin{array}{r}37 \\ 250 \\ \hline 1\end{array}$ | 4.81 22.51 |
| \$2.00 but under ${ }^{\$ 3.00}$ but under 4.00 | 167 | 21.72 |
| ${ }_{4} .000$ and over ove. | $\begin{array}{r}43 \\ 272 \\ \hline\end{array}$ | 5.59 35.37 |
| N'ot reporting . ....... | 272 |  |
| Total | 769 | 100.00 |

In this table the weekly rate for board and lodging has been arranged in classificd form. Here it can be seen that 4.81 per cent paid less than $\$ 2.00$ a week; 32.51 per cent, $\$ 2.00$, but under $\$ 3.00 ; 21.72$ per cent. $\$ 3.00$, but under $\$ 4.00$, and 5.59 per cent. $\$ 4.00$ and over. The greatest number came in the class of those who paid $\$ 2.00$ but under $\$ 3.00$, and the smallest in the class of those who paid under $\$ 2.00$.

COST OF BOARD AND ROOM PER WEEK, DAY AND YEAR FOR THOSE WHO WERE BOARDING.

| Classiflcation. | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { persons. } \end{aligned}$ | Cost per week to each employe. | Cost per day to each employe. | Cost per year to each employe |
| :---: | :---: | :---: | :---: | :---: |
| 1 |  |  |  |  |
| 2 | ${ }_{28}^{43}$ | $\begin{array}{r}\$ 425 \\ 350 \\ \hline\end{array}$ | $\$ 0$ 50 50 | \$22100 |
| 3 | 27 | 325 | 46 | 16900 |
| 4 | 112 | 300 | 43 | 15600 |
| 8 | 45 | 275 | 39 | 14300 |
| 8 | 96 | 250 | 36 | 13000 |
| $\stackrel{8}{9}$ | 45 | -225 | 35 | 11700 |
| 10 | 64 | 200 | 29 | 10400 |
| 11 | 14 | 175 | 25 | 9100 |
| 12 | 12 | $1{ }^{150}$ | 21 18 | 7800 6500 |
| 13 | 6 | 100 | 14 | 5200 |
| Total and averages | $\$ 497$ | \$2 72 | \$0 39 | \$14144 |

In the third table relating to the cost of board and lodging the actual rates paid by the 497 reporting have been arranged by the day, week and year, the averages for each being given. It is shown that the average weekly rate is $\$ 2.72$, the daily rate $\$ .39$, and the yearly rate $\$ 141.44$. The table is so plainly arranged that it requires no explanation, and taken in connection with those immediately preceding it makes an interesting summary of this most necessary expense for all working women.

SHOWING THE RESPECTIVE NUMBER OF THOSE WHO HAD SAVED SOME MONEY, AND OF THOSE WHO HAD NOT BEEN ABLE TO SAVE ANYTHIN゙G SINCE BECOMING WAGE-EARNERS.

| Classification. | Number. | Per cent. |
| :---: | :---: | :---: |
| Saved some .. |  |  |
| Not saved any | 626 | 81.40 |
| Total . | 769 | 100.06 |

Considering all the facts that have been brought out previously in this report, it is not surprising to find that less than one-fourth of the number responding report any savings. The mere question, when personally put, was invariably provocative of mirth and a negative answer was made usually. This was true of every trade investigated and applies with equal force both to those workers who were receiving wages that could be
called fair and to those whose earnings fell below the average. Apparently the living expenses of the workers kept steady pace with their incomes. In many cases this could be accounted for by the custom referred to in connection with the cost of board and lodging. Girls who relinquish all personal right to their earnings, turning them into a common family fund, cannot well have individual savings. They may have a share in the co-operative accumulations of the family, but if they have it is usually an indefinite one not clearly recognized by the other members. It is significant that those who reported savings were for the most part workers living away from their homes or without family demands upon their incomes. Or they were girls who, while living at home, paid a definite sum for their board and handled what remained of their wage to please themselves. This might seem to suggest that the lack of ambition ascribed to girls in factories is due, to some extent at least, to the fact that they do not always enjoy a direct reward for greater exertion. "What difference does it make? I wouldn't get any more out of it if I should earn more," is a sentiment they frequently express in conversation. The period of betrothal sometimes ushers in a new era for the individual worker, who with a prospective home of her own in view is permitted to withdraw her usual contribution to the family support that she may save for the purchase of a trousseau. Where a girl is still unmarried at her twenty-first birthday a new arrangement is sometimes made by which she pays a stipulated amount for board, keeping all above that amount for herself, but in course of the present investigation many instances were encountered of women in their late twenties and thirties who were still, as when children, turning over to their parents their Saturday night envelopes.

The table above is based on the replies to the several ques tions: "Have you saved any money this year ?" "Were you able to save any money last year?" "Have you saved any money since becoming a wage earner?" Most of these answers, it will be seen, were in the negative, 626 , or 81.40 per cent., reporting not having saved anything, while 143 , or 18.60 per cent., had been able to put something by.

SHOWING CLASSIFIED SAVINGS OF THE 143 PERSONS WHO REPORTED HaVING SAVED SOME MONEY SINCE BECOMING WAGE-EARNERS.

| Classification. | Number. | Per cent. |
| :---: | :---: | :---: |
| $\$ 500$ or more . | 7 | 4.90 |
| 300 but less than $\$ 100$ | 13 | 9.09 |
| 100 but less than 300 | 53 | 37.06 |
| Less than $\$ 100$ | 70 | 43.95 |
| Total | 143 | 10000 |

This table shows the classified earnings of the 143 individuals referred to. The highest class is made up of those who had saved $\$ 500$ and over and these number 7 or 4.90 of the whole number reporting. Thirteen, or 9.09 per cent., had saved $\$ 300$ but less than $\$ 500$ and 53 , or 37.06 per cent., $\$ 100$, but less than $\$ 300$. Seventy, or 48.95 per cent., had saved sums under $\$ 100$, ranging in amount from $\$ 10.00$ to $\$ 75.00$. In the $\$ 500.00$ and over class the highest figure was reached. This table shows the classified earnings of the 143 individuals referred to.

The highost figure in the $\$ 500.00$ class was by a worker who made sample garments in a clothing factory and out of a weekly wage of $\$ 7.00$ had put away $\$ 900$. T'he next highest amount was reported by an inspector in a hosiery factory who had saved $\$ 700.00$ on a wage of $\$ 8.40$ out of which she paid $\$ 4$ a week for board and lodging. A cutter in the same factory, making $\$ 9.00$ a week and paying $\$ 3.50$ a week board, had saved $\$ 600$. A foreman in a candy factory, making $\$ 8$ a week and paying $\$ 3.50$ board, had accumulated $\$ 500$. Another foreman in the same factory, making the same wages and paying $\$ 4$ for her board, had saved $\$ 100$. A worker on fur garments, making $\$ 6$ and paying $\$ 2$ board, had saved $\$ 300$. In the same factory, a more skilled worker receiving $\$ 9$ a week and paying $\$ 4$ board had put by but $\$ 150$. Two girls in a brewery, on wages of $\$ 5$ had $\$ 100$ apiece in the bank. A buttonhole worker in a shirt factory making $\$ 6$ had saved 200. An overall maker working by the piece and averaging $\$ 5.50$ had saved $\$ 150$, while paying $\$ 2.50$ board. Three girls in a paper mill on a weekly wage of $\$ 6$ had saved $\$ 100$ each. A weaver in a woolen mill making $\$ 7.50$ a week had saved $\$ 150$ in spite of being obliged to keep up a house
for herself and children. A girl in a brass factory making $\$ 7.50$ and paying $\$ 4$ board had saved $\$ 300$.

TIME EMPLOYED DURING 1901.

| Classification. | Number of employes. | Total time. |
| :---: | :---: | :---: |
| 12 months of full time | 338 | 4,056 |
| 11 months . | 127 | 1,397 |
| 9 months . | 98 | 980 |
| 8 months . | 34 | 240 |
| 7 months . | 21 | 141 |
| ${ }_{5}^{6}$ months . | 29 | 174 |
| ${ }_{4} 5$ months months . | 20 | 100 |
| 3 months . | 19 | 76 |
| 2 months | 18 | 54 20 |
| 1 month | ${ }_{5}^{10}$ | 5 |
| Total | 769 | 7,729 |
| Average to each person |  | 10.05 |

To gain some idea of the actual working time of the persons concerned in this report, each was asked to state just how many weeks or months she had been employed during the year previous to that in which the investigation was made. The period chosen was a fairly average one, with no great financial depression or any unusual prosperity that might affect the opportunities it offered for employment and it was not so far in the past that its events could not be recalled with distinctness by the workers, whose replies, as they anvear in the preceding table, may therefore be regarded as fairly accurate. It will be seen that the average working year of the 769 persons covered only 10.05 months, leaving almost two months of idleness, chosen or enforced, but still unproductive. A large proportion of the girls worked the entire year, 338 , or 44 per cent., reporting that they had been employed the full twelve months. From this on, however, there is a constantly decreasing scale, beginning with the 127 , or 16.5 per cent., who worked eleven months and running down to the five who were employed only one month during 1901. In many cases the short working time was due to the fact that the girls had only recently left school and entered the factory. Older and more experienced hands reported no such great loss of time, though in some occupations having strongly defined seasons of trade four and five and even six months were
lost out of every year, the total income being greatly reduced in that way. On the other hand, there were girls who reported having worked every day of the year except on Sundays and legal holidays, taking no vacation whatever.

CAUSES OF LOST TIME IN 1901.


In investigating the causes for this lost time it becomes apparent that much of it is due to sickness, 323 girls or 42 per cent. of the whole reporting illness as the reason why they had not worked the entire year through. Lack of work was given as the cause for the idleness of 174 or 22.63 per cent. On the other hand, 204 , or 26.53 per cent., voluntarily "laid off," taking at their own expense the vacations not allowed them by their employers. Sixty-eight, or 8.84 per cent., were kept from work by the necessity of performing home duties of various sorts. None of the girls reported vacations given at the expense of the firm. Indeed, "vacation" seems to be interpreted generally in the factory as the time, when for repairs or because of the slackness of of the season, the shop closes its doors for a period more or less extended, leaving its workers grateful for the rest, no doubt, but without any wage coming in to tide them over to the time of resumption of work. In factories that were unaffected by seasons and which never closed down, girls who had worked for years without a rest could always be found. Individual instances of continuous service for ten, twelve, even fifteen years were not uncommon, though many employers complained that girls would not work the year through but took vacations when they wished them, even at the risk of losing their positions.

BUSIES'T SEASON.

| Classification. | Number. | Per cent |
| :---: | :---: | :---: |
| No variation ......... |  |  |
| Summer and autumn | 3188 353 193 | ${ }^{46.55}$ |
| Winter and spring | 193 | 25.10 |
| Total | 769 | 100.00 |

It will be seen by this table that while 218 , or 23.35 per cent. find no variation in the amount of work expected of them, 358, or 46.55 per cent., are kept busiest in the summer and autumn and 193 , or 25.10 per cent., in the winter and spring. In certain industries there are great extremes of activity, periods of depression when there is not enough work to keep all the employes busy being followed by months, when every one is driven to the utmost expenditure of energy and when the workers are lucky if they escape without being required to put in several hours of over-time each day. One period seems to have as many drawbacks as the other. When the factory is being run to its greatest capacity and every worker is being pushed to the point of exhaustion work is done under a strain and at a tension that could not be kept up long without seriously affecting the health of the workers. On the other hand, the dull season means smaller earnings, if indeed any at all. In some factories, the straw works, the boot and shoe establishments, and the garment-making shops for example, the operators are expected to be on hand at the usual time until actually laid off. The day's work will depend upon the orders that have come in and sometimes the workers will wait for several hours before getting anything whatever to do, if they are not eventually sent home having wasted a whole morning. Piece workers and those who are paid by the hour seem to suffer more in this way than those receiving regular wages since the latter when the dull season comes are laid off for a definite time and may, with a certainty of regaining their position, take up some other work in the interim. In the straw works especially, where all the work is done by the piece, the beginning and end of the very short season is always ushered in by days of waiting in the factory for work that is not always forthcoming.

HOURS OF LABOR DAILY.

| Classification. | Number. | Per cent. |
| :---: | :---: | :---: |
| 11 hours per day or more |  |  |
| $101 / 2$ hours per dлy ....... | 9 34 | 1.17 |
| 10 hours per day .. | 589 | 76.59 |
| $91 / 2$ hours per day | 13 | 1.69 |
| 9 hours per day . | 195 | 12.36 |
| $81 / 2$ hours per day | 7 | . 91 |
| 8 hours or less | 22 | 2.86 |
| Total | 769 | 100.00 |

It will be seen from this table that a ten hour day is the general rule in those industries employing women and girls and that the state law limiting the daily hours of labor for women to eight is so universally disregarded that it is little more than a dead letter on the statute books. Over three-fourths of the total number reporting put in a full ten hours and a few work even longer. In exact figures 589 , or 76.59 per cent., work ten hours a day, 34 , or 4.42 per cent., ten and one-half hours and 9 , or 1.17 per cent., eleven hours and over. Only 22 , or 2.86 per cent. enjoy the eight hour day.

In some of the industries covered in the investigation, such as the breweries and paper mills, double shifts are worked and wherever this is done half the force work from 12 to 13 hours a day. In the breweries this is only done in the summer when the plants are obliged to work day and night to keep up with their orders, but some of the paper mills are never closed down and the cutter hands and finishers often work all night. The strain is lessened by changing the shifts so that one week one set of girls works at night and the next week during the day. Overtime is required in many other factories during the busy season. The candy factories, for instance, run over time for almost two months before Christmas, the workers being on duty from 7 in the morning until 9 and even 10 o'clock at, night. In the clothing factories the long periods of slack work are in a measure offset by the over-time required in other seasons. Such over-time means an increase in the earnings, of course, since piece workers turn out more work and those working by the hour or the day are paid extra, but it is the general opinion that it does not pay. Even most of the manufacturers
say that the fatigue point in women workers is reached at the end of ten hours and that over-time means work badly done and a weary set of workers for the following day. The few factories where an eight hour day was observed were governed by union rules, certain tobacco factories and book binderies being among these.

The length of the noon hour was not made a subject of special inquiry. It was found, however, that it varies according to locality. In Milwaukee and one or two of the larger cities of the state but half an hour is allowed and the girls eat in the shops the cold luncheons they bring with them. In smaller places a full hour is given so that the workers may go to their homes for a warm mid-day meal. In other shops forty-five minutes are allowed. Whatever the amount of time given at noon it is always deducted from the total working day. For example, when a half hour nooning is given the hours are usually from 7 to 12 and from $12: 30$ to $5: 30$. Where an hour is allowed work usually continues to 6 o'clock.

SAṄITARY CONDITION OF PLACE WHERE EMPLOYED.


In endeavoring to arrive at the worker's personal opinion of the sanitary conditions of the places in which they were employed the difficulty arose from the fact that there was a general lack of knowledge as to what constituted a good or made a bad condition. In some instances specific complains were made, but as a general rule the workers expressed themselves as well satisfied with their surroundings even when to the observer they seemed anything but satisfactory. For that reason the table is more interesting as showing the girls' own point of view than as a revelation of the actual state of affairs, though it is also true that taken as a whole the factories in Wisconsin where women are employed are above the average as to sanitary re-
quirements. Persistent work on the part of the factory inspection force and a gradual awakening of public sentiment that is finding reflex action in the manufacturers' endeavors to improve the surroundings of their employes have tended to improve a condition at no time probably so bad as in other places, if reports from those places are to be believed. The factories generally are fairly clean, reasonably well lighted and ventilated and equipped with modern and sanitary toilet conveniences. The reverse was often found, however. Many of the clothing factories in the city are located in buildings originally planned for stores and so badly lighted that most of the hands work by gas light all day. The rag sorting rooms are dusty and dirty and the same is true in lesser degree of other places. The enameling works are dusty and hot and the foundries are usually dirty and dark. In some of the larger buildings where a great many girls are at work the ventilation is sadly imperfect. Open windows mean draughts for those sitting near by and thus the workrooms go unaired throughout the day. In the breweries there is a great deal of steam and dampness and the same is true of the canning factories. The toilet arrangements are often inadequate and imperfect.

On the other hand a number of model factories are to be found, places in which every effort is being made to keep the surroundings of the workers as comfortable and healthful as possible. In many instances, it must be admitted, the sanitary conditions of the shop are infinitely better than the sanitary conditions of the homes from which the workers come. It must be acknowledged, also, that the average factory girl has an aversion to fresh air and does not always take advantage of what opportunities there may be for improving her immediate surroundings.

It will be noted that over one-half, or 55.27 per cent., report the sanitary conditions of their workplaces as good and 40.83 per cent. as fair, only 3.90 unqualifiedly condemning them.

OCCUPATION INJURIOUS TO HEALTH.

| Llassification. | Number. | Per cent. |
| :---: | :---: | :---: |
| Injurious to the healthNot injurious to health | 137 | $\begin{aligned} & 17.82 \\ & 8 . .18 \end{aligned}$ |
|  |  |  |
| Total | 769 | 100.00 |

In pursuing the inquiry it became apparent that the general health of factory workers is about on a par with that of any other class. There were individual instances of the wan face, bent form and lack-luster eye of the poet's description, but such were the exception rather than the rule. The older workersthe women who had spent years in factory toil-almost invariably carried evidences of their long-continued drudgery in countenance or figure, but the younger girls, who after all constitute the great body of the workers, while not noticeably robust looking did not, as a class, appear to be in poor health. That the girls themselves are not inclined to regard their work as injurious to their health is shown by the fact that in response to an inquiry to that effect, 632 , or 82.18 per cent., answered in the negative, while but 137, or 17.82 per cent., gave affirmative replies, indicating that whatever their physical condition might be the great proportion of the workers did not believe or at least were not willing to state openly that their occupation had in any way affected their health. The complaints that were made by the 137, who believed that their health had been impaired by their work, were varied. Garment workers and others engaged in tasks that required constant sitting complained of headache and constipation. The almost universal use of power machines has lessened the extent of pelvic troubles which formerly existed when machines were driven by foot power, but the women in the subcontractors' shops, which were not supplied with power of any sort except that furnished by human energy, were victims of a long list of ailments brought on from a constant running of heavy machines. In many of the garment factories the light is so poor that cases of impaired eyesight were frequent. Some of these places are so dark and so poorly fitted for the use to which they were being put that most of the sewers were obliged
to work almost the entire day by gas light. Moreover, the gas jets were not always shaded and the flickering light falling on the dark materials which were being handled made eye troubles casy to acquire and difficult to get rid of. Girls in the breweries complained of rheumatism and colds and also said that they were in constant danger of cutting themselves on broken bottles. In the knitting factories there was an occasional complaint of throat or lung trouble brought on, it was thought, by the flying fluff of woolen yarn. Complaint was also frequently made by this latter class of workers of badly adjusted tables and chairs, while in one case over 200 girls were without chairs altogether and were compelled to stand at their machines ten hours a day until through the efforts of this bureau the manufacturer finally put in stools. At this place, girls said it was not unusual for them to drop to the floor out of sheer weariness. There they would rest while their neighbors kept a wary eye for the foreman that when he approached they might give the signal. In other knitting factories, as well as in the candy factories and in other places where girls sat at their tasks the seats provided were often mere boxes turned on end or they were stools without backs. Those compelled to sit on such seats ten hours a day naturally complained of backache and their bent and in some cases actually deformed spines testified to the truth of their assertions. In the tin shops the girls often suffered from sore hands brought on by contact with the acid used in soldering. In the chair and toy shops girls said that the smell of varnish made them ill and some went further and laid throat and lung trouble to the constant inhalation of varnish fumes. In box factories and in paper mills girls not infrequently suffered mutilations from having their hands caught in the machinery. Girls who packed washing powder and lye worked in an atmosphere thick with flying particles, but said that they soon grew accustomed to it and did not notice its effect on eyes and throat. In the match factory where it was thought many cases of necrosis would be found the firm exercised so much precaution that there was little trouble on that score.

In general, the complaints were of dust, lack of air and excessive hours and it is safe to say that comparatively few places
were found that were free from one or all of these defects. Anaemia, the most common form of illness among factory workers is often due to such causes taken in connection with a lack of proper nourishment. In the larger cities few of the girls can go home to their midday meal but instead eat a cold lunch in the room where they have worked and in an atmosphere thick with dust and often foul with the exhalations of many workers. In seasons of over-time work, they eat a second meal of the same sort in the same surroundings, getting no warm food until 8 or 9 or 10 o'clock at night if they get it then, which is doubtful. In some factories gas stoves have been put in so that the girls can make fresh tea and coffee or warm that which they may have brought with them. In one or two instances hot soup and coffee are furnished free by the firm, but such cases are rare.

In suggesting ways in which factory conditions could be improved a longer noon hour affording an opportunity to go home for dinner was advocated by several, while others acknowledging the desirability of such a change declared that it would be impracticable except for such as lived within walking distance of their homes since the others could not afford the extra ten cents a day street car fare that would be necessary. Better light, and air were asked for in many instances.

REASONS FOR しHOOSING PRESENT OCCUPATION.

| Classification. | Number. | Per cent. |
| :---: | :---: | :---: |
| Pays me the best | 120 | 15.60 |
| The best place I can find | 250 | 32.51 |
| Because I like it best | 161 | 20.94 |
| Have evenings and Sundays free | 238 | 30.95 |
| Total | 769 | 100.00 |

The question as to why these workers had chosen the factory in preference to other employments brought out the fact that the cause is to be found in the greater freedom found in an occupation, having its regular hours and duties, and leaving Sundays and evenings free of set tasks. That, expressed in various ways, was the reason given by 238 , or 30.95 per cent., as the chief incentive for entering upon factory life, while 250 , or 32.51 per
cent., explained that they were working where they were simply because it was the best place they could find. In 161 cases, or 20.94 per cent., the work itself was the most pleasing of any that had offered up to that time, while 120 , or 15.60 per cent., advanced the very practical reason of better wages than could be commanded elsewhere. In informal discussion the workers rarely advanced any other reasons than these for taking up the special line of work at, which they were found. Often the girl regarded it as a most temporary arrangement to be changed whenever inclination or an opportunity to do something else offered. Only in the trades where a high degree of skill was necessary in order to make fair wages and in which consequently a long term of semi-apprenticeship had to be served did girls regard themselves as members of a definite trade who could not and did not wish to move about from place to place.

> IN CASE OF CHANGE WHAT OTHER OCCUPATION WOULD BE PREFERRED.

| Classification. | Number. | Per cent. |
| :---: | :---: | :---: |
| Dressmaking, sewing, etc. | 264 | 34.33 |
| Öffice work. | 86 | 11.18 |
| Keep house | 215 | 27.96 |
| leouse work | 49 | 6.37 |
| Miscellaneous | 155 | 20.16 |
| Total | 769 | 100.00 |

The ambitions of the factory girl, so far as her working career goes, are indicated in the preceding table which is based on the replies to the question: "In case of change what other occupation would you prefer?" It will be seen that dressmaking and sewing lead, 264 , or 34.33 per cent. of the whole stating a preference for those occupations. This might be taken to indicate that days of unlovely toil do not eradicate an inherent feminine love for the needle and it may suggest to would-be philanthropists the sort of thing in which the factory class might be interested. That 215 or 27.96 are put down as preferring to "keep house" is not to be interpreted as a desire to take up housework as a calling, but to that other feminine instinct that finds its outlet in home duties. Many of the workers frankly stated
that they would prefer to be married that they might busy themselves with domestic work of their own. Forty-nine, or 6.37, declared that they would like to do housework, always, however, with the proviso "if wages were better" and the rest had varied ideals, ranging from the profession of a trained nurse to clerking, stenography and teaching.

SHOWING NUMBER WHO PREFERRED THEIR PRESENT PLACES TO HOUSEWORK.

| Classification. | Number. | Per cent. |
| :---: | :---: | :---: |
| Prefer present place | 720 | 93.63 |
| Prefer housework ... | 49 | 6.87 |
| Total | 769 | 100.00 |

REASONS FOR PREFERRING THEIR PRESENT OCCUPATIONS TO HOUSEWORK.

| Classification. | Number. | Per cent. |
| :---: | :---: | :---: |
| Because of better wages | 91 | 11.83 |
| More time to themselves | 557 | 72.43 |
| Can live at home ..... | 98 | 12.75 |
| Miscellaneous reasons | 23 | 2.99 |
| Total | 769 | 100.00 |

In view of the increasing complexity of the domestic service problem and the part that the factory girl plays in that complexity by her refusal to enter domestic service, it was deemed worth while to make a systematic attempt to arrive at her point of view and ascertain, if possible, the validity of the reasons that lie back of her undoubted aversion to housework as a calling. The question was bluntly put: "Do you prefer your present occupation to housework, and why?" Out of the 769 replies, fortynine, or 6.37 per cent., indicated-a preference to housework in itself but showed various causes why those replying did not engage in it. The other 720, of 93.63 per cent. of the whole, answered in the affirmative and were not backward in stating their reasons for doing so. This is shown by the first table, while the second gives, in broadly classified form, the reasons assigned. It will be noted that 557, or 72.43 per cent., base
their refusal to enter domestic service on the greater independence afforded by factory life, and that 98 , or 12.75 per cent., prefer factory work because it enables them to live at home. Ninety-one, or 11.83 per cent., think the wages in factories better than those paid in housework, while the remaining 2.99 per cent. advance various reasons.

These replies have a significance to the student of social questions that make them worthy a more detailed consideration since they tend to show the attitude of the average working woman towards domestic service. In a great proportion of the schedules returned to the bureau, the "why," which follows the first question, is quite as laconically answered by the phrase, "Evenings and Sundays to myself." Recurring in one form and another it is this aspect that becomes most prominent, indicating that it is not what is so often given as the reason for girls' reluctance to enter domestic service-the menial nature of the tasks required and the consequent lowering of the individual's social position-but the very practical question of greater leisure for the worker.
"In the factory we have regiular hours of work and regular things to do," say many of the girls. Variously worded the same idea runs through five hundred of the schedules:
"I know what my hours are now. I never did when I did housework."
"Hours are better in factory work."
"In the factory one's work is done at six o'clock. In housework it is never done."
"No night work."
"Can go to church Sunday mornings and have evenings in which to see my friends."
"Factory work gives me more time off."
"Like a regular ten hour day."
"In factory work if you work evenings or Sundays you at least get extra pay."

Next to the question of leisure comes that of wages. The two are frequently combined. "Better pay and shorter hours" is a phrase familiar to the eyes in going over the schedules. This *arcely carries out the idea prevalent among employers of don
mestic servants, who in figuring on the actual wage of the girl count in her board and lodging, and so hold that household work pays best. The girl, however, rarely takes either item into account, as living under hẹ mother's roof she rarely pays a stipulated sum for her maintenance, either, as in the majority of cases, giving over her entire wages to her people or contributing what proportion of them she pleases. In any case, as Miss Addams in her recent work on "Democracy and Social Ethics" points out, the girl by working in a factory contributes towards the family's support in a greater degree than is possible when she does housework and lives away from home.

Many of the girls say that they prefer doing factory work because they can live at home. Often they add that by living at home it is possible for them to assist in the work there, thus relieving their mothers. What they do not say, but what may be implied since the average factory girl is not given to analyzing her reasons, is that life within the home brings the girl certain social pleasures that she misses entirely when her entire time is passed among strangers. Sometimes this is indicated by the remark, "Housework is too lonely" or "Don't like to live among strangers."

When a girl has expressed herself upon the social side of the two lines of employment she has not hesitated to do so somewhat vigorously. There seems to be a general feeling that mistresses are not so considerate as the man "boss," and more or less resentment toward them is shown. Something of this can be seen in the following replies:
"Any girl would like doing housework best if folks were always good to her."
"If ladies would give girls better rooms and kinder treatment and warmer beds and let them live more independently more girls would do housework."
"Many women who have hired girls don't know what a day's work is."
"Housework is healthy for girls, but good places are hard to find."
"There is more liberty in factory work and one is not looked down upon."
> "Housework is slavery."
> "A servant girl is never treated as a girl should be."
> "I'd like housework in my own home."
> "Don't like the way women treat their girls."

"Most girls, who do housework are taken for regular slaves."
No doubt these are somewhat exaggerated statements, but they are interesting as indicating what the girls who refuse to do housework at any price say and think about it. In a few instances personal letters to the inspector were appended to the schedules, and in these the situation was thoroughly discussed. As in these cases the replies came from the better grade of factory workers they bear more than ordinary weight. One from a woman working in a paper mill for $\$ 1$ a day follows:
"Working women prefer factory work because a good mistress is rare. Women usually lack consideration about household duties themselves. They look upon the servant as a machine. Really, mistresses should know the daily duties of these servants, how long it takes for each task. I know of one house where one girl does the work for a family of six. She is expected to cook like a cook, do housework like a housemaid, dress and wait on table like a waitress, and all without the slightest help. Such conditions make girls leave housework and go into the mills."

Somewhat bitter in tone is this reply: "I love housework, but, with many other girls, I refuse to be thrust into someone's else kitchen to eat the family's leavings, nor in an attic to freeze in winter and swelter in summer. Besides women lower their girls by saying, 'My girl does this,' or 'My girl does that,' right before us, as if we had no feelings."

From the personal notes collected in the course of hundreds of interviews with factory girls it is easy to gather that the prevailing objection to housework is its irregularity of hours and tasks. Many girls, when a scheme of domestic work based on thoroughly business principles, with a regular working day and the privilege of leading one's life outside one's place of work as one pleased was broached, said instantly that in such a case housework would be preferable to most kinds of factory work. Often a girl frankly said that factory life gave her no prepara+ tion for a future career as a housekeeper, while housework
would train her for it. The workers, however, were frankly skeptical of any radical change coming about, and plainly regarded a proposition of business methods in the home as little short of absurd.

ARE MEN AS WELL AS WOMEN EMPLOYED IN YOUR OCCUPATION?

| Classification. | Number. | Per cent. |
| :---: | :---: | :---: |
| Yes, both men and women | 422 | 54.88 |
| Only women . | 347 | 45.12 |
| Total | 769 | 100.00 |

This table shows the percentage of occupations in which men as well as women were engaged, the number reporting that they. had men as fellow-workers being 422 , or 54.88 per cent., while 347 , or 45.12 per cent., were occupations in which only women were employed. It must be stated, however, that there is a likelihood that in some instances the question was misinterpreted so that the terms "occupation" and "trade" were confused, as while there were men in most of the factories visited they were rarely engaged in the same kind of work that was being done by the women. The heavier tasks fell to their share.

CAN' MEN IN YOUR OCCUPATION DO MORE WORK IN A GIVEN TIME THAN WOMEN?

| Classification. | Number. | Per cent |
| :---: | :---: | :---: |
| Men can do more | 350 | 45.51 |
| Men cannot do more | 419 | 54.49 |
| Total | 769 | 100.00 |

That the girls did not regard men as being able to do any more work in a given time than they could do themselves is shown by the preceding table which explains itself. Four hundred and nineteen, or 54.49 per cent., believe that women can accomplish just as much, while 350 , or 45.51 , do not.

ARE MEN PAID MORE THAN WOMEN IN THE SAME OECUPATION?

| Classification. | Number. | Per cent. |
| :---: | :---: | :---: |
| Men are paid more | 364 | 47.33 |
| Men are paid the same | 405 | 52.67 |
| Total | 769 | 100.00 |

Where men were doing the same kind of work as that done by the girls, opinions as to their respective compensation differed. As will be seen from the table above, 364 , or 47.33 per cent. of the girls questioned, believed that men were paid more for the same class of work, while 405 , or 52.67 per cent., believed that they were not. In some kinds of work complaint was made that there was a discrimination in favor of the men who, while subjected to the same scale, were given the line that netted the larger profits. This was openly asserted in somé of the cloak factories where men and women worked side by side but where the men were employed on garments in which there was a greater profit for the worker. In the glove factories men and women operating machines made about the same amount. Usually, where men were working with the women, they were engaged in quite different kinds of tasks. For instance, a man and woman were frequently found running a machine together, but the man tended the levers and saw to the feeding, while the girl or woman merely took care of the product as it came out. In the woolen mills men and women weavers made about the same. wages.

## PERSONAL OBSERVATIONS.

## ARTIFICIAL FLOWER AND FEATHER FACTORY.

The making of artificial flowers and feathers gives employment to about forty girls in Milwaukee, where there is only one establishment of the kind. The work is of a nature requiring a long apprenticeship before any great degree of skill is acquired and is open to the objectionable feature of long periods of idleness and of a somewhat inadequate wage even in the busy season. Still, it is employment in every way suited to women and those who become skilled workers make fairly good wages with less effort than in many other lines of industry. It takes about two seasons before a girl becomes a good worker. She starts in as a helper, steaming out feathers and doing odd jobs about the place. Then she is advanced to the coarser grades of feathers and flowers. The work is paid both by the week and by the piece, the best workers getting a stated wage, amounting usually to $\$ 1$ a day. These girls do the intricate flowers and feathers, the making of which is an art. Some are so complex of manufacture that the making of a single breast or blossom will consume a whole afternoon.

The girls were of a higher social type than those usually found in factories. Almost all had been through the ward schools and some were high school graduates. A few were daughters of well-to-do parents, working merely for pin money. The same objection was made to the business as that which is oftenest heard about the millinery trade. There are usually about three months of dull season a year, though three or four of the best workers find employment throughout the twelve months.

## BAG FACTORY.

About one hundred girls in Milwauke find employment in a factory which makes burlaps and muslin bags, such as are used
so largely in the milling trades and for handling produce. The bags are cut out by machines, operated by men, but the counting, folding, stitching, and turning are done by girls, and girls are also employed in the printing department where the bags are labeled. No great amount of skill is required for any part of the work, though a certain proficiency is necessary to turn out the large amount of work expected daily from the best hands. When the bags are cut they are given to girls who count and fold them into shape for the stitchers. After they are seamed up other girls cut them apart, look them over for slipped stitches and arrange them in orderly piles for shipment. The stitching is done on machines run by steam power, and while no great exertion is necessary the work requires constant attention. The girls who fold and count stand all day.

The most disagreeable feature of the work was the dust arising from the cutting machines. The air was filled with the light fluff coming from severed burlaps threads and all the girls wore caps to protect their hair and had exchanged their street clothes for cotton frocks. Some of them complained of throat trouble, but most of them said they suffered no inconvenience whatever. The foreman said that the firm expected to put in a new ventilating system before long which would almost entirely do away with the dust that must be disagreeable and irritating to the lungs.

The working hours are from 7 to 6 , with an hour at noon and seven minutes for lunch at half past nine in the morning.

The wages ran from 60 cents to $\$ 1$ a day, few of the girls, however, making the last named figure excepting some of the fastest sewers. One girl said she had made $\$ 1.75$ the day previous to the visit of the inspector, having counted over 10,000 bags. She acknowledged that this did not happen often and that for the most part her earnings were far below that amount. Other girls said that they sometimes made ás high at $\$ 6.50$ a week, but ordinarily they did not go above $\$ 5$. The ten girls reporting specifically averaged $\$ 4.01$ a week, the highest wage received by them being $\$ 4.50$ and the lowest $\$ 3.60$. None of these girls, however, were stitchers. The beginners were paid eight cents an hour.

## BLIND FACTORY.

The sash, door and blind industry was included in this industry, not because of the large number of women who find employment in it, but because any are engaged in it at all. Most of such concerns restrict their working force to men and boys, but the one in question has been employing girls for twenty years past, having put them in at first, so the manager said, to refine the atmosphere of the workshops. In that respect the experiment has been a success, the presence of the girls, it was asserted, having aroused the latent chivalry in the men. What the effects on the girls themselves has been he did not say, though holding to the belief that the work was in every way suited to the sex. The tasks allotted to the girls consisted in finishing and wiring blinds and in putting the moulding into doors. The girls who worked on doors sawed the moulding into the requisite length, using a circular saw, and the girls who worked on blinds handled hammer and nails with all the skill of trained carpenters, at least disproving the theory that a mastery of such implements is beyond feminine skill. Some of the work, especially that with the saw, looked danger ous, but accidents, it was stated, were few. The factory itself was clean and airy, being in that respect far ahead of many of those where the presence of women workers is not unusual. The greatest objection to the work, aside from what might be deemed its unsuitability for women, was that it required constant standing, none of the workers being seated. The hours were ten a day, from 7 to $5: 30$, with half an hour at noon. All wages were paid by the day, running from 50 cents for beginners to $\$ .75$ and $\$ 1$ for the girls who did the wiring. The weekly average for the ten girls reporting was $\$ 4.86$.

## BOOK BINDERIES.

Between 300 and 400 girls are employed in the various bookbinderies and printing offices of Milwaukee alone, while probably as many more find employment in similar establishments in the smaller towns about the state. Book binding is one of the pioneer industries offering work for women, a fact that may account for the small wages that prevail in it. Almost all the
work except the actual binding of the books is done by women, or girls, who fold, paste, sort, operate wire stitching machines, ruling machines, printing machines and punchers. Much of the work requires long practice to acquire anything like proficiency, but the rewards are very small. A forewoman of one establishment who has been in the business for years said that it was not a good one, considered from the financial point of view, but that the work was comparatively light and cleaner than many kinds of factory work, while in most binderies a nine-hour day is now the rule, owing to the influence of the unions to which the men belong. Few of the girls are in unions, however, though at one shop they said that they were grateful to the men for belonging since such affiliation had reduced the working week to fifty-four hours.

In the larger binderies improvements in machinery are to be noted. A circular revolving table on which sorting is done in one big shop permitted the girls to do their work seated, while formerly, and as is still the case in most shops, such work necessitated the girls being constantly on their feet. The wire stitchers sit at their tasks and their machines are run by steam power, but the girls who feed the presses and ruling machines usually stand.

Many of the shops were located on the upper floors of down town buildings and where there was no elevator service the climbing of several flights of stairs twice or more times a day added to the fatigue occasioned by the work. In some instances the places were badly overcrowded and the sanitary conditions far from good, though others, located in modern buildings, were as nearly perfect as could be.

None of the girls did any of the actual book binding, that awork being always done exclusively by men who were better paid. It apparently had never occurred to any of the girls to attempt learning the trade as a trade. A forewoman who was questioned seemed astonished that anyone should think book binding was woman's work. She admitted that it was no harder than much that is expected of women in factories, but said it was a "man's work." The manager of a large establishment, on the other hand, deplored the lack of ambition on the part of the girls.

The wages were low in every instance, running from $\$ 1.75$ to $\$ 6$ a week. In one place, where seventy-five girls were at work, it was stated that $\$ 4$ a week was a very good wage and beginners started in at $\$ 1.75$, the best hands not getting over $\$ 6$. At another establishment, employing fifty girls, the scale was put at $\$ 3$ to $\$ 5$. Girls who worked at folding by the piece made from $\$ 3$ to $\$ 4$ in a nine-hour day. Wire stitchers were the best paid, getting $\$ 5$. In a third bindery, a girl who had started at $\$ 1$ a week was, after two years of work, getting $\$ 3.50$ for feeding a ruling machine, a task that requires the exercise of a great deal of care and attention. The average for fifteen girls reporting was $\$ 4.41$.

## BOX FACTORIES.

Under this head are included both those factories making pasteboard and those making wooden boxes,, though the work done by women in the two is entirely different. The pasteboard box factories employ large numbers of young girls who work in pairs, a little girl, fourteen or fifteen years old, being assistant to the girl who, though but a year or two older, perhaps, has arrived at the dignity of being a machine operator. The work is simple, and requires no great exertion, but is more than usually dangerous in the opportunities it offers for maiming hands grown careless at their task. The girl who operates the machine' takes the box which has been cut and shaped and slips it on an iron mould. As this revolves she covers the box with paper which is reeled off by the machine. She must see that it is smoothly put on and that the corners are neatly fitted, before passing the box to the helper, who smooths down the corner pieces and piles up the boxes, keeping count of the number made. The helpers get one-fifth of the wages made by the machine operators and everything depends upon the harmony with which the pairs do their work. Other girls run folding machines and some do the more delicate work of putting on ornamental strips.

In one factory visited, over 200 girls, few of them over twenty years old, were employed. All the work was paid by the piece and wages ran from $\$ 3$ to $\$ 5$ a week. The highest and best paid worker, by her own statement, had never made more than
$\$ 6.75$ a week and she had been in the trade for years. The forewoman received $\$ 4.50$, but her wages can hardly be accepted as a criterion, as she had but recently been promoted from the ranks of the workers and, moreover, was herself under a foreman, her duties being merely to see that the girls kept steadily at their work. The hours were from 7 to 6 , with half an hour at noon. Saturday half holidays are given during the summer. Lay-offs are the exception as the factory has steady work the year around.

A number of the girls had suffered from having their fingers crushed in the machines. One girl, who had lost the end of a forefinger, had been kept out of work five weeks by the accident, but the firm had paid her half wages during the time, besides meeting the surgeon's bill. She had returned to her place as soon as she was able to work, but some girls who had met with similar misfortunes had gone into other work. Many of the girls had been operating machines for years and had never had any trouble whatever.

In the wooden-box factory included in the report the experiment of using girls for work heretofore done by boys was being tried and with a success, so the superintendent said, that justified him in believing that it would not be long before other factories followed the same plan. Those who believe that even in factory life certain conventions are to be observed would be inclined to hope that his predictions will not be verified since the work itself as well as its environment is not the sort most suitable to women. It consisted in lifting boards from the cross-cut saw tables and carrying them to the rip-saw tables, where they were piled in even rows. One lot of girls stapled bundles of small boards ready for shipment. At the saws a girl and man worked together, the girl catching the boards as they came from the saw. Like other factories of the sort, the building was more or less open to the air and cold in spite of the strenuous efforts of several big stoves which kept the atmosphere torrid in their immediate vicinity but made little impression on the distance. No one complained of the cold, however, the workers being warmly clad and constantly in motion. To protect themselves from the flying sawdust the girls wore big aprons and caps, which were
provided by the firm. The noise of the machinery was deafening and that, in connection with the work itself and the barren surroundings, made the place seem thoroughly unsuitable for girls. The firm, however, was doing all that it could for them, the superintendent having given up his own office for their use at noon. Most of the girls had fathers or brothers working in the factory and did not apparently regard their work as an entire outsider might.

The hours were ten a day and the wages 50 and 55 cents. A girl who did stapling said that she preferred the work to housework at which she had been able to earn only $\$ 1.50$.

The average for the 22 girls reporting for the industry was $\$ 3.42$.

## BRASS FOUNDRIES.

Girls are employed in brass foundries to run foot presses on lighter work, and at polishing and preparing goods for shipment. In the establishment visited, whịch is located in one of the smaller cities of the state, carriage and bicycle lamps and the brass fixtures for electric light globes are made and almost all the work is done by girls. In the busy season about one hundred are employed, but in dull times this number is reduced to thirty, who work at steady wages the year around. Some of the girls operated finishing machines which put the final polish on brass fixtures that had been shaped at the larger machines. The highest paid girl in the establishment made about $\$ 1.25$ a day by running a machine which trimmed the edges of pieces of brass. All the work was by the piece and wages ran from $\$ 3.50$ to $\$ 6$. No girls were employed at buffing. The pleasantest tasks about the place were those assigned the girls in the shipping rooms. These girls merely rubbed the fixtures and wrapped them in tissue paper to keep them from being scratched in handling. The average wage of the eight girls reporting was $\$ 5$.

## BREWERTES.

The great breweries of Milwaukee employ several hundred women and girls who.in the busy season work excessively long hours and at all times are paid meager wages, the work being of
so unskilled a character that it is easily learned, thus attracting a more or less unintelligent class. A large proportion of the workers are Polish. The work consists in washing bottles, putting on labels and tinfoil strips and in wrapping bottles for shipment. The bottles are filled, corked and the larger labels are put on by machinery, but the smaller labels about the necks of the bottles are affixed by hand, that work in the vernacular of the industry being known as "neck labeling." The youngest girls, those still in their early teens, are put at such tasks and are stationed in groups about each of the labeling machines where they catch the bottles as they come out, some putting on the neck labels and others the tin foil. In the tonic and malt extract departments, the large labels are put on by hand while the bottles are still warm from the brew. The older women do the washing and inspecting, working about great tanks of hot water and usually standing in water most of the time as the floors are always very wet. The bottles are washed on revolving spindles, one woman holding the bottle in place against the sponge until it is thoroughly cleansed and then passing it across the tank to another woman who rinses it in clear water and holds it up to the light to see that there are no cracks or defects in it. The clean bottles are then placed on trucks which are wheeled to the stacks, girls doing all this latter work. In one brewery where the superintendent said he did not consider bottle washing fit work for women, boys were employed at it but on the other hand at this same brewery the labeling machines were run by women, which was not the case in the other establishments.

The work is open to a great many objections. The breweries themselves are not always pleasant places to work in. In the bottle washing room the floor is usually covered with water and the girls wear wooden shoes both to keep their feet dry and to protect themselves from broken glass which in spite of frequent sweeping strews the floors. Bottles are constantly breaking in the hands and severe cuts are not unusual, though the girls do not make much complaint on that score. Colds, catarrh and rheumatism are common and one girl complained of the steam from the tanks affecting her eyes. In the summer the heat is disagreeable but at least one brewery has electric fans which modify the temperature.

Added to these drawbacks are the long hours which are required when the busy season begins. The ordinary hours are nine a day, from 7 to 12 and from 1 to 5 , but when orders begin to pour in as the hot weather comes on a double shift is put on and the working day fon each shift is lengthened. At the height of the season in some of the breweries the day shift goes on at 7 in the morning and works until 8 and 9 at night, while the night shift begins at 7 and works until 5 and sometimes until 6 in the morning. This is only when the breweries are running at their fullest capacity, however, but there is a good deal of complaint among both the girls and the men workers, as they assert that the amount of extra pay given them is insufficient for the work required. The girls get only three and four cents an hour extra pay, which is little more than enough to pay for the supper which is little more than enough to pay for the supper which they must bring with them. Not all the breweries run night shifts of girls, employing boys instead. All the breweries give a fifteen-minute lunh time in the middle of the morning.

Most of the breweries provide fairly good dressing rooms for their women employes, these rooms also being used for lunchrooms. Several of them have separate lockers for each worker and tables and benches, the latter being a somewhat necessary provision since all the work is done standing and the girls are exhausted when the noon hour arrives. It is customary in most of the breweries to serve beer to all those who want it, a regular allowance being made. In one brewery every girl under sixteen is allowed half a pint of beer three times a day, while the women are given a full pint. In other breweries the beer is served in glasses to all who wish it. Not all the girls drink it, however. In one brewery* care is taken to keep the men and girls separate, the girls being dismissed from their tasks some minutes before the men that they may leave the building while the latter are still at work.

The wage scale is uniform throughout. Girls at necklabeling and tinfoiling get forty-five and fifty cents a day and bottle' washers sixty to seventy-five cents. In one brewery, the forewoman, a widow who had had twelve years' experience, was getting $\$ 6$. In this same brewery the girls who ran the labeling
machines made from $\$ 3.50$ to $\$ 4.20$ a week and the neck labelers $\$ 3$. Only four girls received as high as $\$ 4.50$ the year around. In another brewery the wages ran from $\$ 2.75$, which was paid the tinfoilers and neck labelers to $\$ 4$ for the bottle washers, the last named amount being the highest paid. At this place a woman who had been working in the brewery for five years received $\$ 4$ a week on which she supported herself and three children, paying 50 cents a week car fare as she lived several miles from the plant. This woman arises at 5 o'clock, does the housework and leaves her children with her mother who lives with her. By seven she is at her post and in summer does not get home until late in the evening.

Many of the brewery girls belong to a union which was formed recently with the intention of working for a reduction in the working day and a better wage scale. There was considerable agitation, but though they were supported by the men's union the girls did not gain recognition from the brewers though enjoying in part the concessions that were granted to the men.

## CANDY FACTORIES.

In the five candy factories which were taken as fairly typical of an industry giving employment to large numbers of girl; there were found over 450 workers, many of whom were little more than children. No effort was miade to select factories representing either extreme as to conditions of work and some difficulty has been experienced in bringing the notes taken at the time of the various visits into a comprehensive story since while someof the places were far from attractive others were thoroughly modern in their appointments. As a general thing, it must be confessed that candy factories are not always inviting in appearance however tempting their output may be. Some of the finest grades of candy are made in dark and poorly ventilated basements and the very nature of the business requires extraordinary care if floors and walls are to be kept perfectly clean. There are features of the business, however, that are far worse than the surroundings. Wages are proverbially poor and no industry requires more over-time work. For almost two months before Christmas the factories are run until 8 and 9 and even until 10
o'clock at night to keep up to the orders that came in from ali over the country. The somewhat pathetic spectacle of children toiling to make more fortunate children happy is then presented with a clearness from which there is no escape. The plants are adapted to only an ordinary output and when the rush season opens they are forced to run overtime or turn away valuable business. A great part of the work both of making the candy and preparing it for shipment is done by young girls in their teens and they are kept at work from 7 in the morning until 8 or 9 at night with only a brief time allowance for luncheon and supper. Sometimes the former is cut down and for the latter it often happens no regular time is given, the workers eating what remains from their noon meal as hastily as they can. The reports from the five factories show that in ordinary seasons the hours for most factories were from 7 to 12 and from 12:30 to $5: 30$, though some ran to 6 o'clock, but gave a full hour at noon. One factory's regular hours were from 7 to 12 and from $12: 30$ to 6 . In rush seasons the hours were from 7 to 12 and from 12:30 to 8:30 and even 9 o'clock. In the dull season immediately following Christmas most of the workers are laid off though in one factory the working day is reduced to eight hours and the girls though paid less can still have regular employment if they desire it. The work required is varied in character and but little of it calls for the exercise of even a small degree of skill. The candy is made by men, but all the finishing touches are given by girls who dip creams and chocolates, wrap caramels, fill packages, pails and boxes, wire candy cherries and put "all day suckers" on sticks of licorice. The chocolate dippers make the best wages and do the work requiring the greatest skill. It takes some months to acquire the dexterity necessary to being a skilled dipper. In one factory the finest chocolates were dipped in a small, completely enclosed room in the basement, the temperature of which was kept at 90 degrees. It was explained that this was necessary to keep the chocolate at the right consistency. The air in the room was not only hot but bad and the girls complained of headaches, though they said they soon became accustomed to it. In other factories the chocolate dippers worked over pans placed either in hot water or kept warm by
gas jets beneath, and were fairly comfortable. In some of the factories only the chocolate and bon bon dippers were seated at their work and these sat on wooden boxes. The rest stood. In the cracker department of one factory the girls were obliged to lift and carry about large boxes filled with crackers and cakes.

The wages were small, except in a few cases of forewomen. In all but one of the five factories the work was done by the piece and for the 53 individuals reporting the scale ran from $\$ 2$ to $\$ 8$; the average being $\$ 4.20$ which seems rather high for the whole sinco in all the factories visited the scale as reported by the managers and superintendents themselves ran from $\$ 1.75$ to $\$ 6$, never going over the figure, while one or two placed it at $\$ 5$. The difference may be accounted for on the ground that the superintendents did not take the wages of the forewoman into consideration while in the table from which the average given was made eight forewomen whose wages ran from $\$ 4.50$ to $\$ 8$ a week are represented. Ėven the average forewoman in the average candy factory does not, however, receive large wages. One in charge of the department where the finest grade of chocolate bon bons was made and upon whom fell constantly the responsibility for hundreds of dollars worth of goods was getting only $\$ 4.50$ a week, though she had been with the firm eight years. The wages for workers were even lower. Extracts from notes made at the time are illustrative and are quoted unchanged:
"The wages, according to the girls' own story, are miserablestarting at $\$ 2.25$ a week and rising to $\$ 4$, the forewoman in charge of the candy packing and chocolate dipping room getting but $\$ 4.50$. Questioned uniformly, the girls stated they were getting $\$ 2.75$ and $\$ 3$ and all complained of low wages.
"The girls made from $\$ 1.75$ to $\$ 5$ a week, the latter wages going to the very best class of workers, forewomen getting from $\$ 4.50$ to $\$ 7$.
"Girls are started at $\$ 2$ a week and can work up to $\$ 5$, but most of them rarely make over $\$ 4$. In talking with the girls this was evident. Girls who had been with the firm five and seven years were getting but $\$ 3.50$.

One factory counted three evenings of over time as a full day,
another gave half a day's pay for each night the force worked, and two paid for six evenings with two full days' pay. In any case the total weekly earnings were so low that the extra amount did not, in the girls' opinion, compensate for the great fatigue occasioned by the double work. In three of the factories all the workers except those just beginning were paid by the piece. In one the wages were by the week, and in the fifth the task system was followed and the girls were expected to do a certain amount of work in a given time. When they failed to do it their wages were cut, but on the other hand if they turned out more work than was set by the limits of the task, they were paid extra. The result, it was explained, was to put girls on their mettle.,It was quite apparent that they worked with feverish haste, quite different from that pursued in the single factory where wages were paid by the week and the girls were discovered singing over their work.

Most of the workers are in their teens. Older women do not stay in the business on account of the low wages.

## CASKET FACTORIES.

An occupation which seems gruesome on its face but which really has much to recommend it to women is the finishing of caskets and the making of mortuary robes such as are supplied to the undertaking trade. All the fancy silk linings put into the modern coffin are made by gịls, and usually girls not only make them but cut, fit and tack them into place, while other girls cover the outside of the caskets with cloth and do the glazing. In one of the factories visited all the work except that of making the linings was done by men, the manager evidently being an unbeliever in a woman's ability to handle a hammer and nails. In the last named place, girls were employed only in the robe department, which in appearance was more like a dressmaking shop than a factory. Even the presence of fashion magazines from which the robes were copied carried out the illusion. Few of the workers except the forewomen were experienced dressmakers, most of them being girls who knew but little about sewing and found it easy to work where less accuracy of fit and
detail was necessary than would have been required of them in a dressmaking shop.

The wages were not high, ranging from 70 to 85 cents a day for those working on the caskets and about the same in the robe department, though in the latter place good workers could make $\$ 1$ a day as all the work was by the piece. Lining makers averaged about 85 cents. In the other factory, where eight girls worked in a pleasant sewing room, wages ran from $\$ 3$ to $\$ 7$, most of the workers getting $\$ 5$ and the forewoman $\$ 10.50$.

## CHAIR FACTORIES.

In the great chair factories, which form an industry somewhat peculiar to Wisconsin, many girls are employed to do the varnishing and what is known in the business as "papering"that is, covering the chairs with stout paper so that they shall not be marred in shipment. Most of the factories are located in Sheboygan and Port Washington, two places which have been largely settled by Germans, and almost without exception the workers in these establishments are of that nationality. In an Oshkosh factory, which combines chair making with another line of business, this was not so marked, but it is safe to say that most girls who make their living by varnishing are of foreign parentage or foreign born themselves, the work having little to make it appeal to others, whose better education or higher intellectual equipment would make it possible for them to secure employment better suited to their sex.

Neither the work nor the surroundings are attractive, even in the best factories, while in the poorer ones it is little short of being repulsive. It takes exceptional care to keep the worker from covering her face, hands and clothing with varnish, as in her eagerness to make as high wages as possible she wields her brush withmore vigor than nicety. In one factory the girls worked at the dipping vats, and were covered with varnish from head to foot, but this was the only factory in which girls were permitted to do anything but hand work, in which it is possible to keep much cleaner and which is neither so dangerous nor exhausting. In hand work the girls varnish chairs which are placed on low
tables, boys being employed to fetch and carry them away as they are completed. All the work was done standing. The deftness with which the girls applied smooth, even coats of varnish was remarkable. All the finest furniture made by the factories was entrusted to them, men doing the coarser dipping. In these factories it was not necessary for the girls to lift heavy chairs, but in the one where girls worked at the vats they were found lifting pieces that seemed to be much too heavy for their strength. The work is said to be unhealthful, but it was difficult to get any definite statements in regard to that. It was stated that varnishers are liable to consumption and throat troubles from constantly inhaling the fumes of varnish, but this was denied by those who had worked for years at the trade without noticing any ill effects. What the girls did complain of was difficulty in washing their hands and faces free from the stuff. They used benzine for the purpose, and between the two things said that their skin was kept in a state of constant irritation, a fact borne out by the rough complexions of some of the workers. One girl complained that the varnish made her dizzy, affecting her head in a way she did not seem able to explain but which would seem to indicate that at times workers are overcome by the fumes.

The girls who did the papering were younger, poorer paid, but had pleasanter work, as all they were required to do was to wrap chairs in paper, tying it with stout twine.

The wages were low but uniform throughout the chair factory district, being fixed by agreement among the manufacturers. Girls in the papering department were paid 35 and 40 cents a day and varnishers 65 to 75 cents. There was no piece work, but the task system prevails, so that the girls work at the highest rate of speed for the most part. In the Oshkosh factory a few girls who worked by the piece could sometimes make as much as 90 cents a day, and a girl who did stenciling in colors was paid $\$ 1.25$ a day. The rest made from 40 to 65 cents.

The hours were ten a day, factories beginning work at 7 o'clock, with forty minutes for noon and an hour off on Saturday afternoons. Most of the factories conformed to this schedule.

In discussing the industry as it affects women, a manufacturer who employs a large number of girls said that he did not consider it suitable labor for them, but that he had been forced to put them in because they could be had at cheaper wages than men and the great competition in the business required the factory to keep its expenses down as much as possible. Then, too, girls were more conscientious than boys and did better work, once they were trained. Some of the factories had been employing girls for a great many years. In one, which put them in over twenty-five years ago, girls now employed are daughters of mother's who once worked for the same firm, so that it might be said they were literally born into the work.

Taken as a class, the varnishers were not reported to be ambitious. As a rule they had little education, having gone to work in the factory as soon as the law would permit them to do so. Few of them patronized the public libraries, and a night school in which sewing and cooking were taught for several years did not prove successful and was given up. The custom of minor workers turning over the entire wage to their parents prevailed throughout, and even workers past their majority had no control of their wages.

A side industry, connected with the chair factories, is the making of cane seats. Such work is done in the homes and so it comes about that in these communities whole families work for a chair factory, the father and elder boys and girls in the factory, the mother and young children doing caning at home. Many of the girls interviewed had been varnishing chairs for five and six and even seven years, and professed to like the work as well as any that was obtainable.

## CIGAR BOX MAKING.

Girls in cigar box factories are mostly employed in lining and decorating boxes, though in some establishments they do the sorting and run the machines on which the boxes are made. Girls al'so work in the printing departments where the labels are turned out. In fact, few men are employed in such places except in the wood-cutting department. Owing to the light material used in making the boxes none of the work is very
heavy and much of it, such as the lining and decorating, seems well suited to girls, who acquire considerable deftness in fitting in the paper and putting it on smoothly. The only work that would seem to be in any way exhausting is that don on the machines, which are operated by foot power.

All the work in the places visited was paid by the piece and wages run from 40 cents, which the youngest and least experienced girls are paid for sorting wood and running errands, to 90 cents, which the machine girls made. Few even of the best workers were able to make $\$ 1$ a day. Girls who did decorating made about $\$ 5$ a week. An exceptional worker was making $\$ 25$ a month, but she could turn out a great deal more work than anyone else in the place. In one factory a woman who had been working for the same firm for twenty-one years was making $\$ 5.40$ a week and supported a mother on that slender wage. Added to the drawback of small wages the business is liable to some fluctuations, and while shut-downs are infrequent the workers lose a good deal of time in the factory through slack work. The lightness and ease with which most of the work is done are its chief recommendations.

## CIGAR MAKING.

The making of cigars is one of the oldest trades in which women have found employment. Some element of romance seems to have clung to it, poets having endowed the cigarmaker with a traditional beauty, but there is nothing in either the work itself nor the surroundings in which it is carried on today that would tend to confirm such a view. It is true, however, that as in the higher grades cigar making is a skilled trade, the workers are usually above the average intelligence of the factory class. Many of them have grown old in the service of one firm, and there are almost as many gray heads bending over the tables on which the cigars are made as there are young ones. Such length of service is possible because of the early age at which girls sometimes begin such work. They are started at stripping tobacco. In the large factory in which most of the facts for this part of the report were gained, there were fifty of
these little girls, huddled together on low benches in one end of the work-room, stripping the stems from and smoothing out leaves of tobacco. From the ranks of the strippers they were presently advanced to the department in which the cigars were stamped and labeled, and gradually they worked their way up to the cigar-making department and learned the knack of putting a cigar together.

The wages varied according to the work done. Strippers were paid $\$ 2$ and $\$ 2.50$ a week, and the girls who did the labeling and stamping, $\$ 2.50$ and $\$ 3$. The cigar makers worked by the piece and made from $\$ 5$ to $\$ 9$, according to their skill and the quality of the work given them to do. One woman made $\$ 10$ a week regularly, but was accounted the best worker in the place. She was the only one who was paid that amount. Others said that they averaged about $\$ 1$ a day. It took two or three years of practice to reach that figure, however, and then one was not always sure of making steady wages.

The eight-hour day was strictly observed, though occasionally overtime work was necessary, Ordinarily the factory opened at $7: 30$ and closed at $4: 45$, with an hour and a quarter at noon and Saturday half holidays the ycar around. The factory was clean, well ventilated and with good light, while the sanitary arrangements were better than the average.

In speaking of the ability of women workers, the manager of the factory said that the firm had not always employed them. As a matter of fact, men were to be preferred, but in a strike over twenty years ago the men walked out leaving the firm in the lurch. Then the firm began to impress women into the work and within a year had trained a great many, so that when the men, tiring of the strike, tried to come back they found their places filled. At that time boys were employed to do stripping, but they struck, too, and little girls were hired in their places. The firm had proved that women and girls did just as good work and were more reliable. It was true that in the finer grades of cigar making men still did the best work, but for the ordinary lines women did just as well. Their earnings were not so high, however.

## CLOTJIING FACJORIES.

Under the general head of clothing it has been deemed best to include all the information gathered in a dozen' different establishments variously manufacturing shirts, overalls, women's underwear, duck coats and trousers, rather than take up separately each division of the industry. In this department's report on sweating, which appears in the present volume, can be found many facts that would come under the scope of any investigation of the entire clothing trade, and those who may care for a more detailed account of the conditions under which such work is carried on are referred to it. Here it is possible to consider only certain general characteristics of the factories visited, and though it is probable that the establishments in question very fairly represent the general status of the business, as it is carried on in factories, the special investigation of sweat shops touched also upon the factories and gave opportunity for a closer study than this general inquiry permitted.

It was found that in twelve factories visited, all but three of which were located in Milwaukee, conditions of employment varicd greatly, though the wage in the several divisions was about uniform. The factory buildings themselves ranged from the thoroughly modern, perfectly equipped structure on the outskirts of the city where every convenience was provided for the workers, to the dark, dingy room in the heart of town, a room never intended for factory purposes in all probability, and illy adapted to them in any event. In some of the places of this last class the operatives sometimes were obliged to work all dav hy gas light, the room being lighted only by windows at one end, the other end being used for office purnoses. Added to this what few windows there were, were not always kept clean enough to let the light come through. In one instance, where thirtyfive girls were making overalls in a long narrow room, the windows at one end of the room were boarded half way up and had been in that condition for some months. In this particular place, which, it must be stated, was one of the worst, the only operatives who could get along withont artificial light even on sunny days were those working near the windows. The others
worked under flickering gas jets. Not a light in the workroom was shaded and the girls complained that after a day spent in sewing dark cloth their eyes gave them a great deal of discomfort. The same complaint was made at other factories where a great deal of work was done in artificial light and no provision was made to shade or steady the flickering gas flames. Frequent complaint was made, too, of lack of ventilation. In many factories of the sort described, opening the windows was the only way in which the workroom could be aired and to this the girls whose machines were nearest thei windows objected on account of the danger of taking cold. In some places, too, storm windows were put on early in the fall and this made it almost impossible to let in a sufficient amount of fresh air. Such factories were quite as numerous as the modern ones, in which every workroom had windows on' at least two sides, if not on three as was the case in one model building. Often in addition ventilating systems were in use in these factories.

In none of the factories visited was any of the work done by foot power, all the machines being run by electricity or steam. Only in the small concerns, coming under the head of sweatshops and not included in this report, were the operatives compelled to run their machines by foot power. All the work was done seated. Some of the workers complained that their chairs were not always properly adjusted to the height of the table, but usually that seemed a matter easy to remedy for foremen and managers professed to be ready to raise or lower seats to suit the workers.

The hours required each day varied in different factories. In the one union shop visited the eight hour day was strictly observed. Others ran nine and ten hours. Two ran from 7 to 6, with an hour at noon; three from 7:30 to 6 , with an hour at noon; three from 7 to $5: 45$, with three-quarters of an hour at noon; one from 7:30 to $5: 45$, with an hour at noon; one from 8 to 6 , with an hour at noon; one from 7:15 to 6 , with an hour at noon. In many places there was little discipline so far as regularity of hours was concerned and girls came and went about as they liked. In the busy seasons the managers of the factories did everything they could to keep girls at their ma-
chines not only the full time, but over time also, but did not always succeed as well as they could wish. On the other hand, there were establishments in which the most rigid methods were followed and operatives were obliged to be at their machines at the moment power started or suffer fines for their lack of punctuality. In one place, the superintendent complained that even in the rush season it was impossible to get the operatives down to business on time and in consequence much overtime was required that could have been lessened by beginning work earlier in the day. Workers themselves admitted that they often did not come to the factory before half past eight and left before six in the evening. They could see no reason why they should not do so so long' as they were working by piece. There is, however, comparatively little of such dawdling, for the earnings of piece workers are not so high that many care to reduce them through their own fault. In one factory slack work had lessened the working day to eight hours and the girls were making such small wages that they were bitterly discontented. Saturday afternoons, in most shops which granted such concessions, were earned by working extra time on the other five days of the week. In almost every branch of the industry there were periods when overtime work was required, but these were usually off-set by dull seasons when work fell off, if the factory did not temporarily close down. Managers, as a rule, were opposed to overtime, believing that it lowered the standard of work. Under the conditions regulating the business it seems difficult to avoid it.

There was the greatest variety in wages, but it is safe to say that the average was below $\$ 1$ a day. There were plenty of instances of workers who earned more, but there was still a greater number who earned less. The younger girls who took out bastings, ran errands and made themselves generally useful, started at $\$ 2$ or $\$ 3$ and learned the trade by degrees. In a factory making overalls and shirts, piece workers made from $\$ 4$ to $\$ 9$ a week, inspectors being paid $\$ 7$ and $\$ 7.50$. The average was about $\$ 5$. In a cloak factory wages ran from $\$ 6$ to $\$ 12$, but lost from six weeks to three months every year. Another shirt and overall factory wages ranged from $\$ 5$ to $\$ 6$, girls being started
on general work at $\$ 3$. Good workers could make $\$ 8$ and even $\$ 10$, by having plenty of work and pursuing it diligently. In two underwear factories the wages were from $\$ 3$ to $\$ \uparrow$ a week, only a few being paid the latter figure. A girl running a hemstitching machine made 50 cents a day. A girl sewing lace on muslin ruffling made the same amount. In a factory making silk waists and petticoats the average for twenty-four girls was $\$ 6.25$ a week. This included a forewoman who was paid $\$ 12$ a week, as well as girls making only $\$ 3$. The scale for operatives ran from $\$ 4$ to $\$ 8$. The average in an overall factory for thirtyfive girls was $\$ 5.40$, the scale running from $\$ 4$ to $\$ 9$. In the union shop, before referred to, workers said they could make as high as $\$ 10$ and $\$ 12$, when conditions were just right, but as they rarely were their wages fell far below that amount.

Individual instances may be of interest. A deaf mute making overalls averaged about $\$ 5$ a week and had managed to save $\$ 500$ in five years. She, however, lived at home and denied herself everything in the way of clothes except those absolutely necessary. A girl who picked out bastings was paid $\$ 3$. A woman running a buttonhole machine had formerly worked in a photographer's studio as a retoucher, but her eyes gave out and she was content to make $\$ 6$ a week in her present occupation. An overall maker made $\$ 5$ and $\$ 6$ a week and remained at home one afternoon every week to assist her mother in the family washing. A girl making shirts had formerly worked in a fashionable dressmaking shop at $\$ 5$ a week and was now making $\$ 8$. A shirt maker who had succeeded to the position of forewoman after eight years of experience, said that she had been able to make $\$ 6$ a week when she had a machine, but that few shirt makers could average $\$ 1$ a day nowadays. Buttonhole operators in that factory received but $\$ 4.50$ a week.

In explaining how he fixed a scale for work, the manager of a large factory employing nearly 200 girls, said that he selected six girls haphazard, making sure that some were swift workers and that others were in the slower class. To each of these he gave the same amount of work to do, paying them by the day for the time employed upon it. Then he kept strict account of the amount of work done by each and struck an average from the
total. He declared that it was not true that the scale was adjusted to the best worker as is so often charged. Old hands who knew what he had in mind when he started out to fix a scale would often try to take advantage of him and work as slowly as possible in order to have the scale fixed low. He told of an instance where an experienced hand, called in to assist in adjusting the scale for some new work, earned exactly fifteen and three-quarters cents in three and one-half hours, while another girl, newer in the business, who did not realize his motive in having her do the work, made twenty cents an hour from the start.

In the cloak factories the girls complained that the scale had steadily declined of recent years. A woman who had been making cloaks for twenty years said it was impossible for her to earn as much today as she did formerly. She was inclined to attribute this to the fact that men were being employed to do the class of work formerly given women. Wherever men were employed in cloak factories they were given the harder, but the better paid grade of work and were able to make much more than the women. In one factory it was stated that while the girls could make from $\$ 6$ to $\$ 12$ at the highest, the men were making from $\$ 18$ to $\$ 25$. Two shirt makers of more than ordinary intelligence for their class said that in many factories of which they knew personally there was a definite limit set to a woman's wage earning capacity and no matter how good an operator she might be, if she went much over the $\$ 1$-a-day mark in one way or another, either through a readjustment of the scale or by changing. her work, she was kept within the amount deemed enough for a woman to make. Frequently these workers said a woman was afraid to do all that she could because she felt that if she did her wage would fall. Another side of the question which came out in these discussions concerned the feverish haste in which the poorer workers are obliged to toil if they would earn anything at all. Under the scale, it was asserted, it was impossible for the best workers to make fairly good incomes without overworking, but it was quite impossible for the slower hands to do so without a tremendous expenditure of nervous energy.

The proprietors and managers took quite another view. They said that wages in Wisconsin were much better than they were in the east, while the grade of workers was not nearly so good. Experienced hands were always able to get good jobs. The trouble with western help was that much of it was inexperienced and needed training. In citing the difference that exists between eastern and western factories, so far as the treatment of operatites go, one manager told of a certain eastern firm which does not allow its help to wear laced shoes as it has figured out that a worker loses a certain amount of time by attending to refractory shoe laces in working hours.

It was also stated that western houses are obliged to compete with eastern sweatshop goods and the competition is so great that it is impossible for them to pay any more than they do without running the risk of loss.

It was difficult to get at anything like the real facts regarding the effect of such work upon the workers. There were general complaints of failing vision caused by defective light and constant work, of rectal troubles brought on by constant sitting, of anaemia and general ill health from close confinement. Usually, however, there was a prompt denial of any inference that would tend to show that the clothing trade is unhealthful, and it is quite true that women who have been in it for a great many years do not seem to be much worse off than women of their same station in life whose lives are spent in the kitchen. One thing was noticeable, however. That was the general failure of such workers to sit properly. Almost every woman had the round shoulders and the bent back that come from continued sitting in wrong positions. At noon, when they might go for a walk in the fresh air, the workers seldom do so, and instead eat their luncheons at their machines. "It is too much trouble to dress up", was their usual reply to a query as to why they did not take advantage of what opportunity they had of getting needed exercise and change of air.

## CORE MAKING.

Accustomed as the investigator of social conditions becomes, in time, to seeing women doing strange work in strange places, it is always with more or less of a shock that he finds them in foundries, the best of which must, in the very nature of things, seem wholly unsuited to the sex. Nevertheless, in certain kinds of foundry work women, or to be more particular, girls have made a distinct place for themselves, ousting the boys who formerly occupied it through no other means apparently than by being more conscientious and painstaking. In two of the large brass foundries in Milwaukee some seventy girls in all are employed at what is known as core-making, a very important and essential phase of foundry work. It consists in making the sand cores for castings, a task requiring absolute accuracy in following the model and a certain delicacy of touch that it is said girls have in greater measure than did their predecessors in the work. Each girl works with a little heap of sand, mixed with rosin before her, out of which she moulds the core, using a metal mold for the purpose. Part of the work depends upon her accuracy of sight and deftness of touch, as it consists in drawing certain lines and indentations in the wet sand which, when reversed in the casting, become all important in the strength and durability of the completed piece.

The worst features of the work are the bare, uncomfortable, dirty surroundings. The girls inevitably get themselves covered with the greasy sand and present anything but an attractive appearance, while the rooms in which they are stationed are not pleasant places. In one shop every effort is made to safeguard the girls morally. They have a separate entrance to their workroom and are sent home ten minutes earlier in the afternoon and come ten minutes later in the morning so that they have no need of meeting any of the men working in the establishment, none of whom are permitted to enter the room where the girls are employed. Girls who go home to their midday meal are also dismissed before the noon whistle blows. In this respect the foundry is some steps in advance of other places where both sexes are employed, and in
which there are seldom any restrictions as to their meeting. The firm referred to has been employing girls for about nine years. Before that cores were made by boys, who were usually hired at that irresponsible age of boyhood when it is impossible to tie lads down to any regularity of life, and in which a conscience, as applied to the task in hand, has not been well developed. The experiment of filling their places with girls proved so successful that the foundry has kept them ever since and other foundries have followed its example. While unpleasant in some respects, it must be said that core-making is not more so than many other lines of work in which women and girls are engaged. The wages ran from $\$ 2$ to $\$ 5.50$, only the most expert workers receiving the latter figure. Beginners were started at $\$ 2$ and $\$ 2.25$ and worked up gradually, the most skilled, after some years of experience, being paid from $\$ 4$ to $\$ 5$. The hours were from 7 to $5: 30$, with half an hour at noon.

A few girls were employed in the shipping rooms of both places to pack brass and nickle fixtures for shipment.

## COTTON BATTEN MILL.

The greatest difficulty was experienced in getting information at this mill, which is located in one of the smaller cities in the state and which has recently been affected by a strike. The managers refused tor discuss the situation and the workers were either reluctant or afraid to do so. Two objectionable features of the work were speedily discovered. One was the length of the working day, which although reduced by the strike from the eleven hours heretofore demanded, to ten and a half is still longer than that in vogue elsewhere, as work begins at $6: 30$ and continues to 12 and then runs from $12: 50$ to 6 p . m. The ten minutes taken from the noon hour makes up for an hour less of work on Saturdays, when the mill closes down at 5 instead of 6 . The other drawback was found in the work itself, as in addition to the fatigue occasioned by long standing at the reels and jenneys, the workers were exposed to an air thick with flying cotton. One's own clothes and hair were so thickly covered with lint in
the course of even a short inspection that it seemed reasonable to conclude that day after day of breathing in such an atmosphere must have a bad effect on the lungs and throat.

The girls were employed in running spinning jenneys and reeling machines and in packing the rolls of cotton batten as they came from the reels. Each girl had a long row of spindles to look after and none of them was able to sit down to her task. Wages, from statements made in the factory, ran from $\$ 5$ to $\$ 10$ a week, but this was disputed by other working girls in the same town who said that the cotton batten mill workers were lucky when they made $\$ 1$ per day. There was no way of verifying either statement, both of which are here presented for what they are worth.

## DYEING AND DRY CLEANING.SHOPS.

Women find a variety of occupations in the dyeing and dry cleaning establishments. The one selected for inspection was a comfortable place as factories go, with abundant air and good light. Some fifty girls in all were employed. A dozen worked in the tailoring department where garments were renovated. Another set were engaged in taking out stains by chemical processes. Other girls did pressing both by hand and by steam rollers. One who had worked at a large roller for six years, being constantly enveloped in a cloud of steam, said that she did not notice any effect on her health except that she caught cold easily. . She had been told that the steam would affect her eyes, but did not find this to be the case. Other girls made buttons, did accordion pleating with a machine that was operated by hand, pressed elaborate party dresses, resewed the carpets sent in to be cleaned, re-curled ostrich feathers and did a number of other things, the work apparently being free from the monotony that is customary in most factories.

Wages ran from $\$ 2.50$ to $\$ 8$. The forewoman was getting the maximum figure, $\$ 8$, after having served the firm fourteen years and being in full charge of the pressing and renovating departments. She thought the salary low but said that she was never docked for days absent and had a two weeks' vacation with pay every year. The other girls had no such favors.

She had once done housework but looked back upon it with horror, saying that she was not treated right and that she had been obliged to work from early in the morning until late at night for a mere pittance. The pressers were paid from $\$ 3.50$ to $\$ 6$, according to their skill. The catpet sewers were paid $\$ 5$ and $\$ 6$, and the girls running special machines about the same.

An electric ventilator in the pressing room kept the air fresh and cool and there was plenty of light.

## ENAMEL WARE FACTORIES.

The increasing demand for enameled ware in household utensils has created a distinct line of work for women, several hundred of whom,-many mere girls in their teens,-find employment in the several factories of the sort in the state. Some of these are large tinware factories of which the enameling works are only a department, but others are devoted entirely to enameling, and in either case the two kinds of work are so distinct in character that it had been thought best to consider them separately. The work of enameling consists in coating utensils of cast iron with a certain metallic preparation which, when exposed to intense heat, becomes as hard as porcelain. This preparation is applied either by dipping or with the brush. The girls stand at vats filled with enamel of various colors, into which they dip the piece to be covered, holding it with a long pair of pincers. The only skill required is a certain trick of so shaking off the surplus enamel that the piece shall be evenly and smoothly covered. This takes considerable muscular effort, as well as a certain deftness which not all girls seem able to attain, since not every girl can become a first class enameler. The mottled ware is made in another way. A utensil already covered with plain enamel is held by the pincers in one hand, while the girl with the other hand lightly flecks it over with enamel of a contrasting color, dashing it on with sharp, quick movements of a whisk broom. Special care has to be taken to cover the edges and joints neatly and to keep the inside clean. The enamel is not dirty, is easily removed from the hands and face, and does not ruin clothing, though the workers wear enveloping aprons to pro-
tect their gowns. In a dry state the enamel is a fine, light powder, easily blown apbout, and all enamel workers complain of the dust that filters into the lungs and throat.

Worse than this, however, is the intense heat noticeable in all the enameling works. The great ovens in which the ware is fired adjoin, if they are not actually in the room where the enameling is done, and in spite of funnels arranged to carry off as much of the heat as possible, the atmosphere becomes fairly torrid at times. Combined with the dust it makes such places most disagreeable and uncomfortable to work in. Girls are frequently overcome by the heat in summer when the workrooms become unbearable. At times it is found necessary to close down the entire plant on account of the heat. An intelligent forewoman in one of the factories suggested putting in electric fans, which would certainly tend to improve conditions and would not be so great an expense that they could not easily be afforded.

Still a third drawback to the work is the fact that it has to be done standing. Girls can not well sit at the vats. They complained of great weariness on that account, but said that tho work was preferable to much that is done in factories and paid about as well as any.

Wages varied according to the factory. In one the enamelers were paid $\$ 4$ a week. In another, where the piece system was followed, they could make up to $\$ 5$ by diligent work. In a third the wage ran from $\$ 3$ to $\$ 4.50$ a week, according to the skill of the worker. The hours were ten a day throughout. In one place girls who worked a full week were given half a day's extra pay as a reward.

## ENVELOPE FACTORY.

The work required of the girls in the envelope factory visited was purely mechanical. The larger portion of it was done on machines which required nothing more than to be fed as they cut, folded, gummed and counted envelopes. All that the girls did was to feed the paper in and take care of the envelopes as they came out, doing them up in bundles and putting them into
boxes. This last work was regulated to the speed of the machine and an astonishing number of boxes can be packed by a girl in one day. Ten girls were engaged in folding and gumming special makes of envelopes, and there were about twenty little girls who ran errands for the machine operators, bringing the material and taking away the envelopes.

The factory was clean and well ventilated, but overcrowded, the machines being placed very close together. The greatest objection that could be raised to the work was the nervous strain caused by the incessant noise and the effort of keeping up to the machine. The only really dangerous work was that being done by the girl who cut the paper bands for the envelope bundles. She used a long knife fastened in a hinge, a wickedlooking tool, but the girl asserted that she had never cut herself and that no one else using it had ever done so. All the machine work was done sitting and the girls had chairs instead of the usual uncomfortable stools.

The hours were from 7 to 6 , with an hour at noon and Saturday half holidays through the summer. There was no over time. Wages ran from $\$ 4$ to $\$ 6$ a week for the machine operators, the errand girls getting $\$ 2$ and $\$ 2.50$.

## FLY NETS AND HAMMOCKS.

Practically all the work of making leather fly nets is done by young girls in dark and unpleasant factories. The work, if not so arduous as some that is given women to do, has certain unpleasant features, entailing apparently an inevitable and most unfeminine state of griminess and dirt. Of the two places of the sort visited during the course of the investigation, one was given over entirely to the manufacture of fly nets, while the other combined that industry with the making of hammocks and fur and duck coats. It was true of both, however, that the rooms in which the fly nets were made were the least attractive of the entire establishment, floors, walls, chairs and tables being black and dirty from the oil and coloring used in the leather.

The work of making fly nets is simple. The leather is first cut into fine strips on machines operated by girls. It is then
netted on low frames, two girls working on a net from opposite sides of the frame. All the work is done by hand, the strips being knotted into holes punched in the leather straps that traverse the width of the net. As all the leather used is freshly oiled and blackened the girls are soon begrimed, faces, hands and clothing being covered. The odor is unpleasant and the air in the room at one place seemed close and bad. In spite of their grimy hands and faces and soiled clothing the workers seemed cheerful, though taciturn about discussing their work, taking their cue from the proprietor who objected to their being interviewed on the ground that talking might make them discontented. Wages, according to all that could be learned, ran from $\$ 2.75$ to $\$ 6$ a week, all work being by the piece.

In the other factory, the fly net makers worked in a dark, badly lighted and poorly ventilated room. At the time of the visit it was full of smoke and dust, which it was explained was due to a temporary defect in the chimneys. All the girls in the department were young, the older workers being engaged in making duck and fur coats and in netting hammocks. The wages were small, even for the last named class of work, which demands a good deal of skill. From $\$ 5$ to $\$ 7$ a week seemed to be the highest possible figure, while the younger workers fell far below that in earning capacity.

## FUR GARMENT MAKING.

The making of fur garments is open to all the objections that can be made against a trade so sharply affected by seasons, but, on the other hand, it holds out rewards for good work that are sufficient to induce a great many girls to struggle along to the point of being so invaluable to the house that they will be retained the year around, as are a few of the more fortunate and highly skilled workers. All the department stores of any importance have their fur garment making establishments, but in addition to these there are a number of factories which are exclusively devoted to the manufacturer of fur garments. Some of these make a specialty of fine furs; others only do coarser work, such as is seen in the heavy, cheap fur coats worn by
teamsters and motormen. All the finer work is done by hand, and is the better paid. The coarser work is done on machines specially adapted to the purpose. The skins are first neatly joined together, a work that requires a great deal of nicety, since the seams must not show, and then the garments are cut and put together. As most of the hardest work and the greatest rush comes in summer, when sometimes the factories are obliged to work overtime to get out their fall orders, the work is likely to become unpleasant owing to the odor in the cheaper furs and the constant flying of hair, which sticks to everything. All the factories visited, however, had excellent ventilation and the workers did not complain to any extent.

Wages were better than the average, though it must be taken into consideration that the workers suffer from long periods of enforced idleness, ranging from two to six months. Few of the workers make below $\$ 6$ a week and some make as high as $\$ 12$. The last figure is somewhat high, however, and means working at a pressure that could not long be kept up. A girl who can make $\$ \tau, \$ 8$ or $\$ 9$ a week throughout the season is deemed to be doing well. It takes a long time to acquire anything like proficiency.

## GLOVE MAKING.

Glove making in this state does not offer a large field of work to women, though there are several factories in which gloves of various grades are made. Some manufacture only the coarse, clumsy affairs in which the farmer protects his hands at the corn husking season, but others manufacture the fine hand covering worn by the society man. It is in the manufacture of the last named sort that women find both the best wages and the fiercest competition, for they are obliged to work side by side with men, who, for one reason and another, are usually able to make the greater wage.

In the only factory of the sort visited conditions were of the best. The workrooms were clean, well lighted, with fine ventilation and ample space. Walls were snowy white, windows and woodwork were clean and the whole place a model of good sanitation. The workers, too, were of the more intelligent grade,
and many of them had been with the firm for years. All the work was done on special machines run by steam power. Men were employed to do the cutting and run the heavier machines. The latter class of operators were paid more but were required to furnish their own machines, while the firm, as is the usual custom, furnished those for the rest of the force. The work was highly subdivided and few of the workers made a glove entire. Each had a certain part to do, the glove passing along from worker to worker until completed. A few girls, however, made whole gloves of a special sort and were paid considerably more than the other operators as greater skill was demanded of them. All the heavy seaming and the putting on of fasteners were done by the men.

The wages in this place varied from: $\$ 1$ to $\$ 2$ a day. A girl who could not make $\$ 1$ a day after two or three months' experience was considered a poor worker, whose place had better be filled by someone more capable of learning the trade. The little helpers, who ran errands and were supposed to be learning the business, were paid from $\$ 1.75$ to $\$ 3$ per week, as they grew more proficient. From $\$ 6$ to $\$ 8$ was about the average earnings of the best workers among the women. The men made much more. There was great latitude as to hours. The operators usually arrived at the factory at about a quarter to eight and worked until half past five. In the rush season rules were more stringent and operators were required to work over time. The factory closes down for about three weeks out of the year, two weeks in July when everyone in the place takes a vacation, and usually from Christmas to New Years.

In the factories where the cheaper and coarser gloves were made neither the conditions nor the wages were so good. Wages at one place making husking gloves ran from $\$ 3$ to $\$ 8$ a week, according to the number of hours put in. The wages were below $\$ 1$ a day on an average and were lessened by the lack of work. Another place where leather palms were put into woolen gloves, wages ran from $\$ 3$ to $\$ 6$.

GRASS TWINE FACTORY.
A somewhat unusual occupation for women is the manufacture of matting and bottle covers from grass. There is only one factory'of the sort in the state. It is located on the outskirts of one of the smaller cities and is at least three-fourths of a mile from the terminus of the nearest street car line. For all that it finds plenty of women eager to work at its looms, since the wages they can so earn are rather above the average for the town.

About 125 women and girls in all are employed at weaving, making bottle covers, sewing and inspecting. The material used is marsh grass brought to the factory in a raw state. It is made into twine and then this twine is woven into matting of really remarkable artistic merit. The refuse is used for making squares of woven grass that breweries use for covering bottles intended for shipment. The air of the room in which the girls who make the covers work is thick with dust and the noise of the machines is deafening. The girls wear big aprons and caps, and are covered with dust, which must affect the lungs and eyes. The weavers have charge of enormous looms on which the matting is made. The noise of the looms is even greater than that of the machines making the bottle covers, but there is less dust. In both departments, however, there is enough to make breathing uncomfortable. The weaving is done exactly as for cloth, except that everything is on a larger scale and does not require so close attention. There are other departments of the mill where girls trim the ragged ends of the matting strips, preparatory to running it through presses and sew on bindings and fringe, all the sewing being done on power machines. The quarters for the latter class of workers are by far the most comfortable in the entire establishment.

Wages were rather better than the average, running from 60 cents to $\$ 1.50$ a day. Girls making bottle covers worked by the piece and made from 60 cents to $\$ 1.50$ a day. The last figure was made only by exceptionally rapid workers, but many made as high as $\$ 1$ right along. The weavers made from 75 cents to $\$ 1.60$, the average being about $\$ 1.25$. When wages fell below that, the manager said he did not consider his looms
were being operated to their best advantage and he could not afford to keep operators who were not swifter. Girls in the sewing rooms were paid $\$ 4$ a week, and those who trimmed the inatting strips made 60 cents a day. The hours were 10 and $101 / 2$ a day according to the season. There were no Saturday half holidays and no vacations as the place never shuts down. There were no dressing rooms and poor toilet facilities. The workers were largely German and Polish. Many of them walked several miles every day to their work. It was generally agreed that the work was excessively hard and only the strongest girls could stand it.

## HOSIERY FACTORY.

Though a number of factories manufacturing hosiery were visited during the progress of the investigation, it has been decided to include them under the general head of knitting and to reserve this space for a somewhat more detailed account of the conditions existing in a certain establishment, which make it unique among the rest. The establishment in question is located in Kenosha and it has had under way for some time a rather interesting experiment in the new "factory altruism." It has not been able to go so far in its reforms as has been done elsewhere perhaps, owing to the stockholders' insistence that the pecuniary value of every step shall be proved by the management before another is taken, but enough has been accomplished to justify calling attention to it.

The factory building is a model in itself. Over 500 girls are employed, but there is so much space in the great knitting halls, which are said to be among the largest in the world, that there is no appearance of crowding. Everything is clean and bright.

- There are many windows on every side from which glimpses are had of well kept lawns, trim shrubbery and gay flower beds, while within the scene is quite as attractive, the windows being curtained with crisp white muslin curtains, while shelves in the spaces between hold blossoming plants. There is no over-head machinery in the knitting halls, and on the low tables at which the girls sit in comfortable high backed chairs, pots of growing palms and ferns are placed, a man being employed to do noth-
ing else but keep these and the window shelves freshly stocked from the conservatory which adjoins the factory. The hardwood floors are kept perfectly polished, the toilet rooms are as clean as those in any private house, being scrubbed out every day and the whole factory from end to end is a revelation in what can be done to improve the surroundings of the workers.

Attractive environment is not, however, the only reform which the firm has in progress. In the middle of the morning and of the afternoon a ten minutes' recess is taken when the machinery shuts down and every one is supposed to take some exercise to offset the monotony of long hours at the machines. At noon hot coffee, with cream and sugar, is served by a whitecapped chef, the firm furnishing all the materials at a cost of about $\$ 30$ a month. Two weeks' vacation is given everyone, though wages are not paid during that time.

Moreover, perhaps best of all, the scale of wages is exceptionally high. The average for thirty-six girls making definite statements as to their wages was $\$ 8.06$ a week, the scale running from. $\$ 4.80$, for a beginner, to $\$ 13.50$. Girls of sixteen and seventeen were making $\$ 7$ and $\$ 8$ a week, and some of the older hands made as high as $\$ 15$. Workers said that a girl who could not make over $\$ 1$ a day after six months' experience would never be a good knitter. Beginners were started at $\$ 3$ a week when they lived in town, at more if they were obliged to pay board, the firm assuming that the girl when she had mastered her trade would make up for the actual loss entailed by her poor work when learning. Board in Kenosha ran from $\$ 2.50$ to $\$ 3.75$. Inspectors made from $\$ 1.20$ to $\$ 1.50$ a day.

The workers were an interesting study. In going through the place there was none of the idle curiosity usually displayed, and none of the whispered comments and giggles that frequently follow a visitor through a factory were heard. Instead the girls merely glanced up from their work, smiled at the superintendent who was acting as guide and then returned to their duties, showing no further interest in the incident. In appearance the workers seemed to be much above the average factory class, but the superintendent protested that this was merely because their self independence and self respect had been
developed by the methods in vogue. He explained that in a measure all that the firm did was in its own interest, since so much expense necessarily attaches to training a girl to the work that once she has become a good knitter it behooves her employers to keep her. His girls remained with him for years, usually until they married, and this was proved to be a fact by the statements of those filling out schedules, as the greater proportion had been with the firm for over five years.

The firm now proposes to erect a separate building for a clubhouse, putting in a gymnasium, baths and class rooms and conducting classes in manual training, draughting and the like. Heretofore the rapid growth of the plant has made it impossible to spare any room for such purposes and, moreover, the superintendent said that he had tried the experiment of getting the workers to come to the factory in the evenings for classes and clubwork, but had failed, as they did not seem to care to spend their times of recreation in the same place where they passed their working hours. Therefore he was urging the erection of a separate clubhouse and hopes it will soon be an accomplished fact.

## KNITTING FACTORIES.

Under this head are included all but one of those factories visited in which woolen gloves, stocking-caps, stockings, shawls, and knitted underwear are made, for though there are differences in the amount of skill required and the wages paid, the work itself and the conditions under which it is done are much alike. There are probably more girls in knitting factories than in any other one line of industry carried on within the state, for in addition to the several large factories in Milwaukee, which employ nearly a thousand girls alone, in almost every town of any manufacturing importance whatever a factory in which knitting of some sort is done may be found. It is as if the knitting needle, even in its modern and more complicated form is still pre-eminently the woman's tool, which the exigencies of industrial life have not as yet wrested from her. Knitting remains a distinctly feminine employment, with all the drawbacks and advantages that go with such,

The knitting factories vary in size from the one room with a dozen girls at work to the large building with a hundred or more girls working on each of its several floors. Some of them are thoroughly modern in equipment, with ventilation, lighting and general sanitation as perfect as possible, while others are dark, dingy, dismal places unfit in every way for factory purposes. In the smaller towns and in the outskirts of Milwaukee, where a number of factories are located, there is always plenty of light and air, but many of the factories are in the heart of the city, housed in buildings that are ill adapted to the purpose to which they are being put. In one such factory, where 250 girls are employed, thirty of the number were found huddled in a small gallery swung from the ceiling of the first floor where the sorting and packing were done. These girls did the finishing on stockings and caps, working ten hours a day. They complained a good deal of headache, which they attributed to the lack of air, for though there were plenty of windows; it was impossible to keep them open without subjecting the girls who sat nearest to a draught. The height of the gallery was nine feet, which made it come within the letter of the law, but for all that the air was bad. Two hundred girls worked in the knitting hall, which was crowded and close, and twenty were employed in packing. The dressing room was another gallery, so small that the workers had to await their turn at changing their clothing, while the closets were in bad condition. Those on the first floor were placed next to that used by the men and were not screened off in any way. In another factory employing 500 girls there was complaint of inadequate dressing rooms, but members of the firm announced that an addition was shortly to be made to the building for the purpose of giving the girls better quarters. Against a third concern, employing 300 girls, the same complaint of over-crowding was made, the machines being placed too close together and all the spare space, even in the knitting hall, being taken up with stock. These were among the worst factories. There were others in which the dressing rooms were commodious, and the light and air good. On the whole, however', the knitting factories suffer in comparison with other places in which women are employed, the over-crowding
which is to be found in nearly all of them being one of their worst features.

Whatever the particular output of the factory, the process of manufacture was similar in all. Stockings and stocking caps were made on circular machines, so easy of operation that usually a girl looked after two or three at a time. Gloves and underwear, demanding modifications of shape, were made on machines, controlled by a lever but operated by steam, hydraulic or electric power. In one case, however, a factory making a special feature of its "hand-knit" underwear, required its best grade of goods to be made on hand machines, for which no power but that coming from the girls' arms as they pushed the levers back and forth, was furnished. Moreover, the hand workers were for the most part unable to sit down to their work, though some of the more experienced girls declared that if they had high stools they could use them a great deal when their work had reached certain stages where it was not necessary to give each row of stitches particular and separate attention.

The question of seats in these factories is an important one. Some of the factories furnished chairs to their operatives, others only small wooden stools without backs, and one required the workers to stand all day. In this particular place the owner • declared that his machines were of such a kind that they could not be operated from seats, and he insisted, moreover, that it was less harmful for girls to stand all day than to do their work seated. The girls did not agree with him, but were chary of expressing positive opinions, apparently being afraid of losing their places. Except for the noon hour when, as many as could found resting placess on the few benches in the place or on the low wooden boxes in which they kept their lunch baskets, the girls stood at their machines ten hours a day. When they grew too weary to bear it any longer they dropped on the floor beside their machines and snatched a few moments of rest while their neighbors kept a sharp eye out for the foreman that they might give notice when he approached. Girls who had worked in this factory but had left it to engage in other employment at which they were found at the time of the investigation, talked
freely of the wearing effects of their former work, saying that it was impossible to describe the fatigue that came from ten hours of constant standing in front of a machine, especially when to this is added the exertion of pushing a heavy lever back and forth, as is necessary in certain parts of knitting. The evidence of the girls was so opposed to the opinion of members of the firm that the latter were at length compelled, through the efforts of the Bureau of Labor, to put in a sufficient number of seats. At a factory in one of the smaller towns where stocking-caps were a special feature of the output, few of the girls sat at their work as they were obliged to attend to two machines. There were, however, benches near by on which the girls could rest whenever it was possible, and at the larger machines on which shawl's were made all the girls had chairs. It would seem only humane that these factories should put in not merely stools, but chairs with backs to relieve the fatigue that comes from ten hours of constant sitting at a machine. The fact that very few of such workers are free from spinal curvature in more or less pronounced form is an argument for better seating facilities. In all the factories where only stools are provided for the workers, girls were found working in the crouched position that inevitably results in bent backs.

The hours in the knitting factories were almost without exception ten a day. A few gave Saturday half holidays. One required night work from part of the force, but it was explained that this was not compulsory and was rewarded with extra pay. In one large glove factory, when the piece system was entirely followed, the girls practically kept their own hours. The proprietor of this particular factory seemed to have no objection to the plan, a point of view which was not shared by many of his brother manufacturers, whose greatest complaint was the lack of punctuality among the workers. In many factories, even where all the work was paid by the piece, strict discipline prevailed and the operatives were obliged to be at their machines at a certain hour and were not allowed to leave them until a certain set time. In several of the factories a Saturday half holiday was allowed in summer, but the girls were compelled to make up their full quota of sixty hours by working half an hour
extra on the other days of the week. In one factory only those workers who turned out a certain amount of work were allowed to take Saturday afternoons off.

Vacations with pay were unknown, and comparatively few of the workers allowed themselves the luxury of days of idleness. In factories which had slack seasons it was possible for the operators to have periods of rest, but where, as was the case in many factories, work was steady throughout the year, to take a vacation was to run the risk of losing one's machine. One forewoman who had been working for eighteen years had never had a vacation in all that time. Once she had been ill and stayed at home two weeks, but she had never taken a day off on any other occasion. In all that time she had never been outside the limits of the city.

Knitting, especially in the finer grades, requires the closest attention and the exercise of considerable skill. Girls making fancy woolen gloves frequently had to follow the most intricate patterns and were constantly obliged to keep track of the number of stitches taken. They said, however, that it was always much more interesting to make the intricate pattern and to work in several colors than to fashion plain dark gloves, the making of which was monotonous. In the underwear factories the greatest care had to be taken in fashioning the garments after the models furnished. A great deal of the knitting done in factories, however, is purely mechanical, the machine doing all the work, even stopping automatically when it is completed.

Wages varied greatly. For the thirty-six who made definite report as to their earnings, the average was $\$ 4.30$ a week, the scale running from $\$ 1.75$ to $\$ 14$ a week, the last named figure being the salary paid an experienced forewoman. The personal notes taken in the course of visits to the various places are more interesting. In a glove factory the usual wage was $\$ 6$ or $\$ 7$ a week. By working hard the girls said they could make as high as $\$ 8$ and $\$ 9$, but the strain was too great to keep up. At this factory the older workers said the scale which had gone down during the hard times, had never regained its former figures, so that it was impossible for even the best workers to make as much as they had in former years. In a large knitting con-
cern which spins its own wool, the carders, spinners and spoolers made from $\$ 1.50$ to $\$ 4$ a week. Girls who had worked for three and four years were not making over $\$ 3.50$ a week. For knitters the scale ran from $\$ 1.50$ to $\$ 7$ a week, with the average earning at about $\$ 4$. Stocking finishers made about $\$ 2.50$ or $\$ 3$ a week. On one whole floor in another factory, it was stated that not a girl was making over $\$ 3.75$ a week, but the work, it is true, was of the kind requiring a small amount of skill. It can be safely said that by far the greater proportion of girls in most knitting factories make less than $\$ 1$ a day, and only the exceptional workers get above that figure. This is not true, however, of the factories where knitted underwear was made and where the wage scale was higher. By hard work girls in those places could make from $\$ 8$ to $\$ 12$ a week. Few of them did, however. In one factory, a story was told of a phenomenal worker who made from $\$ 18$ to $\$ 27$ a week for spveral years and then broke down in health. The makers of hand knit underwear made about $\$ 7.50$ a week when work was steady, but lost much time from slack business and break-downs of machinery. Some days, one of the most expert workers aserted, it was hard to make as much as 50 cents. Girls operating two and three stocking-cap machines and those making shawls made from $\$ 4.50$ to $\$ 6$ a week. Girls who sewed borders on shawls made $\$ 1$ or $\$ 1.50$ a day.

Employers denied that the scale of wages had fallen. They admitted that such seemed to be the case, but the fact was that with improved machinery more could be turned out in a given time than formerly. Gloves which fifteen years ago brought the knitters $\$ 1$ a dozen were now made for 35 cents, but the total earning for making them is as much as ever owing to the larger capacity of the machine.

In many of the factories systems of fines were in vogue. Girls were obliged to pay for broken needles and poor work. Needles were charged up at a cent apiece and frequently, owing to defective machines, so many were broken in the course of a day that even at this small figure they made a sad hole in the slender wages. Tardiness in arrivirg at work was punished by "docking." One factory, in its posted rules, announced a
fine of ten cents for tardiness and also the detention of the first month's wages of any beginner who did not remain the month through. This was excused on the ground that a beginner always spoiled more work than her wages came to and there was no profit in her services until she had gained more experience.

## LACE PAPER FACTORY.

About forty girls in Milwaukee work in a lace paper factory, which ships its wares all over the country. The girls do folding, counting and packing and also feed the machines on which the paper is perforated in various designs. All of the work is light and most of it is done seated, only the machine girls standing. The manager, however, in order to relieve these arranges the work so that the girls change off at stated intervals and none is on her feet all day. The place was light and sanitary. The hours are from 7 to 12 and from $12: 30$ to 5 , with Saturday half holidays in summer, earned, however, by working an extra half hour on other days of the week. Wages run from $\$ 2.70$ to $\$ 4.50$ a week, the average for twenty-four workers being $\$ 3.40$. Almost no skill is required. Artisans for making dies are employed, but girls never do that sort of work, and only boys are received as apprentices.

## LYE WORKS.

The making of lye is not an extensive.industry in Milwaukee, but it was included in this investigation because it gives peculiar employment to a limited number of young girls. In the establishment visited fourteen girls were wiping and labeling cans of lye as they came from the machines where they were filled. The most striking thing about the place was the air which was so strongly impregnated with the fumes arising from the lye that the first breath irritated the throat and left the visitor gasping and coughing and with watery eyes, as if strong ammonia had been suddenly inhaled. The workers, however, did not seem to be suffering from it. They said that one soon grew accustomed to the air, though one girl naively remarked that it was "always worse on Monday morning when the girls
had been breathing another kind of $\cdot$ air over Sunday." It apparently did not affect their general health, and probably the building, though it was unfitted for factory work, was not unhealthful, the lye keeping everything clean without much effort on the part of the managers.

All the girls wore strips of rags tied about their hands to protect them from contact with the lye that clung to the cans, but in spite of such precautions many of them had sore fingers and one displayed scars on her arm which had come from being badly burned with the stuff. Their work was to wipe the cans free from lye, paste on labels and pack the cans in boxes. On the third floor two girls were engaged in even more disagreeable work and were breathing air still heavier with lye fumes than that on the second floor. Three men, their heads well pror tected, filled and soldered the cans. One girl hooded and gloved placed the cans in a revolving brush arrangement by which they were wiped fairly clean. The other girl caught them as they came out and put them in boxes to be sent to the floor below to be wiped a second time and labeled and packed. It seemed almost impossible to breathe in the air on this floor, but the workers had apparently grown accustomed to it. At noon, talking with the girls, they expressed themselves as dissatisfied with their work, but said it paid as well as anything and was to be preferred to housework, which some of them had tried. One girl who was getting $\$ 3$ for wiping cans had only received $\$ 1.50$ in a knitting factory and had given it up on that account. Another girl had been in domestic service on a wage of $\$ 1.50$ a week and had taken the lye works in preference.

The wages were from $\$ 3$ to $\$ 4$ a week. The hours from 7 to $5: 30$, with half an hour at noon, no Saturday half holidays and no vacations, as there is little slack time. The girls eat in the workrooms. There are no dressing rooms and only a single closet, which is placed conspicuously in the workroom. The lavatory is merely a sink by the side of the closet. None of the 'girls were scated at their work. The foreman was asked if he permitted the girls to sit down and he replied that there were plenty of boxes about, which they might use if they wished. He never tried to stop them from sitting down, and he appealed to the girls
to know if he had, asking if they would rather sit than stand. As might be expected, they promptly said "No."

## MATCH FACTORY.

Girls in match factories are employed at feeding machines and packing matches, the work being light and fairly well paid. In the establishment visited there were 110 girls at work and the conditions, except for the all-pervading odor of phosphorus and the ever-attendant danger of disease which threatens every worker in a match factory, were far above the average. Not only were ventilation and sanitation as perfect as possibld under the circumstances, but what, for lack of a better term, has come to be known as 'factory altruism,' probably reaches its highest point for Wisconsin in this place. Necrosis is the grim terror that stalks at the side of everyone who passes much of his time in a match factory, and the greatest precaution must be taken constantly to prevent the disease getting a foothold. In the factory under consideration these precautions have taken on a most interesting phase and besides working successfully so far as warding off the disease itself, afford an opportunity for studying the effects and benefits of certain reforms so far but sparingly followed in Wisconsin factories. Necrosis is a disease of the bone and usually finds lodgement through a decayed tooth. Once it gets a start it is almost impossible to check it, and the victim's jawbone is fairly eaten away. The chief safeguard against the disease is a perfect condition of the teeth and general bodily cleanliness, and it is toward the accomplishment of these ends for their people that the factory is working. The company employs a dentist who looks after the teeth of every worker at stated intervals and no one is allowed to work who refuses to comply with. the dentist's orders. Baths have been put in for both men and women, but are not extensively patronized. The men use them on Saturday afternoons when the factory closes down at three o'clock, but the girls do not use them at all. The most remarkable thing about the factory are the lunch rooms that have been fitted up and the luncheons that are served free by the firm every day. It has been proved that a great deal of necrosis starts from food contaminated either by exposure to air impreg-
nated with phosphorus fumes or by hands or clothing that have come into contact with the phosphorus. To lessen danger from this source, the company has fitted up dressing rooms and lunchrooms for both sexes in a building separate from the main factory and has issued strict orders prohibiting any worker from carrying his lunch box or dinner pail into the workroom. Instead he is supposed to leave it with his street clothing in a ventilated locker reserved for his individual use. Ample lavatory facilities are provided and every worker is supposed to sit down to his lunch with perfectly clean face and hands. He is then served with hot soup and coffee of excellent quality, which added to what he has brought with him, makes a really substantial meal. It costs about $\$ 1,500$ a year to supply the $250 \mathrm{em}-$ ployes with the soup and coffee, but the firm believes that it is money well expended. The girls' lunch room is extremely attractive. The windows are curtained, the walls are kept freshly kalsomined and the tables and chairs are well polished. The firm also started a reading room and circulating library, but did not have much success with either, though the girls carried home the fashion magazines when they had gowns in process of manufacture.

Disagreeable as is the odor of the phosphorus the workrooms were more pleasant than in many factories. The girls sat at high platforms, part of them: feeding small blocks of wood to a machine which split and dipped the matches, the others packing the matches in boxes as they came out. Another squad of girls operated box-making machines, and some did up bundles of matches ready for shipment. All the girls, with the exception of the bundlers, sat at their work in high-backed, tilting chairs. No heavy exertion was required whatever.

Wages ran from 50 cents to $\$ 1.25$ a day. Girls were started at 50 cents and were put in the "coops," as the places from which the machines were fed are called. Packers made from $\$ 1$ to $\$ 1.25$ a day, and box makers 90 cents. The average seemed to be about $\$ 1$ for the older workers. The hours were from 7 to 6 , with half an hour at noon and only seven hours on Saturday. At Christmas every girl gets 50 cents from the company, and if she is the support of her familly, a turkey besides. The forewomen
who had been with the company thirty years, said that wages and opportunities for work had steadily decreased in the business, as new and improved machinery had been put in. Work that twenty years ago would have taken ten girls to do could now be done by a single machine operated by one girl, who received only 80 cents for her services, while the ten might have made $\$ 1$ apiece. She did not think match making so very dangerous. Looking back over her experience in the factory she could recall only one death among the girls and that was caused by typhoid fever. There were occasional cases of necrosis, but at the time of the investigation only one woman was so affected.

## MINERS' SOLES AND LEATHER FACTORY.

The single concern of its kind in the state gives employment to about 500 girls, most of whom are Poles of the more ignorant type. The work consists of making leather soles and heels from scraps gathered at the tanneries in the neighborhood. All of the work is done by hand, the girls working at long tables with no other implements than a pot of paste and a pile of leather scraps. All they have to do is to paste the scraps in smooth layers on pieces of leather, the slabs so mader being then placed in a press to make them still more compact. Each girl has her directions to make a slab of a certain thickness, for a sole or heel, as the case may be, and all that she is concerned with is to get as many layers in place as are necessary. It takes about a day to learn the business, and after that there is no great expenditure of mental energy. The bodily fatigue must be considerable, however, as most of the work is done standing. The girls were smeared with paste, but the company has provided far more comfortable and capacious dressing rooms than are usually found in factories, a trough with running water being supplied for them to wash in, while there were separate lockers for their street clothing.

The work, being so purely mechanical and calling for the exercise of so small an amount of skill, was naturally not particularly well paid. Beginners were started at $\$ 2.25$, were soon advanced to $\$ 3$, and later could make $\$ 3.75$ or $\$ 4$ a week, rarely
more. A few rapid workers sometimes made $\$ 6$, but this was rare.

The manager said that he experienced some difficulty in getting German and Polish girls to work together. Almost all the workers were Polish, and Germans, even when induced to come in to fill vacant places, rarely remained long. He was fresh from the branch factory in the east where negroes and whites, Trish and Germans worked peaceably side by side and the national antagonism of the two races furnishing the greater proportion of unskilled labor in Milwaukee seemed to perplex him.

## PAINT FACTORY.

The most interesting feature of the establishment in question was the unusual comforts that the firm has provided for its workers. About forty girls, mostly of the young, unskilled class, are employed at labeling cans, preparing color cards, printing labels, stamping, etc., all the work being simple and easily mastered. Owing to the removal of a part of the business to another quarter of the city the firm has recently come into possession of some spare room, and instead of using it for factory purposes has fitted it up for its work people. Half of it is given over to the men employes as a smoking, game and lunch room, and the other half belongs to the girls and has been furnished in a most attractive fashion. The rooms were formerly used for office purposes and the woodwork, floors and walls are consequently of better material and are more handsomely finished than they otherwise might have been. The girls' room faces on the street and is flooded with sunshine. At one end are square oak tables, with polished tops and little pots of growing ferns in the center. At these the girls eat their luncheons. Divided from this end of the room by gay Japanese screens is the rest room, with couches, rocking chairs, heaped up with pillows, a table for games and another for magazines and books, which are abundantly furnished. Adjoining is a neat toilet room and opposite this is a tiny kitchen, fitted up with gas stove and a china closet. Here the girls prepare simple luncheons, making coffee and tea, boiling eggs and even cooking meat. One girl is detailed to go
down half an hour before the noon whistle blows and get things ready for the rest. The firm tried to serve coffee at a cent a cup, believing that it was wiser to ask a nominal sum than to furnish it free of charge, but the parents of some of the girls objected to their spending any of their wages in such a way and the scheme fell through. Under the arrangement in vogue at the time. of the visit those who wished to supplement their cold luncheons contributed their quota of the expense involved. The girls were most enthusiastic about their lunch room. All of them had worked in other factories, and their comparisons were interesting. They all seemed to feel a spirit of proprietorship in the rooms and took the greatest care of them. A member of the firm said that shortly after the place was opened he came down one Sunday morning to find two girls on their hands and knees scrubbing the floor. He promptly hired an extra scrubwoman, but said the incident proved better than anything else the interest the girls take in the comforts provided for them.

The hours are from 7 to 6 , with three-quarters of an hour at noon, Saturday half holidays through July and August and two hours off on Saturday afternoons for the rest of the year. Wages ran from $\$ 3$ to $\$ 7$, the average for thirty making reports being $\$ 3.68$. Girls are not started at less than $\$ 3$. In the color card room the girls are paid from $\$ 3$ to $\$ 3.75$. The girls who label cans get about the same. The work used to be considered dangerous owing to the risk of white lead poisoning, but the risk has been so greatly reduced of late years that.there is seldom a case of illness traceable to the work.

Another noticeable thing about the factory was the way in which the girls were kept from association with the men. Both at the noon hour and while at their work the sexes were kept apart.

## PAPER BAG FACTORY.

In the paper bag factories the girls have light and monotonous work to do, for which, as compared to the average of factory labor, they are well paid. The bags are made on machines operated by men, the girls merely taking the bags as they come out and tying them in bundles. Even the counting is done automat-
ically by the machine. A few girls are employed as inspectors, and are better paid, but have harder work. The girls at the machines stand or sit, as they choose, tall stools being provided for every worker. The factory visited, which is in the paper mill district and so more or less affected by the conditions existing in that larger industry, is large, well ventilated with good light and fair sanitation. Ample dressing rooms are provided. The hours were from 7 to 6 with an hour at noon, and an hour less on Saturday afternoon. $\Lambda$ few girls are kept on a night force and are paid eight cents an hour, usually putting in twelve hours a night, but not working on Saturday night. The wages for the day machine girls are 80 cents a day. The inspectors get $\$ 1.25$.

## PAPER MACHE FACTORY.

The making of artistic and commercial papier mache figures is a Milwaukee industry giving employment to about 100 girls in the busy season, though as trade falls off after Christmas that number is reduced to thirty or less. The work done by the girls is of two sorts. Some of them fill the plaster of paris molds with moist paper and paste and others tint the completed figures according to the directions of the artist in charge. The filling of the molds is unpleasant but not hard work. A certain amount of skill is required to put in the bits of moist paper, so that every line and curve of the mold shall be preserved, but the workers speedily acquire that and manage to turn out a large number of molds in a day. Naturally they get themselves covered with paste in doing so, but the firm provides dressing rooms and all the workers keep working gowns at the factory. The girls who tint the figures have nicer work but it is little less mechanical than making molds, as they are obliged to follow closely the model made by the artist who does all the designing.

A somewhat unusual feature of this factory is the matron whom the firm employs to look after the girls, most of whom are little more than children. A room on an upper floor has been set aside for dressing rooms and lunch rooms and the matron is in charge of them. She is supposed not only to be with the girls in the factory but to act as a. friend to them out of working
hours, visiting them at their homes when they are sick or in trouble. The firm has not been financially able to carry its philanthropic endeavors so far as its members wish and the lunch room is only a bare, though clean place. Half an hour is given at noon and ten minutes in the middle of the morning and afternoon, with Saturday afternoons from half after four on. There are no vacations with pay, but when a deserving girl needs rest the firm sees to it that she gets it. without expense to her. The friendliest relations seemed to exist between employers and employes, making the place an interesting study, as it showed how much can be done without the expenditure of much money.

Wages were not high. They ran from $\$ 2.50$ to $\$ 5$. Some of the girls have been with the firm ten years but the greater number were beginners, who as they grew older would probably seek more lucrative employment. For thirty-two making definite returns on wages the average was $\$ 3.41$, the scale running from $\$ 5$, which one worker received, to $\$ 2.25$, which was the lowest wage paid.

## PAPER MILLS.

The great paper mills of the Fox river valley, which employ hundreds of girls, offer an unusually interesting field for an investigation of the present sort. This is due, in large measure, to certain peculiar conditions, existing both within and without the mills, and affecting the workers' social as well as business life. What follows, it must be understood, is based on a survey of the situation as a whole, and though a thorough and detailed investigation was made, no one community or establishment is specially referred to in the report. It has seemed wise, however, because of the somewhat successful organization of the workers and because of the social differentiation in question to go more into details than has been thought necessary to do with many other kinds of work in which women are engaged.

The mills are located in the smaller cities and are usually in -groups of one or more, so that there is to be found in these communities a well defined class of paper mill workers, who are again divided into two distinct classes, between whom a social gulf seems to be tacitly fixed, the girls in the finishing rooms
having nothing to do with the girls in the rag room, who, however, often have the advantage of the others in point of wages and hours, despite certain disagreeable features of the work itself. The mill buildings are generally large and comfortable, with plenty of light and air, their picturesque location on the banks of rivers or canals, assuring both. Some of the buildings are old, inconvenient and unsanitary, so that the surroundings of the workers in every department are far from comfortable, but this is true only of a comparatively few.

The finishers, which is the generic name for all the girls who work at the cutting, calendaring and stamping machines and who count, fold or bundle, usually have the pleasantest quarters in the mill, outside of those occupied by the office force. The cutter hands, as they are called, are stationed at the end of the machines on which the paper is rolled out and it is their duty to catch each sheet as it comes from the rollers, smooth out the wrinkles with a heavy flat piece of wood and lay it straight on the receiving tray. The work is light, but exceedingly monotonous, and the constant strain of keeping up with the machine proves tiresome. The girls also complain that their arms ache from using the long stick with which they smooth out the paper. Not infrequently a girl has her fingers crushed by getting them between the rollers. From the cutter hands the sheets go to the counters, whose work is to separate the paper into reams. They do this with remarkable rapidity, their fingers flying over the edges of the sheets and rarely making a mistake. They, too, say that the nervous strain tells in time. The stamping and calendaring are done on machines that are comparatively easy to operate and the heaviest part of the bundling is done by men.

The work in the rag rooms is in sharp and repugnant contrast to that done in the finishing rooms. Even in the more modern $\dot{m} i l l s$, where earnest efforts have been made to supply the workers with all possible conveniences, the rag rooms are disagreeable places, the nature of the work itself being responsible for this. In the better mills ventilating systems, with suction pipes to draw off the dust have been puti in, and these mitigate the unpleasant features, but even with these things, which only a few mills have, there is much about the work that is repulsive. The
sorters work at long benches divided into sections. Each section is covered with a coarse wire grating and provided with a sharp knife. The rags are brought to the girls in barrels or trucks and are dumped upon the grating and thoroughly shaken so that the loose dust may fall through to the receptacle provided beneath. Buttons are cut off and seams ripped open on the upright knife, so that no dust shall be left in the rags to spoil the whiteness of the paper. The work is usually paid for by the hundred pounds. Before being brought to the girls the rags are threshed out in machines, usually operated by men, though in some instances girls assist at this. The room in which this part of the work is done usually adjoins the sorting room so that the dust is carried into it in spite of all precautions. Added to the dirt and dust is the unpleasant smell of old rags, long packed in bales and so grown musty.

- The sorters, however, do not seem to suffer from their work as much as might be expected. Physicians in the communities in question say that throat trouble is somewhat common among them, and that serious epidemics are to be traced to the rags in spite of all the care that is taken to disinfect them. On the other hand, the girls have a theory that the disinfectants used in the rags really ward off disease. They complain most of the fatigue of constant standing, no seats being provided.

If stories that are told by the workers are to be relied upon the conditions at one time were far worse than they are now. In one mill, a former superintendent kept the windows of the rag room nailed down, but when he was superseded the spikes were taken out and plenty of fresh air was let in.

The hours of work required in the paper mills have been a bone of contention between employers and employes for years, but have of late been greatly reduced through the efforts of the unions. The cutter hands have always suffered the most and in some of the mills still work excessive hours. They are divided into shifts or "tours," one of which works ten hours one week and thirteen hours the next, the mill not closing night or day. The hours for the shifts are from $7 \mathrm{a} . \mathrm{m}$. to 6 p . m. one week and from 7 p. m. to $6 \mathrm{a} . \mathrm{m}$. the next, with the same pay. In the unionized mills, the hours are from 7 to 6 , with an hour at noon
and Saturday afternoons off from 12 o'clock. In the unionized mills, where night work is still required, the workers put in thirteen hours a night every other week, but have Saturday nights off, so that the total working week is brought within the required number of hours. The girls who work at night say that they can usually get from one to three hours' rest, as the machines do not run continuously. Girls in the rag room work nine and ten hours a day.

Wages vary from $\$ 1.25$ a day, which is paid the finishers, to 50 cents a day, which is made by the least skilled sorters. In the finishing rooms the scale runs from 60 cents to $\$ 1.25$ a day. In some mills all the girls in the finishing room were paid 75 cents a day; in others all were paid $871 / 2$ cents, and in others 90 cents. In a tissue paper mill each of eight girls employed at counting was paid $\$ 1.25$ a day. Rag sorters are usually paid by the pound. and make from 50 cents to $\$ 1.25$. In one mill where they were paid by the day they received 75 cents. The weekly average for the thirty-nine who filled out schedules was $\$ 4.70$.

Selections taken at random from rough notes made at the time of the investigation may be of interest to those wishing for further details of a somewhat peculiar line of work:
> ———————— One hundred and eighteen girls in rag room; well lighted; windows on three sides. Rags threshed in adjoining room. Girls all stand. Foreman said he had tried allowing them to sit on planks laid across the barrels holding the rags, but found they did not get work out fast enough. Wages from 30 cents to $\$ 1.25$. Average about 85 or 90 cents. Hours 7 to $5: 30$, with half an hour at noon. Saturdays close down at 4 . Fifteen minutes for lunch in middle of morning. No overtime. Little dull season. Steady work most of the year. In finishing room thirty-five girls sort, stamp, count and seal, making from 60 to 85 cents. Up to a few days ago the highest was 75 cents.

—_s. In finishing room girls work in shifts. One shift goes on at $7 \mathrm{~A} . \mathrm{M}$. and works until 6 P . M., and the other goes on at 7 P . M. and cuits at 6 A . M. Change about from week to week. Get samei pay, $871 / 2$ cents a day. Fifteen so employed. In rag room thirty girls work from 7 to 6 and get 75 cents' a day. No piece work. Rag room dustier and not nearly so good as at ——, the mill being an older one.
———. One hundred and twenty-five girls in all; 75 in rag room. Fine mill, light, airy, with plenty of room, good ventilation, superb view from windows; river flowing by on both sides. In rag room girls work from 7 to 5 except on Saturdays, when they work from 7 to 4 . Finishers from 7 to 6, with Saturday half holidays from noon on. One hour at noon. Finishers paid from 75 cents to $\$ 1.25$ a day. Rag sorters make from 50 cents up at piece work. Girls operate calendar machines that require close attention.

-     - Eight girls employed only at finishing. All but one, a beginner, get $\$ 1.25$ a day. Hours 7 to .6 , with Saturday afternoons off. Girls said they had no separate toilet room. Foreman said they had keys and kept it locked, but finally admitted that there was no separate place provided for them.
-_-. Firm operates three mills employing in all twenty-five girls, only two of them being rag sorters, as the rag rooms have not been in operation for some time owing to the high price demanded for rags. The girls have recently gone into the paper makers' union. Wages were the union scale, 75 cents a day for the cutter hands, $\$ 1$ for the finishers and 75 cents for the rag sorters. The hours were from 7 to 6 , with an hour at noon and Saturday afternoons, from 12 o'clock off. In one mill four of the cutter hands take turns, week and week about, at night work, two going to work at 6 in the evening and staying on until 7 in the morning, while the other two fill up the day schedule. This makes thirteen hours of night work, but since the strike and the unionization of the girls no Saturday night work is required. The cutter hands have no regular lunch time, but eat when the machine permits, but on the other hand haye more or less leisure, as the machines do not always run steadily. Girls said that there was rarely a night when they did not get from an hour to three hours' sleep, curled up on the sorting tables with their heads on a pile of paper and a felt mat over them for warmth. All the girls said that they believed in union life as the only way of protecting their interests and cited the reforms the union has been able to bring about as proof. The three mills were clean and well ventilated and separate dressing rooms and closets were provided for the girls.
-_ - Employs ten girls, six being cutters, at 75 cents a day, and four finishers at $\$ 1$. No sorters. Superintendent said there were few shut downs. Mill clean and light. ,All the girls were in the union. No night work required.
——. Thirty-five girls, twenty-seven being employed in the sorting rooms where rags, paper and paper shavings were handled. The mill is old, and the rag sorting rooms are dirty and uninviting, with no modern appliances for ventilating them. The wages are the same as in the other mills, except that for some classes of sorting the work is paid for by the piece, though the wages amount to elout the same. The mill is not in the union, however, and the girls were contemplating another strike on the following Saturday if Saturday afternoons' were not allowed them, the "scabs" discharged and the girls who went out on strike and lost their places last winter reinstated. The hours now are from 7 to 6 , with an hour at noon and no extra time off on Saturday. Sometimes overtime work is required and the girls are paid half a day for working up to 10 o'clock at $n$ :ght. The sorting rooms seemed dustier and dirtier than in any of the other mills so far visited. The girls who work at the shavings stood at the front of a revolving cylinder of wire screening which threshed out the dust, their work being to pick out the colored strips. The rag sorters worked at bins and barrels. Saw one girl jumping on the top of a barrel to press down the rags. The waste paper sorting was done in the same way, and there was none of the protection from dust to be found in some of the more modern mills.
——. Seven girls employed, six cutter hands at 75 cents and one finisher at $\$ 1$. Cutter hands work in shifts of three, taking turns at night and so working thirteen hours a night one week and ten hours a day the next. Only work five nights, however, and have Saturday afternoons off. All in unions. Mill expects to arrange for all day work shortly.
———. Eight girls, six cutter hands at 75 cents, one finisher at $\$ 1.25$ and one finisher at $\$ 1$. Not in the union. Hours from 7 to 6 , with occasional overtime work to midnight. No Saturday afternoons. The girls went out with the rest, but the mill refused the concessions and the workers' came back. Mill has no rag room, but it has what is worse, a shingle mill in which éght girls pack shingles, working in the flying sawdust in a barn-like place. These eight take turns at night and day work and get 75 cents a day. Hours are from 7 to 6 and from 6 to 7, with an hour for lunch. All the girls in the shingle mill were Polish. Other part of the mill was clean and not bad.
———. Twenty girls in the rag room at 75 cents a day, seven cutters at 75 cents a day and two finishers at $\$ 1$. Night work the rule and girls work in shifts, ten hours a day one week and thirteen the next. Not in the union. Rag room unventilated and with no modern appliances for admitting air. Same firm has' a mill at __, where nearly seventy work in the rag room. Wages there are paid by the pound, and are higher, owing to the better grade of rags, girls getting 20 cents, instead of 14 cents a hundred pounds. Finishers get from $\$ 1$ to $\$ 1.35$ and cutter hands 75 cents.
———. Mill forms the nucleus of a small community from which most of the workers including the dozen girls employed are drawn. At time of visit only two were on hand, the whole force having been laid off for the day. The stories of the two were interesting, however. Both had come down from where they had been employed as finishers in a paper mill and where they had homes. The mill there had its seasons of slack work, and growing discontented the girls had come to _at the time the mill was opened. Since then they had never had a full week's pay. Their wages were $\$ 1$ and $\$ 1.25$ a day but they never made the full amount, as they lost from a half to three days a week. Occasionally they had to work overtime and were paid at the rate of a day's wage for three evenings, but this they said did not begin to compensate for the loss. They boarded, paying $\$ 12$ a month for their board. They rode back and forth to work every dạy on commutation tickets which cost a dollar a week. Made on an average about $\$ 5$ a week. One of these girls had been working nine and the other seven years at the trade and expressed .themselves discouraged over the outlook, saying that it scarcely paid to go into the business.

In talking with a group of rag sorters an effort was made to discover why they preferred their work with its dust and dirt to domestic service. All said it was a question of hours and money. One girl of sixteen had done housework for a family of five adults and two children, doing the washing and ironing but not the baking. For this she was paid $\$ 1.50$ a week. Another girl had been a nurse girl at 75 cents a week. All said that they had never made over $\$ 2$ a week at housework and that they had always been obliged to work from early in the morning until late at night, doing heavy washings and cleaning. One girl said that she would like to learn cooking and asked all about the cooking school in Milwaukee. None had ever gone beyond the fifth grade in school and all had started to work at thirteen-
before the fourteen-year-old age limit was enforced, probably. None of them liked rag sorting; said they grew tired standing and were always dirty. Still, compared to what was asked of them at housework, rag sorting was easy.

A novel side to the life is the element of chance that enters into it from the "finds" that are sometimes made in the rags. Girls frequently come across small bills and coins, which they are entitled to keep, and the good fortune that befell one girl, who found $\$ 300$ sewed up in an old coat, is a constant stimulus to the rest, and may in part explain why it is never difficult to hire sorters.

## PEARL BUTTON FACTORY.

Girls in the pearl button factories, of which there are several in the state, are employed at operating machines which drill and polish the buttons and at sewing them on cardboard for the market. In fact, all the work except that of cutting the button forms from the shell is done by girls, though some of it seems to require considerable muscular effort and to be unfitted for women. This was true of the heavier drilling machines which pierced the button forms and which were operated by levers. The greatest objection, however, is the dust arising from the shell as it is ground away. The drills and polishing machines are fitted with pipess to carry away the dust and most of it is disposed of in that way, but enough remains to make it necessary for the girls to keep their heads covered while at work, and it would seem likely that considerable must be breathed into the lungs, though the workers protested that they did not mind it in the least. The girls who sewed buttons on cards had pleasanter and cleaner quarters as well as nicer work, but their wages were not so good. Besides sewing the buttons on cards they sorted them into different grades according to their quality.

Wages ran from 75 cents to $\$ 1.50$ a day. The girls who did the sewing made about 75 or 80 cents a day and the machine girls averaged about $\$ 1$. There was only one girl making so high as $\$ 1.50$ a day and there were many weeks when she fell below that figure. This particular girl was an interesting type, who tried tobacco sorting, knitting and boot and shoe making, going
from one occupation to the other as wages and opportunities for advancement grew smaller. She was the swiftest worker in the factory and was planning to enter a nurses' training school, having had all the factory life she cared for.

The hours in the factory were from 7 to 6 , with an hour at noon.

## PIPE COVERRING.

As showing still farther the conditions and possibilities found in unskilled factory life, an establishment which in the busy season employs seventy girls who merely cover asbestos pipes with canvas was selected. The factory was large, new and well lighted, but the work rooms were hot because of their proximity to the great ovens in which the pipes are made. Even in the winter the heat is bad, but in August when the busy season is at its height it is almost unbearable, in spite of a special ventilating system by which the air of the factory is kept in constant circulation. The work required of the girls was exceedingly simple, being merely to fold canvas in squares for the cutting machine, which was operated by a man, and to paste strips of canvas about the pipes. The work was quickly learned and was not hard, though it necessitated standing all day. No seats, whatever were provided for the workers, even for what idle time they might have during the day.

The highest paid workers in the place were three girls who received $\$ 6$ a weck. Four others were paid $\$ 5$ and the rest from $\$ 4$ to $\$ 4.50$. In the winter and early spring there was a great deal of time lost owing to slack business. It was estimated that the girls had employment only about nine months out of ceery year.

## RAG SHOPS.

In another part of this report the condition of the rag rooms in the paper mill district was discussed somewhat at length, but it is safe to say that the worst among them is better than the best of the places in Milwaukee, where the rags, collected by peddlers all over the state, are sorted before being sent to the mills. A number of these shops were visited, but owing to the fact that
the workers found in them were not only unable to speak either English or German, but were ignorant and suspicious, it proved impossible to get anything of their personal point of view. Therefore, only the actual conditions under which they worked could be noted. These were open to every sort of objection, the shops being dirty and filthy, badly ventilated and often unheated. They were usually located in the second story of a tumble-down dwelling house, the first floor being used for receiving the rags as they come from the peddlers and for the very limited office business that was necessary. Only two of the shops were in large buildings in any way fitted for business purposes.

The sorting rooms in these smaller shops were reached by steep stairs and through bales of rags over which it was necessary to climb. As the door was opened, it was at first impossible to see the sorters because of the clouds of dust. As the dust cleared away with the inrush of air comparatively pure one caught sight of women, usuaily old, wrinkled and bent with toil, working without apparent definite aim upon the mass of rags with which they were surrounded. They were literally hemmed in by rags, the only bare spaces being the open trap doors, through which the sorted bundles were thrown to the floor beneath. In one place the broken panes of the windows were stuffed up with rags. In two there was no fire, though the visits were made in winter. In another, a small sheet iron stove, protected by a screen of tin kept the place more comfortable. The air in every case was foul and stifling. It is difficult to give an adequate picture of the conditions without seeming to overstep the limits of truth and nothing short of an actual visit to these places would be convincing.

The workers were the lowest grade, usually Poles and Russian Jews and almost all of them are middle aged. A few of them were far advanced in years. Only two or three young girls were seen and it;was explained that these were newly arrived immigrants who would not be long in such employment. Some of the women who could understand German and were not indisposed to talk said that they did such work to help out the family income. One woman was a widow with six children. She worked from 7 to 5 o'clock each day and usually made about $\$ 1$
a day. She complained of a chronic sore throat. In one place the women were indignant at the presence of visitors and refused to talk at all.

The proprietors, in some instances, allowed an inspection of their payrolls. One place showed wages running from $\$ 6$ to $\$ 10$ a week, which may explain why any women will do the work. This same man complained that it was difficult to get rag sorters at any price. Younger girls absolutely refused to take such places. Another proprietor said wages in his place ran from $\$ 4$ to $\$ 6$ a week. The women keep their own hours, as the work is by the piece. Usually, however, they put in the regulation number.

A shop where waste paper was sorted employèd more hands, and the conditions were slightly better, though susceptible of much improvement. The business was carried on in a warehouse, unheated except by two stoves, one on the upper and the other on the lower floor, and neither making any appreciable effect on the temperature of the place; as the outside doors were almost constantly kept open. The proprietor explained that the women did not mind the cold, as they wore extra clothing. There were fifteen women and girls at work. In one room they sorted the waste paper from binderies, filling great baskets with it. In another row three girls picked over heaps of waste paper from the department stores, stirring the mass up with brooms, so that a constant cloud of dust arose, while as the larger pieces were sifted out in the process the debris was swept into a chute, and dropping to the ground floor was caught in bags by men standing below, while two other girls stationed there swept up the falling scraps. Everywhere there was dust and dirt. As the baskets of paper were collected they were taken to a press where a man stamped down the paper with his feet until the hopper was filled. Then he with three women turned the handles until the paper was pressed into a bale. It was evident that it took considerable exertion, but the manager gave assurance that the girls were better off doing it than they were at most kinds of work "because the muscular effort required is exactly what you ladies go to the gymnasiums to get."

The wages paid were from $\$ 3$ to $\$ 5$, only two of the girls get-
ting the latter figure. Presumably most of them got the lower. There were no closets in the warehouse, as it had no water connection, and the girls were obliged to cross the street to the bottle department conducted by the same firm. The factory is located in the worst part of town. The girls were largely Polish.

## SHOE FACTORIES.

Shoe making affords women workers about as varied and lucrative a trade as can be found. Wages vary almost as much as the personality of the workers who range from the ignorant, unskilled type to the intelligent, self-reliant, wide-awake young woman who is one of the best products of modern life. At least three-fourths of all the work that goes on in the shoe factories is being done by women. Men do the cutting and lasting and the heavier tasks in general, but practically all the fashioning of the uppers, all that calls for a delicate, expert touch, is in the hands of women who often attain a degree of skill that, if conditions were as they should be, would ensure them more than a fair livelihood. As it is, in this trade as in most others, there are drawbacks of one kind and another, chief among which is the irregularity of employment and a wage scale that, it is declared, has an almost imperceptible but steady tendency to decline.

The factories are as varied in conditions as are wages and workers. Some of thern are fine, modern buildings, eauipped with every possible convenience for the people under their roofs, and others are dilapidated, old structures, dark and dingy within and without, coming only within the letter of the law so far as wanitary requirements go. In some the machines are placed so close together, and whatever spare room there is is so occupied with stock, either.completed or on the way to be, that the workers suffer much inconvenience. On the other hand, there are large commodious workrooms to be found, in which there is plenty of air and space and light for every one. One curious phase of this particular branch of industry are the small factories on the outskirts of Milwaukee, places that are but little more than home shops, with the proprietor's wife acting as bookkeeper or forewoman and the proprietor's relatives and neighbors running the machines. In such places the work done is usually of
the coarser, heavier sort, the finer grade of shoes being manut factured in the larger and better equipped establishments which are conducted on stricter, but more business-like methods.

When a girl starts to work in a shoe factory she usually is given a fair opportunity of learning the trade, and if she shows interest and intelligence she is rapidly advanced from one kind of work to another until she becomes a vamper, which is the goal of every operative's ambition. She passes through the various stages of being a table worker, cementer, ironer, dresser, lining maker, upper and lower leather closer, beader, edge stitcher, tip stitchers, eyelet stayer, foxer, until she eventually is given a vamping machine and is acknowledged to be an experienced operative. From then on she is practically sure of a job most of the year, and though she may waste a good deal of time both within the factory and out while waiting for trade to become brisker, she is no worse off in this respect than are the workers in most trades, while when she is earning wages she is making more than most other workers. At one factory the estimate on lost time in a single year was placed at one month; in another at two months. In one factory visited, where usually 200 girls are employed, but fifty were in the building and many of these were occupying their time reading and making fancy work while waiting for orders to come in from the office. A great deal of work is purely mechanical and can be mastered in a few days, but much of it requires years of practice and a constant desire to improve.

Wages varied from $\$ 2.50$ a week, paid girls doing table work, to $\$ 20$ a week earned by the forewoman in one factory. The scale for the various grades of work given at one establishment and presumably uniform for all the larger places was about as follows: Table workers, $\$ 2$ to $\$ 4$; ironers and dressers, $\$ 5$ to $\$ 6$; lining making, $\$ 4$ to $\$ 8$; closing upper leather, $\$ 6$ to $\$ 8$; second closing, $\$ 8$ to $\$ 10$; beading, $\$ 5$ to $\$ 6$; edge stitching, $\$ 6$ to $\$ 10$; tip-stitching, eyelet-staying, and foxing, $\$ 7$ to $\$ 10$; vamping, $\$ 8$ to $\$ 12$. These figures may be a trifle high and it must be taken into consideration that they represent what can be made on the best class of work, with the full amount of time allowed and with plenty of work to do. The average in every class probably falls considerably below these amounts. A forewoman in
one factory who had been in the shoe making trade for twentyone years said that wages had fallen considerably in that time. When she had started out good workers could make as high as $\$ 15$ and $\$ 18$ a week doing the same sort of work that brings but $\$ 8$ to $\$ 12$ nowadays. She thought there was a tendency to grade the scale as close as possible to the $\$ 9$-a-week-point- that is to keep the best workers making about that figure, while of course the poorer ones fell much below it. Then, too, the amount of work required increased as the scale of wage declined. Something of the task system prevails in many factories, which set a certain number of pairs of shoes as the daily output. As each girl does only a certain part of the shoe it is necessary for all to work with some degree of uniformity in order that the work can pass from machine to machine as each piece is completed. In most of the factories fines are imposed for broken needles and spoiled work, and these often make serious inroads into the weekly earnings. Workers claim that often the amount of the fine is far in excess of the value of the goods spoiled and also insist that considerable injustice exists as to the methods of imposing fines. Those in charge of the workrooms exercise a good deal of power in such ways and are not always above displaying favoritism or taking petty revenge for personal grievances. On the other hand places were found where the very best relations existed between employers and employed, where no fines were imposed and where every consideration was given the worker. It must be confessed, however, that such places were the exception rather than the rule.

The hours of work were nine and ten a day according to the factory. In one the day had been reduced to nine, it having been proved that the output of the factory would be just as large and the workers preferring the shorter day. Contrasted to this was the condition in another place where the nearest approach there has ever been to a strike came from trying to install a nine hour day. The strain of keeping up to their usual earnings, while working a smaller number of hours was felt by the workers to be more than they could stand. After trying it for some time and becoming more and more discontented the girls circulated a paper stating that unless the ten hour day was reestab-
lished they would leave their machines the following morning. Every girl signed the paper which was presented to the head of the firm, who promptly restored the old working day. Out of this concerted movement, it is worth while noting, grew one of the largest and most flourishing trades unions of women in the state and a complete unionization of the factory is expected as the ultimate outcome. It has also led to the organization of a Union Label league in the town in question. On the other hand, the bitterest opponents of union life in one of the largest factories of the state were to be found among the girls who by a strike some years previous had been thrown out of work for eight weeks. A later reorganization of the union failed to enlist the women who when a second strike occurred refused to go out with the men and so held their places.

Taken all in all, shoe making seems to be one of the best industries in which women can engage. The work is rarely heavy and although it is confining it is no more so than most other lines of factory work, while the wages are better than in many industries. Unless, however, a girl is eager, ready and able to learn, the trade holds little for her, for the unskilled among the shoe makers are poorly paid and sometimes over worked. There are always plenty of such workers to draw from and consequently they can not always be sure of getting anything to do, but a good shoe machine operator is practically sure of always holding a position, more or less lucrative and reasonably secure.

One of the establishments afforded an opportunity for noting the extent and value of the "factory extension" work being carried on by the Young Women's Christian association in the city. A small library has been put in, noon talks are given and some class work is being carried on. The library is not so well patronized as the promoters of the scheme had hoped for, but the noon talks are most successful and always elicit the closest attention on the part of the girls. In another factory the proprietor is planning to use a vacant storeroom as a lunch room for the women operatives.

## SOAP FACTORY.

At the soap factory visited about forty girls 'were employed wrapping and packing soap and filling boxes with washing soda. The last named was the best paid class of work and also the most disagreeable. The girls employed at it worked in - small room into which the washing powder descended througn a chute from the room above where it was made. The girls were stationed at the end of the chute, their duty being to fill small pasteboard boxes with the powder as it came down in a steady and somewhat rapid stream. Naturally, they were obliged to work in great haste. One girl looked after the actual-filling of the boxes, the others putting on the covers and labeling them as she passed them along. The air of the room was thick with floating particles of the powder which formed a cloud about the little group of workers, none of whom seemed to mind it, however, though visitors coming in from outside coughed and sneezed from the pungent fumes of the ammonia and soda used in the powder. The girl at the chute had her nose and mouth protected with a cloth, but none of the rest wore any head covering nor attempted to shield their lungs from the floating stuff. All the girls seemed fairly robust. The foreman declared that, a soap factory was the healthiest place in the world because tho lye in the soap "ate up all the microbes" and a girl who had worked in a knitting factory until threatened with consumption said that her health had steadily improved since she had gone into soap making. On the other hand another girl said her doctor warned her that her lungs were being affected by her work.

The packers and wrappers work by the piece and make about $\$ 4$ a week. The best packer in the place was paid a cent and a half a box for wrapping 100 cakes of soap, placing them in a wooden box and nailing the cover down. By hard work she sometimes packs sixty boxes a day, but she is the only one who makes such a record. The wages of thirteen girls filling out the schedules ranged from $\$ 3.50$ to $\$ 6$ a week, the average being $\$ 4.75$.

## STRAW WORKS.

There are two establishments in Milwaukee manufacturing straw and felt hats of the ready-to-wear variety and during the busy season they give employment to 600 girls or more, most of whom, however, are laid off during the long periods of dullness that succeed the rush. A high degree of skill is demanded and though the ostensible wage is higher than in most industries emploving women, the actual earnings are so greatly reduced by the enforced idleness that they are no larger than in other lines of women's work, if indeed they are so large. The work itself is light, pleasant and in overy way adapted to women, while the factory buildings are fine, commodious structures, clean, well lighted and with good ventilation, their location in the outskirts of the city ensuring greater space than is permitted establishments nearer the business district.

The work consists in making straw and felt hats and trimming them for the trade. The blocking, varnişhing, pressing and steaming are done by men, the girls reeling and sewing the straw braid and trimming the completed hats. A girl is started at "ticketing" at about $\$ 2$ a week and then goes into the reeling room where she makes from $\$ 3$ to $\$ 5$ a week. The work she does is somewhat fatiguing as the reels are turned by hand. Later she graduates into the sewing hall where her wages increase with her dexterity so that in time, when there is plenty of work to do and her working day is lengthened to twelve and thirtten hours a day to meet the demands of the trade, she may make as high as $\$ 3$ and even more a day. Ordinarily, however, her wages fall below that amount and when she makes $\$ 2$ she is counted unusually lucky. The best operators acquire their skill only after many seasons of practice. The dexterity they show is remarkable, as with only a plaster of paris model for a guide they can sew straw braid into any required shape with astonishing swiftness. The same is true, though in lesser degree, of the trimmers, who advance from the simple work of putting bands on sailor hats to intricate rosettes, bows and feathers, making from 75 cents to $\$ 1.25$ a day.

The great drawback to the trade is the long dull season, last-
ing usually from May to December. The straw workers are most affected, as the trimmers are kept longer in order to get out the felt hats, the making of which does not require the services of the straw operators. A recent fashion of using felt and chenille braid gave longer periods of employment to the operators, as the work could be done on the same machines as those used in making straw hats, but the fashion passed and work fell off. A still more recent fashion which has led to the importation of native hats from the Philippines and Cuba threatens to affect the straw workers' business by curtailing the amount of work given them to do each year. The operators deplore the new style, saying that it brings them into competition with peasant girls of foreign countries who work for mere pittances on which American-bred girls could not exist.

During the busy seas. the factories often run over time, and at one the operators are divided into shifts which take turns week and week about at night work. At such times the opera-- tors make good wages, but as the season advances earnings decrease. Operators themselves estimate that they do not average more than $\$ 7$ a week the year round. The pay roll of one factory proved this, as the average weekly earnings of the 107 girls being carried at the time of the visit, which was made during the first part of April, came to $\$ 6.29$, the individual earnings running from $\$ 1.50$ to $\$ 12$ a week. The general range seemed to be from $\$ 6$ to $\$ 9$. The reelers averaged $\$ 2$. The trimmers made about $\$ 1.25$ a day. The average season for the operators the manager of this factory estimated at not over five months. He said that the opportuniteis were so poor that he was continually being astonished at the fine class of girls attracted to the work.

The girls in discussing this long dull season said that those who could found employment in other factories. Some girls were able to combine the two trades of hat-making and fur-sewing, as the season of one followed the other. Others find work in the knitting factories. A few try housework, but the majority, living at home and being under small expense, put in the time sewing for themselves or their families. The worst feature, according to the girls' points of view, was the necessity
of going day after day to the factory as the season begins' to wane. There is no way of telling what orders may come in and so the operators gather to see what the morning mail will bring. If no work is forthcoming they go home to return in the afternoon on the same quest. This goes on for some time before orders for hats finally cease, and with the straw work out of the way the factory management begins to plan out its felt season. In dull seasons the girls do a great deal of fancy work while waiting for work, but none of them find a profitable sale for it. The trimmers get along better than the operators, for while their wages are never so high in any one day they have not such protracted times of idleness. At one factory 190 girls are usually turned away in May and are not taken on again until December. The green hands suffer the most. When a girl first gets a machine she is given a case of coarse straw hats to make. This nets her about 72 cents, and takes her about a week to do. But by the time she has finished the case she has learned to operate her machine and before long can turn out a case in a day. It takes a year or more for her to acquire any real proficiency or skill, however, and a still longer time before she is put into the favored class which is kept at work as long as possible.

The girls seen were of the best type of factory workers-intelligent, self-reliant and courteous. Germans and Americans largely predominate. Among the trimmers trained milliners can be found, but it is said that they do not make better workers because of such training as in trimming a ready-to-wear hat it is fidelity to copy and not ingenuitv to create that tells.

Both firms provide gas stoves for heating coffee and tea at noon. The dressing rooms were fairly good and all of the work is done seated.

## TINWARE FACTORIES.

Girls seem to have sunerseded boys in the tinware factories to a great extent. In some of the establishments boys are still employed to run the machines on which the tinware is cut and pressed, but in others girls do even this work, unsuitable as it
may seem to be. In all the factories the girls do soldering, japanning, painting, varnishing, stenciling and inspecting. The girls who solder are responsible for making water-tight the seams of the various utensils brought to them to be soldered, and flaws in their work are detected by the inspectors whose work consists in plunging these completed articles into hot water, noting by the formation of air bubbles the presence of any leak. The solderers frequently burn themselves with their soldering irons and injure their hands with the strong acid which is used to clean the tin before submitting it to the solder. Most of them wear their hands bandaged to prevent the acid touching the skin. There are fewer accidents from either source than might be expected as the girls become expert in the use of the soldering outfits. Girls who varnish cans complain of the fumes and smell, but say they soon grow accustomed to both and their health is not affected, and girls who operate presses occasionally suffer a smashed finger.

The conditions in the factories vary. Some of them are immense establishments, covering several blocks and employing hundreds of workers. As arrule these larger places were better from the sanitary point of view than the smaller ones, which were dark and dingy, poorly ventilated and with insufficient light. In the larger places it was noticed that the strictest discipline was maintained, fines were imposed and the individuality of the worker reduced to the lowest degree. This could be noted in the stolid, unenthusiastic way in which much of the work was done, though such an impression might also be traced to the evident fact that the workers were of the less intelligent class, most of them being either foreign-born themselves or children of foreign-born parents of the peasant type.

Wages were various in amount. Of the twenty-six workers making definite returns the scale ran from $\$ 2.25$ to $\$ 9$, the last sum being the salary paid a forewoman. The average was slightly over $\$ 4$. The scale in one factory was as follows: Soldering, $\$ 3.50$ to $\$ 7.50$; painting, $\$ 3.50$ to $\$ 6$; japanning, $\$ 3$ to $\$ 6$. In another it ran from $\$ 250$ to $\$ 5$, all being piece work. In a third it ranged from $\$ 2.50$ to $\$ 4$. The japanners and painters were paid the highest wages. They seemed to re-
gard their work with more pride than did the others. One girl who painted lard cans, using a stencil design, said that she always told people she worked in a "decorating establishment." Some of the best japanners said they could average $\$ 1.25$ a day if work was steady. If, however, they made $\$ 1$ they thought they did well. Many of the older workers had had wide factory experience. $\Lambda$ girl operawng a press said that she liked the work better than making fur coats though the wages were much less. Still in the fur trade there were long seasons of no work at all, while the tin can factory was busy all year around. Another girl said that her health had broken down in a knitting factory and she found soldering more healthful. A third was working merely during the dull season of the tobacco factory, where she could make better wages.

The hours were usually ten a day. One factory ran from 7 to 5:40, with half an hour at noon and ten minutes in the middle of the morning for lunch, and two hours less on Saturday afternoons. One factory closed down a week at Christmas to take stock and all hands get a vacation at that time.

In commenting on the fact that girls are pushing boys out of their former places in tin-ware factories, several managers of large plants sajd that they had tested both sexes and found that girls were much more conscientious about their work and were more to be depended upon. The only objection to be raised to thom was that it is harder to advance them from place to place. When they had once learned to do a certain kind of work they preferred to continue doing it rather than go to the trouble of acquiring something new, even if the new work would pay better. He explained their lack of ambition on the ground that as most of them had no control of their wages any way it mado little difference to them how much they earned.

## TOBACCO PACKING.

At certain periods of the year hundreds of girls in Wisconsin find employment in sorting and stripping tobacco, but the present report takes no cognizance of that particular phase of the whole industry as it is supposed to include it in a second and
more detailed investigation to be made later. Tobacco stripping and sorting are carried on in the districts where the tobacco is grown and are subject to certain peculiar conditions arising both from the environment and from the fact that the work is a seasonal occupation. For these reasons it is distinct from tobacco packing, as it is carried on in the few large factories located in Milwaukee. It is the latter class of work that is under present consideration, and while it gives employment to a comparatively limited number of girls it has certain aspects that make it of unusual interest.

These tobacco factories as they are found in the city vary as to sanitary conditions, wages, hours and the demands made upon the workers. In one place, a large factory, only fifteen girls were employed and these worked under conditions that were as good as it was possible to make them. Contrasted to this was a second factory almost within stone's throw, where just the reverse was true. In the first factory improved machinery has been put in so that the actual work of packing is done automatically, the girls merely putting in the right amount at one end of a revolving belt arrangement by which the tobacco is carried down the length of a long table, on either side of which sit other girls who fill, stamp and seal the packages, the work being as light and the conditions as good as could be asked for. In the second factory, on the other hand, where nearly one hundred girls are employed all the work is done by hand, and though long practice has undoubtedly brought individual expenditure of muscular strength to as small a degree as possible yet everything went to prove the work most exhausting. The packers were obliged to pound the tobacco down into the packages as tight as it was possible to make it, using heavy wooden mallets which they wielded with considerable force. Many of them worked like automatons, with swift, nervous movements, each one of which told in the rapidly accumulating heap of packages on which the packer's daily wage was estimated.

In this second factory all the work was done under electric light, as the place was little better than a warehouse so far as daylight and air were concerned. Half the girls worked on the lower floor, the other half in a gallery built around the wall and
reached by a narrow, crooked, wooden stairway. At noon the dynamos stopped running and the place was in darkness, except for the gas jets at which the packers melted the wax used in sealing. In this dim, flickering light they ate their luncheons and spent their noon hour, not deeming it worth while to dress for the street. They complained of the almost unbearable heat in summer, as there are days when it is impossible to open the windows on account of the wind blowing the gas flames. At all times the air was heavy and close and combined with an all-pervading odor of tobacco made it difficult for outsiders, at least, to breathe in any comfort.

In both factories the eight hour day prevailed, in one because the place was under union regulations, in the other because conditions have been more or less affected by union life though it is not officially recognized. In the union factory work begins at 8 and stops at 5, with an hour at noon and Saturday afternoons off. In the other, Saturday afternoons are earned by adding a half hour extra to the regular eight-hour day.

Wages are fairly good, especially in the union factory, where a girl can usually make about $\$ 4$ a week at the start. All work is paid by the pound, and a girl's wages increase with her rapidity until she can make $\$ 7, \$ 8$ and $\$ 9$ a week. In the other factory all wages were paid by the week and ranged from $\$ 3$ to $\$ 7$, the oldest worker being the only one paid the latter amount. At one time she received $\$ 9$ a week, but wages fell and hers with the rest. The present average for the establishment was about $\$ 5$.

A good deal of overtime work is required in these factories, but is always paid for. In the smaller one, whenever night work is asked, the girls are taken in a body to a good restaurant and given a warm dinner at the expense of the firm. The same firm, while not allowing vacations with pay, still sees to it that girls needing rest get it and girls who fall ill and who have no homes are taken care of.

In the toy factories girls do varnishing and painting, some of the lighter carpentry and most of the packing, all work that was formerly done by boys. In the place visited some thirty girls were employed at painting croquet mallets and balls, varnishing and painting sleds and toy wagons and in wrapping all these articles for shipment. The hours were ten a day, except on Saturday when but nine hours were required. The wages were small. Painters were paid from 65 to 85 cents a day, only the girls who did striping and stenciling getting the higher figurc. Girls who nailed canvas to folding stools and seats were paid 35 and 40 cents and packers 40 cents a day. The head of the firm said that though boys were employed up to within a short time the change had not been made on account of a difference in the wages paid the sexes, since the scale was the same as it had always been. Girls, however, had proved themselves more reliable than the boys and were not possessed of the constant desire for a change that kept the latter roving from factory to fastory in search of new work.

## TRUNK FACTORY.

The trunk factory visited was not the largest of its kind in the city, but may be regarded as fairly typical. About thirtyfive girls were employed in it, making telescopes, lining trunks and sewing the linings for traveling bagg. Most of the work was done with paste. In making the telescopes the pasteboard foundations were cut out of nachines operated by men, folded into shape by girls, and passed through stapling machines, also operated by men. Girls then pasted in the linings. In the trunk-making department, girls were employed pasting in the muslin linings and covering the trays with paper. The girls who made bag linings worked at machines operated by steam power, their work being merely to run up the seams of cloth cut into the desired shape. All the work was purely mechanical, requiring but little skill though considerable neatness and dispatch: Many of the girls had been in the factory for years,
in spite of the fact that the highest wage reported by twelve making definite statements was $\$ 5$. The average wage of the twelve, the scale of whose wages ran from $\$ 2.75$ to $\$ 5$, was $\$ 3.70$. Three of these made $\$ 5$ a week, one $\$ 4$, three $\$ 3.50$, one $\$ 3.25$, three $\$ 3$ and one $\$ 2.75$, which is probably about a fair range.

## WATCH FACTORY.

The fact that the only watch factory in Wisconsin was less than six months old at the time it was visited for the purposes of this investigation made it peculiarly interesting to note the degree of skill attained in that short period by the women operatives, most of whom were green hands impressed from domestic service and still in process of training for factory life. There were, in all, about fifty women employed, engaged for the most part in running the various drilling, cutting, grinding and polishing machines on which the different parts of a watch are made. The work was apparently easy so far as physical exertion on the part of the operator was concerned, but it must have been exceedingly nerve wearing on account of the minute size of many of the screws and bolts turned out. Some of them were so small they could scarcely be seen with the naked eye, yet each had to be polished and grooved with perfect accuracy, and the worker's wage depended upon the number of these infinitesimal articles she turned out in a day to the satisfaction of the inspectors. Much of the work had to be done under magnifying glasses, but strangely enough the girls did not complain of any ill effects. All had been troubled with headaches at the start but these disappeared as they became accustomed to their work. Evidently nature adjusted the eye to its task. The filing and polishing machines were fitted with glass shields so that the workers were protected from any flying bits of brass.

Wages were not especially good at the time of the visit, ranging from 50 cents a day, at which figure a girl was started, to 75 cents, the highest amount then being earned. The manager of the concern said, however, that in a short time good operatives should be making from $\$ 1.25$ to $\$ 1.50$ a day, otherwise he would not consider that his machines were being used to
their greatest capacity. He had in view a scheme for profit sharing in which he intended all the workers in the factory, girls included, to participate. This, he thought, would tend to enlist a keener interest on the part of the employe and would counteract the dulling effects of monotonous work.

The factory was a model in arrangement, and being almost new was attractive and clean in all its appointments.

A curious thing heard in connection with the place was its waiting list. When the factory started, nearly every servant girl in town applied for a position. Out of the applications the company selected those who seemed most desirable. The rest were put on a waiting list, and at the time of the visit perplexed housewives about town, searching for domestic assistants, turned to this list for addresses.

## WOOLEN MIILLS.

There are several woolen mills in the state which employ in all some two or three hundred women and girls. In a few only worsted yarn is manufactured, but in the others the yarn is both spun and made into cloth, the process affording a variety of occupations, adapted both to the young and to the more mature workers and being recompensed on a varying scale of wage, the lowest point of which is pitifully meager, while the other extreme represents about as high an amount as women are commanding in factories today. Skilled weavers are always in demand and are reasonably sure of making a fair livelihood, and it is an occupation in which women not only do as good and rapid work as men but in which there is little of the discrimination in wage which is met with elsewhere. It is not, however an easy life. Weaving means standing at the loom ten and eleven hours a day, with eyes alert to catch the slightest deviation in the running of the thread, while the roar and clatter of the machinery is almost deafening to any one unused to it. Weavers say that they speedily become accustomed to the noise and think nothing of it, pursuing their tasks with no more nervous strain than if everything was perfectly quiet, and this is probably true, though it is also true that weavers proverbially
look worn and weary as if the strain placed upon their nerves had its effect even if they themselves were unconscious of it.

There is usually a great range of wage in such places. In a mill manufacturing only worsted yarn, the scale was as follows: Helpers, who were little girls employed in putting empty spools on the machines, 35 and 40 cents a day ; spinners, 45 cents for a single row of spindles, 55 cents for a double row ; combers, 65 for one machine, 80 for two ; gill box minders, 50 and 60 cents; reelers, from 65 to 90 cents according to amount of work done in a day. The latter was the best paid class of woriz in the establishment where 140 girls were employed. In another mill spoolers and spinners were paid 80 cents a day; girls who set up the warp, $\$ 1.121 / 2$; weavers from 75 cents to $\$ 1.25$, according to amount of work turned out. In a third place, a girl started to work at 42 cents a day and often worked a long time at that figure before getting a chance to run a loom on which, with practice, she could make from 75 cents to $\$ 1.50$, the latter amount being the earnings of the very best workers who had charge of the wide looms. In this last place about three months a year the workers were laid off.

Almost all the work requires constant standing. The girls who run the spinning jennys rarely sit down. In few of the factories is any provision made for even the few moments of rest which a worker might snatch. In one, benches were placed at the end of the jennys and the looms so that when a girl could find time to sit down she might have a seat near at hand. There can nover be long periods of rest, however, as the work requires constant supervision, and, especially when a long row of spindies is under supervision, necessitates a continual walking back and forth to tie up broken threads and keep the spindles running true. Some of the spinners have had as many as 200 spindles to watch.

A good deal of dust arises from the wool, and that taken with the confinement makes the work more or less objectionable on the score of health, but most of the mills were in fairly good condition. The largest of the mills was located in a modern and sanitary building, with good light and air, but many of the
smaller ones were deficient in both respects, and in one or two there was a good deal of crowding of machinery and workers.

The working day in these mills seemed to be considerably longer than in most other lines of factory work. In one the regular hours were from $6: 30 \mathrm{a} . \mathrm{m}$. to $6: 15 \mathrm{p}$. m., with an hour at noon, but Saturday half holidays in part compensated for the extra time demanded. There were women working in this place who lived several miles from the mill and who walked to and from their work, being obliged to start before 6 o'clock in the morning to be at their machines when power started. In a second mill the hours were from $6: 50 \mathrm{a} . \mathrm{m}$. to 6 p . m., with an hour iess on Saturday, but with no half halidoys. In a third the hours were from $6: 45$ to 6 , with an hour at noon and an hour less on Saturday afternoons. Some of the mills had formerly required a straight eleven-hour day the year around, but this was abolished a few years ago. The workers were of all ages. The spoolers and spinners were often young girls in their teens, while middle aged women who had spent years in the mill were to be found at many of the looms. Some of the best workers reported having beeni employed in the same mill fifteen and twenty years.

## PART VII.

## Free Employment Offices.

## INTRODUCTORY.

Free public employment bureaus were established in Wisconsin in response to an economic, rather than political demand. For a period of one year two such offices have been maintained under the direction of the Bureau of Labor and Industrial Sta-tics-one being located at Milwaukee, the other at Superior.

These offices have not existed long enough to furnish a basis for definite conclusions as to the ultimate results but the indications are that there is in Wisconsin a place for such institutions. From the first the free offices were patronized to a very considerable extent by both employers and unemployed and with quite satisfactory results. In the first twenty-five weeks there were received 4,605 applications for work and 4,618 for help. The agencies were able to fill 3,808 positions from those lists. There have been several elements that have hindered the success of the offices more or less, and which may in time be eradicated. In some quarters there has been a slight opposition on account of aversion to state activity in this direction ; in some respects a lack of necessary equipment has hampered the bureau ; no appropriation for proper advertisement was made, which has been a very material drawback; moreover, times have been good and workmen have found comparatively little necessity for calling upon an employment bureau for assistance in getting positions.

But why have such offices as these been brought into existence?

Many states have recently passed upon that question. Generally speaking, it can be said that the real purpose of these offices is to provide facilities that will enable those who are looking for work and those who are looking for help to be brought together with the minimum amount of trouble and expense. They are intended chiefly as a help to the working classes by enabling those who are out of work to find employment with the least possible delay and without paying a fee such as is charged by private employment agencies for similar work.

That there is need of some such institution is certain. Proof of the fact is easily obtained. In most places, especially in the larger cities, it is not an easy matter for worker and employer to meet. The reasons for this are found principally in the conditions under which the productive enterprises are carried on and in the fact that these enterprises are scattered. A workman often is compelled to spend days, if not weeks, in walking from place to place before he finds one requiring the kind of services he can offer. Even where work is plentiful this is true and the employer often suffers more or less inconvenience from the same cause. Thus a great deal of waste results. Labor cannot be stored up and the time lost by the worker in looking for work is not only a loss to him but to society as a whole. If his labor be not expended at the time, that labor cannot be expended at all. This is not merely a truism; it is a patent fact. It is this that makes unemployment one of the greatest of social evils. Free employment offices tend to minimize the evil and would from this point of view, even if from no other deserve, some attention.

But in almost every city there are private employment agencies which make it their business to procure employment for those desiring it. These agencies are, however, private institutions. They are organized for the purpose of making money; that is their first object and the enterprise seems to be a success as a money maker. Laborers who are out of work patronize them well and pay for the services, real or supposed, that the agencies render in assisting them to positions. Undoubtedly these institutions do find work for a great many and they thereby prevent a great deal of waste that would occur were the laborers thrown entirely upon their own resources.

Serious objections, however, are made to such agencies. The services they render the working people are, on the whole, very largely offset by the charges made, charges that come out of the pockets of the unemployed and which often amount to a very considerable sum. Fees are charged at every turn. In the first place there is a fee for the mere registration of names, and very often this is done when there is not the slightest chance of securing positions. If the applicant eventually does get a job he has literally paid for it.

There are many other objections to the private agencies and many of them much more serious in character. These do not necessarily apply to all the private agencies but they do apply to a great percentage of them, their only purpose being apparently to get hold of the dollars of the unmeployed and to keep hold of them. The very fact that renders the unemployed so needful of money makes them also easy victims so long as they have any left. The system adopted by many agents for extorting what funds these people may possess resembles the methods of pawnshops more than those of any other business. Many honest agents, no doubt, do conduct employment bureaus upon methods as honorable as could be desired but the odium that has resulted from numerous rascalities is sufficient to cast a shadow of distrust upon the business as a whole.

Plenty of illustrations may be found. It often occurs that, having received the registration fee, the agent's interest in an individual case at once ceases. Many agents form a sort of conspiracy with employers, the object being to maliciously squeeze money out of the workers. There are many ways in which agents and employers can work together and by dividing the fees make a considerable income while actually doing less than rendering no service at all.

Among agencies located in the greater industrial centers which contain a large and floating working class and where many small and irresponsible contractors obtain their supply of labor, such practices are most common. In such places the workers are both hard pressed and ill posted as to the real circumstances. Very often their supply of bread depends upon their immediate employment, and each worker may have several others depend-
ent upon him as well. The result is that so great is their anxiety to obtain work they will grasp at almost any straw of hope and will submit to almost any inconvenience or imposition that promises to bring employment. Being unable to understand the full import of the operations to which they are subjected they are easily imposed upon, and unscrupulous agents do not hesitate to take full advantage of this fact. Wherever the opportunity exists it is safe to assume that there is no lack of unpriacipled men who are eager to secure the premium offered for their shrewdness. Attempts have been made to give protection to the victims of such schemes through the law, but laws enacted for the regulation of private employment agents do not seem to have helped matters much. The difficulty is that their actions are so easily covered up that it is well nigh impossible to obtain evidence upon which they can be convicted.

The schemes for extorting money from the unemployed are as numerous and varied as are the conditions that lead up to the extortion. The principle underlying them is the same-to deceive the victims into paying for supposed services. Different localities are suited for different sorts of such swindling games and the most successful agent is the one who is most ingenious and plausible in his devices. Some specific instances illustrate well the cleverness of the different systems. A few such may be related here as examples of the methods private agents have been accused of practicing in some of the cities of this state.

Application for work was made at one of these private offices, by a workman who had barely the necessary dollar to secure the position which was open. Having paid the fee he was sent by boat to a lumber camp to which the fare was several dollars. The man did not have the fare but according to an understanding between the lumbering firm and the boat people, he was car ried to his destination. There he was put at work but in a couple of weeks or less was laid off. In his accounting with the company he found that what was due him was just enough to offset the claims on account of his trip, and he was left penniless to make his way home as best he could. He had earned his board meanwhile but was actually money out on the transaction.

Complaints have often been made to the effect that employers
or "bosses" who pick out men for employers have made a business of working in conjunction with employment agents. By a system of hiring and discharging men they make 50 cents apiece or half the fee from each man thus hired. For example, a logging contractor near Superior turned in an order to the free labor bureau there, which was then being operated by the city. The bureau procured about 70 men, nearly enough to fill the order, so notified the contractor and had the men at the depot at the appointed time. Meanwhile the contractor fell in with a Duluth private agent and for some reason permitted him to nearly fill the order, even after notification had been sent from the Superior bureau. The result was that some 50 men were turned away at Superior, their places having been taken by other men hired later. Many of the disappointed men had been counting upon this job for a day or more and may have meanwhile passed by other very good positions. However, in this case they may have been fortunate for it was but a short time before some of the men who had been sent out were back again looking for new jobs.

Again, railroad employes who have been in charge of the hiring of men for surface work, etc., have taken advantage of their positions to make profit from the jobs they had at their disposal, and the private employment agencies prove very convenient allies in these dealings. Men have been turned away from railroad offices on the ploa that there was no need for them, when in reality there was a great necessity for men. These same men have gone to private employment offices, paid their fees and gotten the jobs they sought. The railroad agent could not, charge a fee directly, so this method was taken. Of course, such practices stop when a higher official becomes aware of them but. very often the victims do not realize what the process has been, or if they do realize it they are scarcely in a position to demand redress.

But the private agencies have not limited their operations to individuals. There have been many instances where they have been able to prey upon railroad companies. One agent is said to have done a very paying railroad ticket business by virtue of his having had an order from the company. The order was:
placed for a large number of men to do work on the line 100 miles or more from the city in question. The agent had the authority to issue his employment tickets which were honored by the passenger train crews for passage to the point where work was in progress. The agent would occasionally send out a crew of men who would actually accept the jobs offered and would work at least for a short time, but he would also pass out or sell to his friends or others, employment tickets entitling them to the free ride and job whereas the buyers never had any intention of taking the proffered work. This scheme was worked by one agent even after the railroad company had notified him to send no more men. The company had not supposed it necessary to notify their train crews to stop carrying men, so the traffic went merrily on. One such experience between a company and any one agent suffices, but it is only one of the many possible methods of making money at the expense of and to the great annoyance of the company.

Where two labor centers are within working distance, as is the case with the 'T ${ }_{\text {win }}$ Cities and the head of the lakes, agents in on 3 place and their correspondents in the other are able to work to great advantage, especially among men who have money enough to pay railroad fare from one place to the other. Cities with a state line between them, such as Superior and Duluth, afford great opportunities also. The district attorney in the former city was not long since called upon to threaten a local private agent with legal prosecution unless he would refund money collected from a party of unemployed workmen. The men had been sent to a Duluth office where they were supposed to get positions they had paid for in Superior. The Duluth office was prepared to turn them away but after losing a great deal of time and some car fare, they succeeded in getting back their original fee, being aided by the attorney.

The fact that the four cities referred to afford such a good field for private operations, indicates that with free public employment bureaus in all places and all working together a very sensitive and comprehensive piece of machinery would be at the scrvice of the unemployed. During the harvest season, the seasons of railroad work, logging and other great sources of em-
ployment in that part of the country, the free bureaus would aid greatly in giving relief from surplusages and shortages of labor in the different sections. The men could trust disinterested bureaus not to send them where there was no work and in case the applicants had no money with which to pay fees, that fact would not at all interfere with the distribution of the workmen according to the legitimate demands. Any motive for deception on the part of employers would also be eliminated.

It has been urged against free employment bureaus that they help to bring men to the industrial centers when there is no demand for them there-that a free employment bureau would act as sort of a loafing center. On the other hand such statements are contradicted by advocates of the free employment bureau plan. Instead of unnecessarily bringing the unemployed to centers where there is no work, it is maintained that they tend to do the reverse, that with a well organized system of free bureaus in different centers those seeking work would be able to get true and unbiased information as to the status in the different sections. The bureaus would serve as information as well as employment offices; they would bear somewhat the same relation to labor and the laborers that the produce exchange does to produce and the venders of produce.

These instances show the trend of affairs in regard to private employment offices and they are sufficient to prove that these agencies cannot as a rule be safely trusted to deal with the laboring classes-that for this reason they are likely to become to the community more of a detriment than a benefit. People are becoming aware of this fact and this in turn has created a sentiment that in many states is largely responsible for the tendency to place this work entirely under state or municipal supervision, through the establishment of free employment offices.

Private agencies so conducted as to injure any person or class of persons would be driven out of business. To do this is one of the purposes for which free offices have been established, büt it is doubtful whether they can fully accomplish this. It is not easy to disturb these agencies; their methods may be questionable but their ways are dark and their means of securing business are difficult to reach. So far the free employment offices have suc-
ceeded in taking away only a part of their patronage. It is apparent that some stronger force than mere opposition from free employment bureaus is needed to protect labor from the impositions of private agencies. In fact, it seems likely that these agencies will, at least a portion of them, continue to exist and do business until completely prohibited by law. Yet the free agencies can undoubtedly accomplish a great deal; they can by dividing the patronage relieve many a laborer from the necessity of paying fees and from the danger of fraud. Of necessity also, the private agenciess when in competition with free agencies would be compelled to eliminate more or less their underhanded practices. Thus the free bureaus are serving not only to ameliorate the condition of the unemployed but also to show in their true light the unprincipled agents, enabling legislators to act with much more intelligence in framing the laws which are aimed to better conditions. This latter fact is of $\cdot$ more importance than first thought might presume. While much is known regarding the practices so much complained of, there are a great many matters in regard to the establishing of new bureaus and the abolishing of old bureaus upon which there is not at present sufficient accurate and detailed knowledge. Intelligent action can only be expected when the situation is fully understood.

There are many questions that must be better understood before free employment offices can render their best service. One of these relates to the applicant for employment, another relates to the applicant for help. Each of the parties has a right to know something about the other. The employer desires to know whether the man he employs is efficient and honest, whether he is trustworthy and reliable. All this is of great importance to the employer. In turn, the workers have a right to know something about their prospective employers and this right should not be limited to the immediate terms of the employing contract. The employe should also be entitled to ask, what kind of a man is the employer? Is he responsible and disposed to be fair, or is he likely to take advantage of his position in his dealings with those in his employ? These questions vitally affect the worker and his family as well; he cannot afford
to overlook them. Yet as matters now stand the very nature of the situation makes it more politic, as a general rule, for the free employment agency to say as little as possible about either party to the transaction. The agency is between two forces. There is bound to be dissatisfaction. Some will complain under any circumstances and will perhaps attach to the bureau blame that should rest elsewhere. It is difficult for an agency to learn of the actual conditions everywhere existing and it may often be impossible to give reliable information. Loss of confidence in the bureau is likely to result. Many will also refuse to deal with a bureau that insists upon inquiring too minutely into their standing and their business affairs. The only way to secure the patronage of such persons is to ask as few questions as possible when the applicant has the option either of dealing with the free employment bureau or of transferring his patronage to a private agency.

When such conditions prevail it is evident that the right and the wrong of matters have little bearing upon the case. It is rather a question of expediency, and the Wisconsin free employment agencies have endeavored to be always upon the safe side of expediency ; their object has been confined to the bringing together of the parties wanting work and those wanting workers. While the applicants are requested to fill out application blanks which would necessarily furnish many of the facts in question, there is nothing obligatory about the request; it is in no sense made a condition unon which the bureau is to do its best to procure the desired help or position. The rule is to treat all alike, to cndeavor to give as complete satisfaction to those who furnish the information as to those who do not.

Then there is the business phase of the free employment offices, and this phase should be given careful attention. For some reason a large proportion of unemployed workers have often held aloof from patronizing the free employment offices and it has been noticed that this is true especially of the more efficient workmen. The only reason that can be assigned for such an attitude on the part of these workmen is that to a greater or less extent they look upon state free employment bureaus as charitable institutions. That such an impression
should obtain is probably due to the conditions that prevailed during the last industrial depression. At that time there were many offices maintained the purpose of which was to give relief to the unemployed, of whom there were great numbers. Such charity work took the form of employment finding as well as the giving of direct relief; often the two functions were combined. Hence the impression that anyone procuring employment free of charge was extending charity. For those thus impressed it would naturally be hard to look upon free employment bureaus as a business proposition. They could hardly be expected to regard the maintenance of free employment bureaus as much a state or municipal function as is the function of providing protection against crime or fire or the maintaining of bureaus of information for any other purpose.

It is of utmost importance that this impression be completely effaced and as soon as possible for it works injury to the cause. Just how to overcome this, however, is not easily determined. Probably one of the most effective remedies would be the application of strict business methods; and such methods would do much more than that-they would contribute greatly toward gaining the good will and confidence of the public in general.

The very fact that state activity in the line of establishing free public employment bureaus is of comparatively recent date, would naturally make them the object of more or less discussion and criticism. It is urged by some that the results so far have not been such as to justify the state in sustaining such agencies; that it is not a legitimate function of the state to furnish employment to the unemployed.

The question being an economic one is one that has demanded more or less the attention of every civilized government. A government is supposed to be a servant of the people, both employers and employed, and any way in which the state can serve these parties by bringing them together to their mutual benefit should be a legitimate state function. The question then becomes: Is the state in such capacity capable of serving the people better than any other agency?

The propriety of state action regarding paupers, the insanc and criminals is not questioned; and yet who can say how much of these very conditions are produced by enforced idleness? If it is a proper function of the state to care for the unfortunate victims of idleness should it not also be regarded a function, even a duty, of the state to prevent such conditions by assisting to employment "those who are willing and able to work"? It could hardly be maintained that the state should be charged to cure, yet not permitted to prevent a disease.

Recognizing this, England, Germany, France, Russia, Australia, New Zealand and about one-third of the states in the United States have some form of free employment bureaus either under state or municipal control. Civilized nations are realizing that new conditions must be met by new legislation; and the apparent increasing tendency of men to assist their fellow men in the struggle for existence is one of these conditions that has a foundation both ethical and economic. The complexity of our industrial society, the division of labor which tends to make every laborer a specialist, the industrial revolutions caused by the introduction of new machinery and new methods, throwing men thus out of lifelong employment to undertake new work-these things are continually calling the attention of the public and of the legislative bodies to the needs of the laboring classes. The last session (1901) of the Wisconsin legislature gave evidence of this fact. At that session was passed, among others, a law providing for the establishment of free employment bureaus under state control.

Experience has shown that along certain lines individual interests can be best served by the community acting as a whole. Often, indeed, such action has proved necessary to the success of the undertaking. This being true it is not only a right but an obligation resting upon the state to assume control of any institution "where public welfare can be most readily and speedily promoted." The free employment bureau is held to be one of these institutions.

The Illinois Commissioner of Labor said in his last report: "Idleness naturally leads to criminal pursuits, and an idle man belonging to the class who must work in order to live is a menace to the public. We have advanced sufficiently to accept the dec-
laration of Cardinal Manning, that a starving man has a right to his neighbor's bread, and when the opportunity to carn daily subsistence is taken away the means of support will be secured by other methods. It is these 'other methods' that constitute not only a source of expense, but danger to every community, and which the state, by this form of interference, has endeavored to remove.
"The individual plan as represented by the private employment agenics has justly been voted an unmitigated curse. People who conduct such institutions are moved solely by the instinct of personal profit, and many of them, as experience has shown, have moved from place to place in large cities, accepting fees from poor, unsuspecting applicants for work, with no purpose of furnishing work. There is scarcely a private employment agency that has not exposed itself to criminal prosecution, and only official indifference to a strict enforcement of the law has saved their managers from serving time in the prisons in the state.
"This is a serious charge to prefer against some of our fellow citizens, but the testimony of thousands of men and women who have been robbed of the few dollars they could ill afford would fully support it. That part of the population, however, who have no 'last dollar' to pay for a promise of work, and who are likely to form a dangerous element in a community, are precisely the class who can get no aid from the sharks in charge of the private office, and whose necessities can only be reached and relieved through the free offices under the managment of the state. This is the important reason and sufficient justification for the free offices. To aid deserving men and women to obtain employment is a public obligation and one of the highest functions the state can exercise."

It is perhaps true that the vast amount of vagrancy in the United States is due, not so much to a lack of work, as to a lack of knowledge as to where the work can be obtained, and the free offices are the only institutions that can fill in the gap existing between the man who wants to buy labor and the one who has it to sell.

In addition to being of special value to the unemployed,
free employment offices assist those already employed in securing better positions. They will also aid the young man starting out in life in preparing for those occupations where the greatest demand for labor exists.

That there are evils in the private employment agency system was long since testified by Commissioner Peck of the New York Bureau of Labor Statistics, who said in his report for 1886: "A recent trial reported by the New York papers shows that a young fellow or a recently arrived immigrant can go to one of these agencies professing to have connection with the great employers and for $\$ 5$ get his name put on the list. The agency, of course, has no more direct or legitimate relations with the big employers than it has with the state officers, but it sends out an agent or two to inquire about changes and vacancies present and prospective. 'The agency watches the adverisements and sends out its circulars, and the candidate for employment can call at the agency to meet other candidates and to be told that if he had been there an hour earlier, or 'yesterday evening,' he would have had one of three or four chances just filled. There is not a spark of truth in all these utterances, but they keep hope alive until the applicant really picks up something for himself or quits the city in disgust. In brief, the employment agency is one of the many traps and springs of the metropolis set to catch the heedless and inexperienced and teach life's hard lesson."

Such complaints arẹ by no means confined to any one section of the country. The labor commissioner of Iowa, after making a careful investigation of the private agencies in that state said of them: "Nowhere in this great state can be found a more perfect expression of man's inhumanity to man than is cmbraced in the pernicious methods of our so-called employment offices. The song of the 'Spider and the Fly' never found a more fitting ilustration of duplicity than is found in the management of most of these offices. They allure the honest and unsuspecting laborer into a web of confidence surrounded by sympathy and false promises, only to rob him of his earnings and turn him out disappointed and destitute."

Among instances of such practices, coming from various
sources, is one concerning a saloon keeper who advertised for 200 men to go out to do railroad work. He thus kept a large crowd around his place of business all day and late at night received what purported to be a telegram with the information that they could not be sent out that day. Of course the jobs eventually fell through.

Another.saloon keeper conducted an agency for women and used it as a decoy which lured young girls to ruin.

Such are the institutions and such the schemes against which free employment bureaus are pitted and which they are endeavoring to destroy. Information from Milwaukee states that in that city many of the private agencies are going out of business and that those that intend to remain in it, will use the employment agency merely as a sine to some other business. This effect is said to be due directly to the influence of the recently established state free employmnt bureau in Milwaukee, and the same is true in Superior.

## GERMANY.

Before considering free employment bureaus maintained by various states of the Union, we will refer briefly to those existing in other countries.

In Germany there are three classes of employment bureausprivate pay agencies, the philanthropic bureaus and the various trade agencies. Private pay agencies are licensed and are under strict police regulations which in a large measure prevent the abuses practiced by many similar institutions in the United States. The philanthropic agencies are managed by religious societies or in connection with either public or private charitable institutions, police stations or lodging houses. The union agencies are managed by the different labor organizations.

The private agencies are patronized principally by domestics, sailors, clerks, actors and farm hands. According to an investigation made by Prussia in 1895, the number of private agencies alone in the kingdom was 5,216. During the year previous these agencies had received 535,020 applications for em-
ployment, 481,538 for help and had procured positions for 381,206 persons.

The prime object of the philanthropic agencies is to deal with, and suppress vagrancy. Of 1,957 agencies of this class in Germany, 250 are maintained by private charitable societies and the rest by the government. Those managed by private societies have offices to which applicants are referred and they also have relief stations where applicants can earn a ticket entitling them to food and lodging. There are institutions of this kind all over the empire and the possessor of one of these tickets, without fear of arrest may make his way from one to the other station in search of work. The government agencies are managed on practically the same plan.

The employment agencies managed by the trades unions were originally for the purpose of advancing the interests of the individual trade organization at the head of them. They are probably an outgrowth of the guilds which started with a view to regulating the supply and demand of labor. Of late years, however, these agencies have occupied a sort of middle ground where capital and labor come together to talk over and in many cases settle each other's grievances. In many instances both employers and employes belong to the same union. These agencies work under the great disadvantage of being open only in the evening but the results so far as reported are gratifying. In 1894 Prussia alone reported that 294,604 persons mado application for employment and 140,747 for help, while 115,521 positions were procured for such applicants.

## FRANCE.

The free public employment offices of France grew out of the method of dealing with the unemployed following upon the breaking up of the fuedal system. The unemployed, amounting after a time to a veritable army, fell into the habit of congregating in certain quarters of the city for the purpose of placing their labor on the market. These gatherings were afterward legitimatized under the name of Places de Greve, which gave M. de Molinari, the publisher of a labor paper, the
idea of a labor exchange. The first practical plan for such an institution was presented to the council of Paris in 1848 but the scheme was never carried out. Five years later another proposal was made but that too failed to carry. .This later bill contained among other provisions, the following:
"Art 1.-There shall be erected-in Paris under the direction of the state, a labor exchange.
"Art 2.-This exchange, divided into sections for different classes of trades, shall contain employment registers for workmen and all information adapted for the purpose of enlightening the public as to the different phases of labor."

This bill was also defeated, it being antagonized on the ground that it was communal in nature. The matter was referred to the council of Paris.

Nothing further was done until 1875, when shelter was provided for those that congregated at the docks to sell their labor. Agitation of the subject continued and finally in 1878, M. Manier secured the adoption of the following resolution by the Municipal Council of Paris: Considering that the labor exchange will at least have the effect of (a) suppressing the Places de Greve, (b) facilitating the placing of workers, (c) suppressing the registry offices, (d) centralizing the supply and demand with a view to rapidly bringing workers into relation with work, (e) establishing direct relations between the chambers of syndicates or corporate associations, as well as between all workers in general whether they belong to unions or not, the assembly, having heard the details of the proposal, invites the Municipal Council to vote the said proposal in its entirety in the present session."

This brought out a full discussion of the subject and various schemes were presented for consideration. The general attitude of the adherents of the movement was summed up by M. Mesureur in this way:
"In adhering to the standpoint of liberty of contract, you have the right, if not the duty, to furnish labor with the means of maintaining a struggle against capital with equal and legal weapons; without the labor exchange, the existence of syndicate chambers will always be precarious, the charges which they entail be prohibitive to the majority of workingmen.
"It is therefore necessary that they should have premises and offices to which every one may come without fear of having to sacrifice more time or money than he can afford; the free and permanent use of the meeting rooms will enable workers to discuss more fully and accurately the numerous questions which interest their trade or affect their wages; they will have for their guidance and instruction all means of information and correspondence, the resources furnished by statistics, a library with books on economy, industry and commerce, and the course of production in every industry, not only in France, but in the whole world."

Finally a labor exchange was established by the Paris muni-, cipal council, and in turn, by several other cities. The refusal of some of the trades unions to comply with the law, later brought about the dissolution of the general council of the exchange. The idea of free employment bureaus had be, come firmly rooted in the minds of the people, however, and the various agencies proved a success. The laws and decrees now governing these bureaus in France are similar to those in this country.

Private agencies in France are placed under strict regulations and the managers must give bonds for properly conducting them. Records must be kept for both applicants for work and for help. The applications must state the kind of work desired and the work that one is capable of doing. In many instances reading rooms are provided in connection with the agency, which contain literature designed to be of special assistance to the laborer.

The following table shows the work done in 1891 by the various agencies in France:

| Employment agencies. | Number in 1891. | Applicitions for work. | Applications for help. | Position; secured. |
| :---: | :---: | :---: | :---: | :---: |
| Guilds | 32 | 6,288 | 6,188 | 6,188 |
| Free municipal registries | 24 | 24,805 | 13,292 | 10,856 |
| Trade syndicates: | -54 |  |  |  |
| 1. Wmployers | -54 | - 122,596 | 71,6839 | 184,662 |
| 3. Mixed .. | 13 | 2,558 | 1,882 | 3,292 |
| Licensed agencies | 1,374 | *2,495, 079 | *938,237 | *821,450 |
| Friendly societies. | 59 | 35,041 | 33,059 | 33,794 |
| Convents and philanthropic agencies. | 76 | 132,036 | 25,911 | 133,658 |

[^74]ENGLAND.
Though in England the idea of free employment agencies goes back to the merchants' and crafts' guilds of the thirteenth century, their actual establishment is of more recent date. The first one was opened at Egharn in 1885 and is still successfully maintained. It is managed by the "local superintendent of births, deaths and marriages, who gives his services gratuitously."

The plan of this bureau differs somewhat from that in vogue elsewhere. Cards on which are written the names of applicants are posted about the district in which the employment office is located. Both local and outside laborers are allowed to register but local applicants are given preference, and only those who are bona fide workmen out of employment are permitted to register. No charges are made for the services of the office, but successful applicants are invited to contribute a small portion of their earnings of the first few weeks. Such contributions, however, are entirely voluntary. The policy of the registry is to "scrupulously abstain from interference in any question of wages or conditions of service or labor troubles." Men on strike are not replaced by the agency, nor are employers whose employes are locked out, furnished help; neither does the employment office make any inquiries as to membership in trade unions or regarding wages previously obtained.

Those finding employment most readily through the bureau are gardeners, common laborers, men proficient in the building trades, and grooms. Besides procuring positions for la-- borers the employment office management in some cases makes loans to redeem tools from pawnbrokers or to remove families to other districts. About 75 per cent. of the money so loaned is repaid.

The official report on employment bureaus says that "the success of the registry seems very largely due to the fact that the superintendent knows personally most of those who are likely to apply, whether employers or workmen-a condition
of things possible in a country district, but not in a large town."

Another bureau opened at Ipswich in October, 1885, is somewhat more elaborate in scope. Its methods are thus described in a recent account of the bureau published by the honorary manager :
"When a man applies to us for work he is given a form, of which the following is a copy:
'No. $\qquad$
'IPSWICH LABOR BUREAU.
'Established for the purpose of finding work for men, and securing suitaijle men for employers. No fees are charged, but dohations to defray working expenses are solicited.
'Office, Tower Street. Office hours: 9 to 5. 'Date,

## 'APPLICATION FOR WORK.

'Name
'Address
'Age
'Married or single
'What family
'Trade (describe fully)
'Name and address of last employer'
'How long in his employ
'Average wages
'Cause of leaving

> 'CERTIFICATE OF CHARACTER TO.BE SIGNED BY LAST EMPLOYER.
'I certify that
is a competent workman; that he was in ........ employ as stated above, and that his character and conduct were satisfactory.
'Signed
"If the above is filled up and signed by the last employer to our satisfaction, the man is registered in the following way:

| No. | Date. | Name. | $\begin{gathered} \text { Ad- } \\ \text { dress. } \end{gathered}$ | Occupation. | Age. | Married or single. | How many children. | Name of last employer and reference. | Wages. | How disposed of. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ... | $\cdots$ | $\ldots$ |  | $\cdots$ $\cdots$ $\cdots$ | . $\quad .$. | $\ldots$ | $\cdots$ | . . |  |  |

"If there is an order on the books to suit him, and if the place is near enough to admit of it, we send him to it, but if it is at too great a distance, we send particulars of the man to the employer who has sent us the order, and if he thinks him suitable he goes. If we have no opening for him, we look up advertisements in the daily papers, and if anything likely is discovered, we send on to the advertiser the following form:

## 'LABOR BUREAU, IPSWICH.

'A medium for masters who want men, and men who are seeking employment.
'No fees. Offices: Tower street.
'Telephonic address: "Labor Bureau, Ipswich."
'Honorary Superintendent
WANTS EMPLOYMENT.
'Name
Address
'Age
Married or single
'Trade
'Last employer
......................................
"Having satisfied ourselves that the above is a competent workman, and of good character, we shall be glad if you can find him employment.
"We also advertise daily in the papers such men as we have on hand.

## ORDERS FOR MEN.

"When masters apply to us for men, their orders are entered in a book, of which the following is a sample:

| Date. | Name. | Address. | Occu. pation. | Man sent. | No. of register. | Date. | Result |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | . . | $\ldots$ | $\ldots$ | ...... | ..... |
|  |  |  |  |  |  | $\ldots$. |  |

[^75]
## оніо.

Ohio was the first state in the union to pass a law authorizing the establishment of free public employment offices. This was in 1890. The Labor Congress of Cincinnati, composed of all the trades unions of the city, took the initiative. It started an agitation for such a law and framed a bill which its authorized representative in the legislature presented to that body. The bill as originally drawn up provided that the salaries of the superintendent and assistants and all other expenses of the bureau should be paid by the state, the employment offices being made branches of the state Bureau of Labor Statistics. The bill in this form passed the lower house but was amended in the senate. As finally passed, it read as follows:
"The commissioner shall have an office in the state house which shall be a bureau of statistics of labor and he shall collect, arrange and systematize all statistics relating to the various branches of labor in the state, and especially those relating to the commercial, industrial, social, educational and sanitary condition of the laboring classes. Said commissioner is hereby authorized and directed, immediately after the passage of this act, to organize and establish in all cities of the first class, and cities of the first and second grade of the second class in the state of Ohio, a free public employment office, and shall appoint one superintendent for each of said offices to discharge the duties hereinafter set forth. Said superintendents shall cause to be posted in front of their said offices on a sign board, or in suitable place on a building where such offices are located, the words "Free Public Employment Offices." It shall be the duty of such superintendents to receive all applications for labor of those desiring employment and those desiring to employ labor, and record their names in a book kept for that purpose, designating opposite the name of each applicant the character of employment, or labor desired and the address of such applicant. Each of said superintendents shall be provided with such clerical assistance as in the judgment of the commissioner may appear necessary for properly
conducting the duties of their several offices. No compensation or fee shall directly or indirectly, be charged to or received from any person or persons seeking employment or any person or persons desiring to employ labor through any of said offices. Said superintendents shall make a weekly report on Thursday of each week to said commissioner, of all persons desiring to employ labor and the class thereof, and all persons applying for employment through their respective offices, and the character of employment desired by each applicant; also, of all persons securing employment through their respective offices and the character thereof, and a semi-annual report of the expense of maintaining such offices. Said commissioner shall cause to be printed weekly a list of all applicants and the character of employment desired by them, and of those desiring to employ labor, and the class thereof, received by him from the respective offices aforesaid, and cause a true copy of such lists on Monday of each week to be mailed to the superintendent of each of said offices in the state, which said list by the superintendent shall be posted immediately on receipt thereof in a conspicuous place in his office, subject to the inspection of all persons desiring employment. Said superintendent shall perform such other duties in the collection of labor statistics as said commissioner shall determine. Any superintendent or clerk as herein provided, who directly or indirectly charges or receives any compensation from any person whomsoever in securing employment, or labor for any other person or persons as provided in this act, shall be deemed guilty of a misdemeanor, and shall be fined in any sum not exceeding fifty dollars, and imprisonment in the county jail or workhouse not exceeding thirty days. The superintendents of each said office shall receive a salary, to be fixed by the council of such city, payable monthly. The clerk or clerks required in any of such offices shall receive a salary of not more than fifty dollars per month, provided the compensation of such superintendents so appointed shall he paid out of the city treasury, in which such free public employment offices may be located."

This law in some respects is a curiosity as a sample of hastily
or loosely constructed legislation. It directed the commissioner to proceed at once to organize free public employment offices and to appoint the necessary officers to properly conduct them. One of the principal conditions necessary to the organization of any office is a provision for the salary for the one who fills it. This measure contemplated that the salaries be fixed and paid by the cities in which the employment offices were located. That provision placed the free employment offices and their organization practically beyond the control of the commissioner who alone was authorized by law to establish them. Nnother feature of the law, which also helped to defeat its real purpose, was the giving to cities of the power to make and unmake the free offices by paying or refusing to pay the salaries, according to their own desires or whims. Such a condition not only endangers the existence of the offices but tends to bring about collision between state and city authorities. Still another bad feature of the original law was the clause conferring upon the commissioner power to appoint superintendents and clerks, yet not the power of removal. This feature of the old law has been eliminated, however.

In spite' of these obstacles the Ohio law has proved a success, as is shown by the following extract taken from the Commissioner's report on the first six month of the operation of the free public employment offices in the five cities where they were located:
"The total number of persons wanting situations was 20,136 , and of this number 14,529 were males and 5,607 females.
"The total number of employes wanted by employers was 18,154 , and of this 11,453 .were males and 6,701 females.
"Tho total number of persons having sceured situations thirough the offices was 8,982 , and of this number 5,575 were males, and 3,407 females.
"The' amount of 'help wanted' was 90.2 per cent. of 'situations wanted;' of positions secured, $49 \frac{1}{2}$ per cent. of 'help wanted;' of positions secured, 44.6 per cent. of 'situations wanted.'
"On account of the fact that offices had to be rented and furnished the work done by the free public employment offices
during the short time reported, is creditable alike to the officials in charge of the offices and to the state. The entire cost connected with the offices up to January, 1891, will not exceed \$5,000
"If the 8,982 persons who secured work through the free public employment offices had obtained employment through the private employment agencies, it is fair to assume that the cost of such services would have averaged $\$ 3$ per capita for males and $\$ 1$ for females, or a total of $\$ 20,132$, and by deducting from the latter sum the cost of maintaining the free public employment offices there is a balance of $\$ 15,132$ which has been saved to the willing yet poor and needy workingmen and women by the state law."

This seems an enormous amount of money saved to the laboring community during the first six months by the free employment offices, yet the commissioner has been more than fair in his deductions. In the first place the $\$ 5,000$ he has allowed for the running expenses of the free employment offices is as much of a saving to the laborers as any other part of the $\$ 20$, 132 because they had no portion of it to pay. In the second place there were, according to the various reports, from 12 to 37 private employment offices previously located in the five cities where the free employment offices were placed. It is certainly fair to assume that there were 12 in existence and also from, the means they adopted to secure applications for employment that the number of those applying for work at the private offices was in the same ratio to the number of applications for employment in the free public offices as the number of private offices was to the number of free public offices; or to state it mathematically assuming x to be the number of applications for employment in the private offices: $\mathrm{x}: 20,136:: 12: 5$. Solving for the value of $x$ there would appear to have been 48,326 applicants for employment at the private offices. Taking the rate which the commissioner assumes as the average enrollment fee charged by the private offices, namely, $\$ 3$ for males and $\$ 1$ for females, and assuming the proportion of males to females remain the same, we deduce another saving to the laboring class amounting to $\$ 48,308.80$, most of which was a saving to the very needy.

Again, while the five free employment offices were intended to serve the state as a whole, the further away from them one gets, the less their influence is felt, and the less do employers and employes make use of them. On the other hand private employment offices existed in all parts of the state in every town having 4,000 or 5,000 or more inhabitants. Their influence was felt in every part of the state equally. The officials of the free employment offices were especially energetic in securing positions for those applying to them, as the holding of their offices depends in a measure upon the number of positions thus secured. On the other hand the private offices bend their energies toward securing applications both for situations and for help, for the existence of such offices depends not so much upon the number of places filled as upon the number of applications received. Having no absolute information as to the number of applications the private offices did receive in Ohio, it will never be known how much the state might have saved to the laboring classes by properly advertising the free employment bureaus; the amount undoubtedly would reach into the hundreds of thousands of dollars.

Following is the report of the free public employment offices of Ohio from their organization on June' 26, 1890 to July 1, 1901.


## MONTANA AND OTHER STATES.

Montana followed Ohio by establishing a free employment office through a legislative enactment amending the act providing for a state labor bureau. This first employment office was managed by this bureau. It proved a failure, however, its scope being too limited. The office was expected to bring laborers and employers together by merely recording the names of the applicants and using the mails to aid in placing the men in positions.

In March, 1897, this act was repealed and a new one substituted, this one outlining an altogether different method for the management of free employment offices. It provided that any municipality might establish free employment offices, but the state gave no financial aid. For many reasons this plan also proved a failure. First of all, it was a political measure. Neither were conditions ripe for such institutions. The cous try was too sparsely settled and nearly all the railroads anu mining companies had their own employment offices. The cities were not anxious to undertake the expense of maintaining such offices and the fact that they were to be supervised by the state labor bureau worked against them. In fact no cities have undertaken to open free employment offices and the attempts at such action in Montana have thus far resulted in little benefit to the laboring and employing classes.

## NEBRASKA.

Neluraska has met with better results from a law nearly identical with that of Montana. In April, 1897, such a law was passed creating a free employment department to be run in connection with the state Bureau of Labor and Industrial Statisties. Although it has been charged that this measure was a political one, the commissioner has expressed himself as being well satisfied with the results obtained through it. This is true of Nebraska in spite of the fact that many of the conditions helping to cause failure in Montana confronted the Nebraska law as well.

Only $\$ 650$ was appropriated for the annual expenses of the Nebraska offices and this allowance was less than was needed for extra clerk hire in the state labor bureau. No other extra help was provided for the bureau. This has naturally placed the commissioner at a great disadvantage in trying to make the influence of the employment offices extend over the entire state. There were no funds with which to advertise the new department and scarcely enough for postage. Neither was the office located in the city where it could accomplish most; it was located at the capital (Lincoln) and even outside the business district of that city. Yet the commissioner thinks that the results obtained under such adverse conditions have been such as to demonstrate that under a proper law "the free employment department may be made a blessing to the laboring people and a permanent benefit to the state."

Still the work of the Nebraska office does not show up as favorably as the optimistic view of the commissioner might imply. During the first 14 months there were received 1,040 applications for help and only 218 positions were filled. This latter number, however, probably should be considerably larger had all those that were helped to positions made reports to the bureati after obtaining them.

## MISSOURI.

In 1892, Labor Commissioner Hall of Missouri in a report to the state legislature commended highly the work of the Ohio employment bureau and urged the legislature to pass a measure providing for such bureaus to be organized on a similar basis. Although a bill was prepared after the Ohio model it failed to pass. In 1897, however, Labor Commissioner Rozelle decided that conditions demanded free employment offices and decided to establish an agency without awaiting legislative permission. Accordingly he opened such an office in connection with the office of the state factory inspector at St. Louis. The new department proved so successful that the legislature in 1899 provided for the establishing of free employment offices in all cities of the state, having a population of 100,000 or more, the state to pay salaries and other expenses in connection with the operation of the offices.

Three cities were thus entitled to offices and they were established in Kansas City, St. Louis and St. Joseph. These offices reported for the year ending Oct. 31, 1891 as follows: Applications for work, 13,035 ; for help, 17,080 ; number of positions filled, 8,473 ; applications for help unfilled, 8,587 .

Concerning the effect of the free employment offices upon the business of the private agencies, Chief Clerk R. C. Howe of the state labor bureau of Missouri writes under date of Jan. 4, 1902: "The establishment of these free employment bureaus has had the effect of driving out of business all the fraudulent agencies and to a great extent has regulated all others by compelling them to comply with the law."

## CALIFORNIA.

The California Bureau of Labor took the initiative in the free employment matter in that state by establishing an office in San Francisco in July, 1895, without special legislative sanction. The expenses of the office were met during the first nine months by funds from the regular appropriation for the bureau. At the end of that time private subscriptions for the free employment office were solicited and the business men and trades unions of the city subscribed $\$ 970$. The labor commissioner thus maintained the bureau until August, 1896, when it closed, the state failing to make any provision for keeping it alive or for re-opening it. In his seventh biennial report, the commissioner discusses the bureau as follows:
"The main feature leading to the ultimate success of the undertaking was the selection of only reliable help for the employer, and for this purpose it was necessary to establish a system by which the applicant for work could be followed from the time he was found a position to the time he again sought assistance at the bureau. Each employer was required to fill out a blank specifying the number and sex of employes wanted, the kind of work, wages, and preferences as to age, nationality, and the like. Applicants for employment were required to fill out blanks, giving name, address, occupation, years of experience, wages expected, residence in State, nationality, lit-
cracy, conjugal condition, number in family, reasons for unemployment, and references. The data contained in those applications was entered in separate books kept for the purpose. In addition, each applicant for employment who was sent to fill a position was given an employment card, stating his name and prospective occupation and wages. He was also given two postal cards to be delivered to his employer, one of which was to be used by the latter in notifying the department of the engagement of the applicant, and the other of his eventual discharge and the reason therefor.
"During the first year of its existence, from July 15, 1895, to Aug. 1, 1896, there were received 18,920 applications for employment, of which 14,251 were from men, and 4,669 from women. Of this number, 5,845 secured positions, 3,314 being men and 2,531 women. Out of the 5,845 persons furnished with positions, less than 30 had been reported on adversely. In spite of this promising beginning and in the face of potent arguments for the continuance of the work thus begun, the department was discontinued after a year."

## IOWA.

Soon after the opening of free employment offices in Ohio, the Iowa commissioner of labor attempted to persuade the legislature of his state to provide for free employment agencies. His repeated efforts resulted in failure, however, and he then tried another plan-that of establishing such offices in connection with his bureau and in co-operation with the county auditors of the state. This plan met with so little encouragement from employers that it was soon abandoned, leaving Iowa without free employment agencies.

## WASHINGTON.

Seattle, Washington is the only city in the United States having a municipal bureau of labor statistics. A free employment office was originally connected therewith, but was later placed under the civil service department of the city. The success of the employment office has forced the civil serv-
ice commission to enlarge its quarters and from time to time to increase its office force. This is due largely to the support and co-operation of the employers of labor throughout the state.

The following table shows what the work of the bureau has been during six years in regard to the number of positions procured and cost of such work:

| Year. | 1894. | 1895. | 1896. | 1897. | 1898. | 1899. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 'Total | 2,623 | 3,729 | 3,268 | 5,952 | 13.871 | 18,153 |
| Hop pickers | 1,144 | 2,050 | *135 | 2,890 | 2,235 | 2,682 |
| Railroad laborers |  | \$1,311 | +571 | 2,784 | 7,077 | 2,102 |
| Grand total | 3,967 | 5,779 | 3,403 | 11,626 | 24,183 | 22,837 |
| Total expenses ...... | \$909 65 | \$1,120 00 | $\$ 72050$ | \$724 80 | \$1,377 13 | \$1,136 66 |
| Cost of each position furnished | 0.2293 | 0.1938 | 0.2138 | 0.0624 | 0.0569 | 0.05 |

*Crop failure.
$\dagger$ Not given.
$\ddagger$ Office did not act for railroads before 1897.
Although this office is a municipal one it has perhaps a wider field of operations than any other employment burcau in existence. The territory over which it does business includes Idaho, Montana, Oregon, California, Washington, British Columbia and Alaska. The records for 1898 show that 63 per cent. of the positions filled were of common, unskilled labor, 30 per cent. were positions requiring some skill and the remainder for skilled labor. Nearly nine-tenths of the business is done outside the city. Private agencies which are now required to pay a license of $\$ 100$ have been largely displaced by the municipal agency.

## COLORADO.

Colorado has no free public employment offices, but a law was recently passed in that state regulating the private agencies and securing seekers of employment against the frauds often practiced by such institutions. Any person desiring to operate an intelligence office must pay a license fee of $\$ 100$ and give bonds in the penal sum of $\$ 2,000$ for properly conducting the same. The applicant for employment may sue for and collect damages which he may have incurred through any "misrepresentation or fraud or deceit" on the part of those conducting the
business of the licensed agency. As remuneration for procuring positions the law provides a maximum fee of five per cent. on one month's wages in case' of males, and three per cent. for females. A registration fee may also be charged.

## MARYLAND.

Maryland organized a free employment bureau in 1896. Most of its business is conducted through the mails, however, and no report concerning its operations was obtainable.

The laws of Louisiana, Maine, Massachusetts, Minnesota, New Jersey, Pennsylvania and Rhode Island governing employment agencies are similar to those of Colorado.

## OTHER STATES.

The legislatures of Connecticut and West Virginia in 1901 passed laws establishing free employment offices but no definite information regarding the work being done was obtainable. However, in each case assurance was given that the offices are doing a very satisfactory business.

## NEW YORK.

New York state in 1896 passed a law providing for the organization by the state labor commissioner, of free public employment bureaus. The commissioner was instructed to locate such bureaus in all cities of the first class in the state, to appoint superintendents and clerks such as are necessary for the various offices and to fix the salaries of these appointees. The state makes appropriations to cover the necessary expense.

The reports of the New York labor commissioner charge that that state has furnished a field of operations for employment agents who have perpetrated frauds unequaled in any other state; yet nothing has been done to change the state law so as to affect such agents in any way. Private agencies are still permitted to enjoy all the liberties which were theirs before the law establishing free employment offices was enacted.

Weekly reports from each of the free employment office superintendents are received by the commissioner of labor.

These reports contain the names and addresses of all persons applying for work or for help, the character of the work or help desired and the names of those that have such applications filled through the bureau. The superintendents are required not only to supply such information, but also any additional statistics that the commissioner may call for.

From July 1896 to Jan 1, 1897, the first few months of the existence of free employment offices, the percentage of applications for work filled was only five and one-half ; in 1899, 20 per cent. was filled; in 1898, 39.6 per cent., and in 1899, 45.4 per cent. In a comparison with results in Ohio, these figures appear at a disadvantage. This may be attributed largely to the fact that New York's law places no restrictions upon private employment agencies, and to the fact that the highly developed spoils system in New York prevents the employment offices from supplying men for public works. There is also a greater or less percentage of applicants who come from foreign countries, register at the free employment offices but very shortly pass on to other points in search of work. New York bureaus are, of course, subject to such cases to a greater extent than any of the other states having similar employment offices.

## IL_LINOIS.

Illinois was the fifth state to pass a law providing for free employment bureaus and the law passed was the most complete one of its kind that had been adopted by any state. It was not enacted for political reasons but because of the need for such a law, especially in Chicago, where it was expected that the burean would do a great deal toward bringing employers and those out of work together. Another function for the bureau is that of classifying applicants as to their abilities in order that the right men may be chosen for the right place and not be sent promiscuously to fill the various positions.

The Illinois law is framed with the purpose in view of bringing employers and laborers together with the least possible delay and a minimum of expense. The state appropriates a sufficient amount to meet all expenses of the offices including
those of a superintendent, an assistant and a clerk, one of whom must be a woman. Besides this each of the four offices that have been established are allowed $\$ 400$ per year for advertising purposes.

Among the prescribed duties of the superintendents the law requires that they "record in a book kept for that purpose the names of all persons applying for employment or help, designating opposite the name and address of each applicant the character of employment or help desired. Separate registers for applicants for employment shall be kept, showing the age, sex a nativity, trade $^{\text {n }}$ occupation of each applicant, the cause and duration of [non-] employment, whether married or single, the number of dependent children, together with such other facts as may be required by the bureau of labor statistics to be used by said bureau; but in no case shall the above information be open to the public; nor will the refusal to give such information on the part of the applicant debar him from the services of such employment office."

It is made the further duty of the superintendent of each employment office to "put himself in communication with the principal manufacturers, merchants and other employers of labor, and to use all diligence in securing the co-operation of the said employers of labor, with the purposes and objects of said employment offices."

The superintondent must make to the commissioner a weekly report of the work done in his office and the commissioner in turn forwards. a copy of each report to each superintendent No fee, either directly or indirectly, shall be charged the applicant for help or for employment. Neither shall the superintendent furnish help to any employer whose employes are on a strike or are locked out. It is made the duty of the factory inspectors to assist, in every legitimate way, in securing positions for those applying for work and in getting applications for help. In Ohio the converse of this is true. There the superintendents of employment offices are compelled to perform the duties of a factory inspector. Thus in Ohio the city in which a free employment office is located pays for services rendered for the state.

The Illinois law also makes some requirements of private employment agencies. A license fee of $\$ 200$ is imposed and bonds in the sum of $\$ 1,000$ are demanded, to insure proper conduct on the part of the agency.

In classifying the industries in a somewhat general way, it is seen that 97 per cent. of the applications for employment and 91 per cent. of those for hèlp in the agricultural class have been filled by the Illinois offices; in the commercial class, including deliverymen, canvassers, salesmen, etc., 48 per cent. of those applying secured positions and 62 asking for such help procured it; 76 per cent. of those wanting positions as domestics obtained them, while 96 per cent. wanting such services were supplied. In the manual labor class, 97 per cent. of the applicants procured work, and 77 per cent. of employers who applied were furnished with help. Under the head of transportation, including such as baggagemen, hostlers, conductors, etc., 91 per cent. of those seeking help obtained it. In the miscellaneous class the same result is shown. These figures relate to the males alone. Referring to the columns for females, under the head of domestic service, 97 per cent. of those asking for work and 81 per cent. of those asking for help were accommodated.

The following table gives the totals as taken from the reports for two years:


WISCONSIN.
Since July 1, 1901, Wisconsin has supported free public employment bureaus. The 1901 session of the state legislature enacted a law providing for the establishment of such offices under the supervision of the State Labor Commissioner and the
legislators in framing the measure tried to profit by the experience of the various other states that had already had experience with free labor employment offices. Following is the text of the Wisconsin law. The law creating such offices in Wisconsin is given in full and reads as follows:

## CHAPTER 420, LAWS OF 1901.

To create free employment offices in certain cities, regulating the same, providing for the appointment of a superintendent, fixing his salary, licensing private employment agencies, fixing penalties for a violation of its provision and making appropriation therefor.
Where located--Section 1. A free employment office is hereby created in each city of a population of thirty thousand or over according to the last state or national census; for the purpose of receiving applications of persons seeking employment and applications of persons seeking to employ labor. Such office shall be designated and known as Wisconsin free employment office.
Appointment; salary; offices.-Section 2. Within thirty days after this act shall have been in force, the commissioner of the bureau of labor and industrial statistics shall recommend, and the governor shall appoint a superintendent for each of the offices created by section one of this act, and who shall devote their entire time to the duties of their respective offices. The tenure of such appointment shall be two years, unless sooner removed for cause. The salary of each superintendent shall be twelve hundred dollars per annum, which sum, together with the proper amounts for defraying the necessary costs of equipping and maintaining the respective offices, rent for such offices not to exceed five hundred dollars per annum, shall be paid out of any funds in the state treasury not otherwise appropriated.
Office; signs; record books; registers.-Section 3. The superintendent of each such free employment office shall, within sixty days after appointment, open an office in such locality as shall have been agreed upon between such superintendent and the commissioner of the bureau of labor and industrial statistics as being most appropriate for the purpose intended; provided that said employment office shall be occupied in conjunction with the bureau of labor and industrial statistics when such bureau has an office in any of said cities, and in case said bureau has no office in any of said cities, then in that case the city council wherein said free employment office is establshed shall furnish and equip an office for said employment bureau, either in conjunction with a department of said city or separately without cost to the state, such office to be provided with a sufficient number of rooms or apartments to enable him to provide, and he shall so provide, a separate room or apartment for the use of women registering for situations or help. Upon the outside of each such office, in position and manner to secure the fullest public attention, shall be placed a sign which shall read in the English language, "Wisconsin, Free Employment Office," and the same shall appear either upon the outside windows or upon signs in such other languages as the location of such office shall render advisable. The superintendent of each such free employment office shall receive and record in books kept for that purpose names of all persons applying for employment or help, designating opposite the name and address of each applicant the character of employment or help desired. Separate registers for applicants for employment shall be kept, showing the age, sex, nativity, trade
or occupation of each applicant, the cause and duration of non-employment, whether: married or single, the number of dependent children, together with such other facts as may be required by the bureau of labor and industrial statistics to be used by said bureau: Provided, that no such special registers shall be open to public inspection at any time, and that such statistical and sociological data as the bureau of labor may require shall be held in confidence by said bureau, and so published as not to reveal the identity of any applicant. And, provided, further, that any applicant who shall decline to answer the questions contained in special register shall not thereby forfeit any right to any employment the office might secure.

Report to the commissioner; lists posted; duty of factory in-spector.-Section 4. Each superintendent shall report on Thursday of each week to the state bureau of labor and industrial statistics the number of applications for positions and for help received during the preceding week, also those unfilled applications remaining on the books at the beginning of the week. Such lists shall not contain the names or addresses of any applicant, but shall show the number of situations desired and the number of persons wanted at each specified trade or occupation. It shall also show the number and character of the positions secured during the preceding week. Upon receipt of these lists, and not later than Saturday of each week, the commissioner of the said bureau of labor and industrial statistics shall cause to be printed a-sheet showing serarately and in combination the lists received from all such free employment offices; and he shall cause a sufficient number of such sheets to be printed to enable him to mail, and he shall so mail, on Gaturday of each week, two of said sheets to each superintendent of a free employment office, one to be filed by said superintendent and one to be conspicuously posted in eaçi such office. A copy of such sheet shall also be mailed on each Saturday by the commissioner of the state bureau of labor and industrial statistics to the state inspection of factories. It is hereby made the duty of said factory inspector to do all he reasonably can to assist in securing situations for such applicants for work, to secure for the free employment offices the co-operation of the employers of labor in factories, to immediately notify the superintendent of free employment offices of any and all vacancies or opportunities of employment that shall come to his notice.
Superintendent to communieste.-Section 5. It shall be the duty of each such superintendent of a free employment office to immediately put himself in communication with the principal manufacturers, merchants and other employers of labor, and to use all dilgence in securing the co-operation of the said employers of labor, with the purposes and objects of such employment offices.
Report.-Section 6. It shall be the duty of each such superintendent to make a report to the state bureau of labor and industrial statistics annually, not later than December 1st of each year, concerning the work of his office for the year ending October first of same year, together with a statement of the expenses of the same, and such reports shall be published by the said bureau of labor and industrial statistics annually. Each such superintendent shall also perform such other duties in the collection of statistics of labor, as the commissioner of the bureau of labor and industrial statistics may require.

Fee or compensation; penalty.-Section 7. No fee or compensation shall be charged or received, directly or indirectly, from any person or corporation appiying for employment or help through said free employment oflices; and any superintendent or clerk who shall accept, directly or indirectly, any fee or compensation from any applicant, or from his or her representative, shall be deemed guilty of a misdemeanor, and, upon conviction, shall be fined
not less than twenty-five dollars nor more than fifty dollars and imprisoned in the county jail not more than thirty days.
Strike or lock-out.-Section 8. In no case shall the superintendent of any free employment office created by this act, furnish or cause to be furnished, workmen, or other employes to any applicant for help whose employes are at that time on strike or lock-out; nor shall any list of names and addresses of applicants for employment be shown to any employer whose employes are on a strike or locked out; nor shall such list be exposed where it can be copied or used by an employer whose employes are on a strike or lock-out.
Applicant; work.--Section 9. The term "applicant for employment" as used in this act shall be construed to mean any person seeking work of any lawful character, and "applicant for help" shall mean any persoñ or persons seeking help in any legitimate enterprise. Nothing in this act shall be construed to limit the meaning of the term "work" to manual occupation, but it shall include professional service, and any and all other legitimate services.
Private employment agency; license; sign.--Section 10. No person, firm or corporation in the cities designated in section one, of this act, shall open, operate or maintain a private employment agency for hire or where a fee is charged to either applicants for employment or for help, without first having obtained a license from the secretary of state, for which license he shall pay one hundred dollars per annum; and no such private agent shall print, publish, or cause to be printed or published, or paint on any-sign, window or newspaper publication, a name similar to that of the Wisconsin Free Employment Offices. And any person, firm or corporation violating the provisions of this act, or any part thereof, shall be deemed guilty of a misdemeanor, and upon conviction such person, firm or, if a corporation, all the officers thereof, shall be fined not less than twenty-five dollars nor more than fifty dollars.
Superintendent; removal.-Section 11. Whenever, in the opinion of the commissioner of the bureau of labor and industrial statistics, the superintendent of any free employment office is not duly diligent in the performance of his, duties, he may summou such superintendent to appear before him to show cause why he should not be recommended to the governor for removal, and unless such cause is clearly shown the said commissioner may so recommend. In considering such a case a low percentage of positions secured to applicants for situation and help registered, lack of intelligent interest in the work, or a general inaptitude or inefficiency may be deemed by said commissioner sufficient to recommend a removal. And if, in the uphion of the guvernor, such lack of efficiency cannot be remedied by reproval and discipline, he shall remove such person from office as recommended by said commissioner; provided, that the governor may at any time remove any superintendent or clerk for cause.
Printing, blanks, postage, ete.-Section 12. All such printing, blanks, blank books, stationery and postage as may be necessary for the proper conduct of the business of the offices herein created shall be furnished by the secretary of state upon requisition for the same made by the commissioner of the bureau of labor and industrial statistics.
Section 13. This act shall take effect and be in force, from and after its passage and publication.

## CHAP'TER 213, LAWS OF 1899.

Regulating employment and intelligence offices and bureaus:
License; penalty.-Section 1. No person shall engage in the business of keeping an employment or intelligence bureau or office or agency for the purpose of hiring mer to work for others, and receive a compensation for such hiring without first having obtained a license so to do as hereinafter provided; any person or persons whoi shall establish or keep any office or place within said state, for the purpose of obtaining place or employment for laborers of any kind whatever, or for procuring or giving information concerning such places or employment to such laborers, or for procuring or giving information concerning such laborers to employers, shall be deemed a keeper of an employnent or intelfigence bureau, office or agency; and any person who shall engage in such business without such license, shall be guilty of a misdemeanor and shall upon conviction thereof be punished by a fine not exceeding one hundred dollars or imprisonment in the county jail not exceeding ninety days, or both.
Application.-Section 2. Any person who desires to engage in any such business may apply to the commom council if such business be carried on in a city, or to the village council if in a village, or to the county board of the county in which such business is to be carried on if in the country, for such license, and pay into the treasuruy of such city, village or county the sum of ten dollars, and upon executing and delivering to such common council, village council or county board a bond in the penal sum of one thousand dollars, with sufficient sureties, or in lieu thereof a surety bond of one thousand dollars, to be approved by such common council, village council or county board, he shall be entitled to such license. Each license shall designate the house in which the person licensed shall keep his office, giving street and number of the same, and the number of such license, and shall continue to be in force until the first day of May next ensuing the date thereof and no longer; provided, always, that the foregoing license fee shall be the same for any length of time whether issued for a year on the first day of May, or any fractional part thereof; and no license issued hereunder shall be transferred to any other perSon or persons whatever, or inure to the benefit of any other person other than the licensee.
Bonds.-Section 3. The bonds shall run to the state of Wisconsin, and shall be conditioned for the payment of any damage that any person secured or engaged to labor for others by the obligator, may sustain by reason of any unauthorized act, fraud or misrepresentation on the part of such agent for such hiring. The bond shall be filed with the city clerk if approved by the common council, with the village recorder if approved by the village council, and with the county clerk if approved by the county board of any county. Any person licensed and having given bond as herein provided may, while continuing to reside or maintain his office at the place mentioned in such license, prosecute his said business in any part of the state.

Persons engaged to work.-Section 4. Every person hired or engaged to work for others by one so licensed as aforesaid, shall be furnished a written copy in duplicate of the terms of such hire or engagement, rate of wages or compensation, kind of service to be performed, length of time of such service, with full name and address of the person or persons, firm or corporation authorizing the hire of such person, one of the aforesaid copies to be delivered to the person or persons, firm or corporation for whom the contracted labor is to be performed, and the other to be retained by the person hired as aforesaid.

And any person hired or engaged to work for others by one so licensed as aforesaid, who shall fail to get employment according to the terms of such contract of hire or employment, by reason of any unauthorized act, fraud or misrepresentation on the part of such agent, may bring an action upon said bond, and may recover in such action against the principal and sareties the full amount of his damages sustained by reason of such unauthorzed act, fraud or misrepresentation, together wtih his costs, disbursements, in such action; provided, however, that nothing contained herein shall apply to agencies conducted by women for the purpose of securing employment for females only.

This is the law under which free employment offices in Wisconsin were organized. As the provisions in the same are numerous, and the law as a whole quite lengthy, it was thought advisable for the sake of convenience to summarize the more important provisions under their respective heads and present the same in a briefer form:

## SUMMARIES OF CHAPTER 420, IAWS OF 1901.

1. Free employment offices to be established in-

Places having thirty thousand or over, according to last state or national census.
2. Purpose-

To receive applications of those seeking employment and those seeking for help.

Superintendent-
One for each office created by section 1 to devote entire time to duties.
Appointment-
Governor appoints upon ręcommendation of commissioner.
Term-
Tenure of office-Two years.
Salary-
$\$ 1,200$ per annum.
Duties-
Shall receive and record applications, names, addresses, character of work desired, etc.
Shall keep separate registers, showing age, sex, nativity, cause and duration of non-employment, trade or occupation, married or single, dependent children, if any, and such other facts as the Bureau may require.
Shall immediately communicate with principal manufacturers and cooperate with employers.
Shall make annual report of work done with statement of expenses to commissioner in December, for year ending October 1st.
Shall report to the commissioner on Thursday of each week the number of applicants received; the unfilled applications at the beginning of the week.

Such lists shall not contain the names or addresses of applicants; but the situations desired and number of persons wanted at each occupation.
Shall report number and character of positions secured during the preceding week.
Shall perform such other duties in collection of statistics as commissioner may require.
Shall not receive nor charge a fee or compensation from any applicantPenalty.
Removal of-
If not duly diligent in performance of his duties he may be summoned before commissioner to show cause why he should not be fic.,... mended for remoral.

Removal, causes of-
Low percentage of positions secured to applicants.
Lack of intelligent interest in work or general inaptitude or inefficiency.

## Proviso-

Special register not to be open to public.
The commissioner shall make no statistical publication which would reveal the identity of applicants.
If applicant declines to answer any special register question he shall not forfeit right to employment.
Applicants not to receive help or benefit of the office who are on a strike or lock-out.
No lists of vacancies shall be exposed, where they can be copied by such persons.

Commissioner-
Duties-
Upon receipt of lists, not later than Saturday of each week, shall print . a sheet showing separately and in combination the lists received from all employment offices.
Shall mail on each Saturday two of such sheets to each superintendent, one to be filed by him, the other to be posted.
Shall mail to factory inspectors a copy of such sheet.
Shall publish annual report of superintendent.
Factory inspectors-
Duty-
To assist in securing situations for applicants.
Secure co-operation of employers of labor in factories.
Notify superintendent of vacancies or opportunities of employment which may come to their notice.

Offices-
Shall be opened within 60 days after appointment of superintendent in such locality as superintendent and commissioner may deem best.
Cost of equipping and maintaining offices to be paid out of treasury.
Rent not to exceed five hundred dollars.
Offices to be occupied in conjunction with offices of Bureau, if such office is in such city.
If not, city to furnish and equip office without expense to the state,
Separate rooms are to be provided for women.

Signs-
Wording of--
"Wisconsin Free Employment Office."
Irivate employment agency-
Not to open office where free employment office is established except a license is secured from secretary of state.
Shall not print, publish or paint on any sign, window or newspaper publication a name similar to Wisconsin Free Employment Agency--Penalty.
Applicant-
Construction of-
"Applicant for employment" is construed to mean any person seeking work of any lawful character.
"Applicant for help"--any person seeking help in any legitimate enterprise.
"Work" applies to any lawful occupation, to include professional service. Stationery-

Printing, blanks, blank books, statiourery and postage, such as may be necessary for offices, shall be furnished by secretary of state upon requisition for the same made by commissioner.

The provisions of section 1 of the foregoing act confine the state free employment bureaus at present to two cities-Milwaukee and Superior-and there have been, therefore, but two such offices opened in the state.

There are several sections of the law that contain especially interesting provisions. Sections 8 and 10 are much the same as the corresponding sections of the Illinois law. One prohibits the superintendent of a bureau from exhibiting any list of names and addresses of applicants for employment to any employer whose workmen are on a strike or who are locked out. This section was inserted out of consideration for the rights of organized labor and for the purpose of preventing the state from being made the tool of any parties in their conflicts with wage earners.

Section 10 is designed as a safeguard against private employment agencies and was inserted with the expectation that such agencies would soon disappear from cities provided with state employment offices. In such cities no private agency may be opened without first obtaining a license, the fee for which is $\$ 100$ per year. All such agencies in the state must also file bonds in the sum of $\$ 1,000$, which guarantees patrons against loss on account of fraud and misrepresentation by agents.

Co-operation between state employment agencics and state factory inspectors is made mandatory by section 4 . The inspectors
are expected to assist very considerably in bringing employers and state employment agencies together.

During the first year of the operation of the Milwaukee and the Superior state employment agencies there were filed with these offices 9,002 applications for employment and 9,051 for help. Through the offices 7,380 applicants were given employment. The aggregate numbers and percentages of the applications received and filled during the year ending June 28, 1902, by the two offices mentioned, are given in the following tables:

SHOWING, BY OCCUPATIONS, THE NUMBER OF MALE APPLICANTS FOR EMPLOYMENT, THE APPLICATIONS FOR HELP AND POSITIONS FILLED IN THE MILWAUKEE OFFICE DURING THE YEAR ENDING JUNE 28, 1902.

Male-Milwaukee.

| Classification of Positions. |  |  | Number of positions filled. |
| :---: | :---: | :---: | :---: |
|  | For employment. | For help. |  |
| Agents | 2 <br> 53 <br> $+\quad 1$ <br> $\quad 5$ <br> 1 | $\ldots \ldots \ldots \ldots$431$\cdots \cdots \cdots \cdots . .$. | $\begin{array}{r} 32 \\ 1 \end{array}$ |
| Apprentices. |  |  |  |
| Baggageman Baker |  |  |  |
| Barber . |  |  |  |
| Barnman | 23712218 | 12112 | $\begin{array}{r} 23 \\ 1 \\ 11 \\ 1 \\ 8 \end{array}$ |
| Bartenders |  |  |  |
| Bell boys ...... |  |  |  |
| Bench moulder Blacksmiths . |  |  |  |
| Blacksmiths' helpers | 1922515 | 13 | 8 |
| Bookbinders . ......... |  |  |  |
| Bookkeepers'... |  | 42112 |  |
| Bottle washers. |  |  |  |
| Brass finishers |  |  | 9 |
| Brass polishers | 44115 |  | $\begin{aligned} & \dddot{2} \\ & 1 \\ & 1 \\ & 2 \end{aligned}$ |
| Brewery hands |  |  |  |
| Buffers . ..... |  |  |  |
| Buggy washer |  |  |  |
| Buttermakers | 1113375 | c........48481184 |  |
|  |  |  | $\begin{array}{r} 1 \\ 1 \\ 8 \\ 3 \\ 50 \end{array}$ |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Chemists | 130621175 | $\begin{aligned} & 32 \\ & 40 \end{aligned}$ | $\begin{aligned} & 26 \\ & 37 \end{aligned}$ |
| Chore boys <br> Chore men <br> Cigarmakers |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Clerks . |  |  | 1312$\ldots \ldots \ldots \ldots$$\cdots \cdots \cdots \cdots \cdots$ |
| Clerks, grocer | $\begin{array}{r} 0 \\ 3 \\ 15 \\ 2 \\ 1 \end{array}$ | $\begin{array}{r} 10 \\ 1 \\ 3 \\ \cdots \cdots \cdots \cdots \cdots \cdots \end{array}$ |  |
| Clerks, hotel . |  |  |  |
| Clerks, shipping |  |  |  |
| Clerks, shoe .... |  |  |  |
| 51 |  |  |  |

MILWAUKEE-Continued.

| Classification of Positions. | Number of Applications Filed. |  | Number of positions filled. |
| :---: | :---: | :---: | :---: |
|  | For employment. | For help. |  |
| Clothing cutters <br> Coachman <br> Coal passers <br> Collectors <br> Confectioners | $\begin{array}{r}25 \\ 1 \\ 15 \\ \hline 1\end{array}$ |  |  |
|  |  | [11 | ${ }_{1}^{7}$ |
|  |  |  |  |
|  |  | 1 | 1 |
| Cooks | 28 | 19 | 14 |
| Coopers makers | 12 | 17 | 5 |
| Core makers . | 6 | 5 | 4 |
| Decorator . .. | 1 |  |  |
| Delivery | 3. |  |  |
| Delivery boys. |  |  |  |
| Delivery men ${ }_{\text {Dishwashers }}^{\text {Di........ }}$ | ${ }_{36}$ | 25 | $\stackrel{9}{25}$ |
| Distributors . ......... |  | 37 |  |
| Draughtsmen | 5 |  |  |
| Electrical engineer | 6 | 2 |  |
| Electricians . ${ }_{\text {chen }}$ | 2 |  | 2 |
| Elevator boys ... | 7 | 2 |  |
| Elevator mien | 8 |  |  |
| Elevator operators | 1 |  | i |
| Erecting engineers........ | 41 |  | 3 |
| Engravers . ... | 1 | 1 |  |
| Errand boy . | 17 | 12 | 11 |
| Factory hands |  | 464 |  |
| Farm hands Tinishers |  | $\begin{array}{r}206 \\ 2 \\ \hline\end{array}$ | 175 2 |
| Finishers |  | 25 | 20 |
| Gardeners | 12 | 13 | 9 |
| Handy men . | 19 | 15 |  |
| Harnessmaker | 1 |  |  |
| $\xrightarrow{\text { Horseman }}$ Horseshoers | 1 |  |  |
| Iron workers | 5 | 1 | 1 |
| Janitors . | ${ }^{25}$ |  |  |
| Kitchen men | 1,455 |  | 1,325 |
| Lathe hands | 1,45 |  |  |
| Lathers | 7 | 7 | 7 |
| Laundry hands .. |  | 1 | 1 |
| Laundry man . | ${ }_{2}^{3}$ |  |  |
| Machinists . . ${ }^{\text {Mache }}$ | 48 | 44 |  |
| Machinists' helpers | 35 | 21 | 16 |
| Masons, $\cdot$....... | 10 | ${ }_{1}^{23}$ | 8 |
| Meat cutters ${ }^{\text {Masons }}$... | 4 | 1 |  |
| Messenger boys ... | 3 | 4 | 3 |
| Millwright | 1 | $\stackrel{2}{4}$ | ${ }_{24}^{1}$ |
| Moulders ... | 1 |  |  |
| Moulders; helpers | 1 | ....... |  |
| Newspaper work | 1 |  |  |
| Riggers . ......... |  |  |  |
| Roofers. |  |  |  |
| Salesman ${ }_{\text {Sausa }}$ | $\stackrel{2}{2}$ |  | 1 |
| Sealers. | ${ }_{32}^{1}$ | 25 |  |
| Office boy | ${ }_{6}^{32}$ | 25 |  |

MILWAUKEE-Continued.


SHOWING BY OCCUPATIONS THE NUMBER OF FEMALE APPLICANTS FOR EMPLOYMENT, THE APPLICATIONS FOR HELP AND THE POSTTIONS FLLLAED "IN THE MILWAUKEE OFFICE DURING THE YEAR EN'DING JUNE 28, 1902.

Female-Milwaukee.

| Classification of Positions. | Number of Applications Filed. |  | Number of positions filled. |
| :---: | :---: | :---: | :---: |
|  | For employment. | For help. |  |
| Agents |  | 1 |  |
| Pakers . | 1 |  |  |
| Bookkeepers | 1 2 2 | 2 |  |
| Cash girls ... | 5 | 22 | 3 |
| Cashiers | 1 |  |  |
| Chambermaids | 26 | 22 | 17 |
| Chore girls ... | $\begin{array}{r}1 \\ 28 \\ \hline\end{array}$ | 1 3 | 1 3 |
| Clerks . | 37 | 42 | 29 |
| Cook (first) | 2 | 2 | 2 |
| Cook (second) | 1 | 1 | 1 |
| Dining room girl | 38 | 50 | 31 |
| Dishwasher . .... | ${ }^{6}$ | ${ }^{6}$ | 6 184 |
| Domestics . | 203 | 245 | 184 |
| Drèssmaker | 2 |  |  |
| Factory hands | 55 | 208 |  |
| Governess | 2 | ${ }_{8}^{2}$ | 1 |
| Hotel help . . . . | - 19 |  |  |
| Housekeeper ....................... |  | 9 | 5 |
| Janitor . .... | ${ }^{3}$ |  |  |
| Kitchen girl | 60 | 62 | 57 |
| Laundry girl | 2 | 4 |  |
| Laundry hands | ${ }_{3}^{4}$ | 6 4 | 4 3 |
| Laundresses . |  |  |  |
| Nurse girl | 4 | 5 | 4 |
| Nurses. .............. | 9 |  |  |
| Packers and markers | 2 | 9 |  |
| Printers. ... | ${ }_{25}^{2}$ | ${ }_{21}^{1}$ |  |
| Seamstresses | 9 | 11 | 5 |
| Servants | 51 | 67 | 40 |
| Sewing girl | 1 | 1 | 1 |
| Sorters . .. | 2 | ${ }_{1}$ | 2 |
| Stenographers | 12 | 1 | 1 |
| Waiters | 18 | 25 | 10 |
| Washwomen | 25 | 23 | 22 |
| Totals | 673 | 866 | 511 |

The foregoing two tables show the work of the Free Employment office in Milwaukee during the first year of its existence. The first in order gives the number of the male applicants and their occupations, the applications for help, and the number of positions filled. The second table in order show the corresponding facts for the females,

In the table for the males it is seen that the applicants for employment during the year numbered 3,936 ; that the applicants for help numbered 3,424 and that 2,674 positions were filled. Of the 3,936 applicants for employment 67.9 per cent. thus secured positions; while of those who were looking for help 78.1 per cent. secured such help. Those who were seeking work exceeded the help sought by 512 persons.

Of the positions filled the greatest number is in that of "laborers," in fact they constitute practically one half of all the positions filled. Factory hands is the next in importance followed by farm hands and teamsters. This also holds good with respect to applications for help and employment. In these occupations the demand as well as the supply was the greatest and our work the most effective.

The table for the females shows that the number of the applicants for position was 673 , that the applications for help numbered 866 ; and that 511 positions were filled. About 76 per cent. of those who sought work thus secured the same, while only about 59 per cent. of those who were looking for some one to employ were able to find what they were in search of.

Of the applicants for employment the greatest number came from those whose occupation was in the domestic service. The table shows that 203 sought employment as domestics, 6 as dishwashers, 26 as chambermaids, 37 as cooks, 60 as kitchen girls, 51 as servants, while there were others who sought work in occupations kindred to this service. Next in importance comes those who looked for employment to the factories. Clerks are perhaps the third in point of number.

The applicants for help in the domestic service and factory work also greatly outnumber all others. This is also true of the positions filled. Clerks, stenographers, bookkeepers, show a few but comparatively speakng the number is small.

The next two tables in order represent the business in the Superior office during the same period. By occupations they give, first the applications for employment, then in the same way the application for help, and lastly the positions filled.

SHOWING, BY OLCUPATIONS, THE NUMBER OF MALE APPLICANTS FOR EMPLOYMENT, THE APPLICATIONS FOR HELP, AND THE POSITIONS FILLED IN THE SUPERIOR OFFICE DURING THE YEAR ENDING JUNE 28IH, 1902.


SHOWING, BY OCCUPATION, THE NUMBER OF THE FEMALE APPLICANTS FOR EMPLOYMENT, THE APPLICATIONS FOR HELP AND THE POSITIONS FILLED IN THE SUPERIOR OFFICE DURING THE YEAR ENDING JUNE 28, 1902.

Superior.

| Classification of Positions. | Number of Applica. tions Filed. |  | Number of positions filled. |
| :---: | :---: | :---: | :---: |
|  | For employment. | For help. |  |
| Chambermaid ...... | 18 | 20 | 12 |
| Cooks' | 26 | 28 | 16 |
| Day work | 4 | 1 | 1 |
| Dining room girl | 48 | 87 | 46 |
| Dishwashers | 5 | 6 | 4 |
| Domestics | 128 | 237 | 123 |
| Factory hands | 2 | 2 | $\stackrel{2}{2}$ |
| Housekeeper | 2 | 5 | 4 |
| Housework .. <br> Kitchen girls | 51 | 88 | 49 |
| Laundry girl | 2 | 4 | 2 |
| Nurse girl | 9 | 5 | 5 |
| Office work | 1 |  |  |
| Restaurant girl | 1 | 2 |  |
| Seamstresses . | 7 | 10 | 7 |
| Sewing girls | 4 | 6 | 3 |
| Scrub girls . | 2 | 2 | 2 |
| Stenographer | 1 | ......... |  |
| Work (general) | 1 |  |  |
| Total | 316 | 504 | 279 |

The preceding two tables relate to the work in the Superior office. The first in order shows, among other things, that 4,077 applications for employment and 4,257 applications for help were filed, while 3,916 positions were filled. The greatest number by far in all cases was that of common labor-in fact, the proportion in this respect is much greater even than was the case in Milwaukee. Carpenters and factory hands were also quite numerous, and as seen from it this table includes males only.

The second table in order relates to the females. During the first year this office found employment for 279 females, while it received 316 applications for employment and 504 applications for help. In this case, as for Milwaukee, most of the applications filed and positions filled were in the domestic service or kindred occupations.

In comparing the work of the two offices the following appear to be the results:

The Milwaukee office received, when both males and females are included, 4,609 applications for employment, 4,290 applications for help and from these succeeded in filling 3,187 positions.

The Superior office, including males and females, received 4,393 applications for employment, 4,761 applications for help and filled 4,195 positions.

The Milwaukee office thus received 216 more applications for employment than Superior. In the other items, however, Superior is ahead. Thus, in the applications for help Superior leads by 471 , and besides this filled 4,195 positions, as against 3,187 for Milwaukee, a difference in favor of the former of 1,004 positions.

SHOWING, BY OCCUPATIONS, THE TOTAL NUMBER OF THE MALE APPLICANTS FOR EMPLOYMENT, THE APPLICATIONS FOR HELP, AND TIEE POSITIONS FILLED IN THE OFFICES IN MILWAUKLE AND SUPERIOR COMBINED DURING THE YEAR ENDING JUNE 28, 1902.

| Classification of Positions. | Number of Applications Filed. |  | Number of positions. fillea. |
| :---: | :---: | :---: | :---: |
|  | For emplosment. | For help. |  |
| Agents |  |  |  |
| Apprentices | 53 | 43 |  |
| Baker ...... | 4 |  |  |
| Baggageman | 1 | i | 1 |
| Barbers ... | 1 |  |  |
| Barnman | 25 | 25 | 23 |
| Bartenders | 8 | 1 | 1 |
| Bell boy | 13 | 14 | 12 |
| Bench moulder | 2 | 1 | 1 |
| Blacksmith .... | 35 | 16 | 13 |
| Blacksmith's helper | 19 | 20 | 8 |
| Boiler washer ..... |  | 1 |  |
| Book binder | 2 |  |  |
| Bookkeeper | 30 | 1 |  |
| Bottle washer | 1 | 1 | 1 |
| Brass finishers | 5 | 5 | 5 |
| Brass polishers | 4 | 4 | 5 |
| Brewery hands | 4 | 2 | 2 |
| Bricklayers |  | 5 |  |
| Bridge carpenters | 4 | 4 | 4 |
| Buffers | 1 | 1 | 1 |
| Buggy washers | 1 | 1 | 1 |
| Butcher ..... | 5 | 2 | 2 |
| Buttermaker | 1 |  |  |
| Cabin boy | 1 | 1 | 1 |
| Cabinetmakers | 13 | 48 | 8 |
| Call boy |  | 1 |  |
| Canvassers | 3 | 11 | 3 |
| Carpenters | 156 | 181 | 129 |
|  | 1 |  |  |

MALE APPLICANTS FOR EMPLOYMENT, APPLICATIONS FOR HELP, AND POSITIONS FILLED, ETC.-Continued.

| Classification of Positions. | Number of Applications Filed. |  | Number of positions filled. |
| :---: | :---: | :---: | :---: |
|  | For employment. | For help. |  |
| Chore boy | 32 | 33 |  |
| Chore man | 62 | 41 | 87 |
| Cigarmakers'. | 1 187 |  |  |
| Clerks, grocer | 187 5 | 15 1 | 13 1 |
| Clerks, hotel .... | 6 | 5 | 7 |
| Clerks, office .... | 15 |  |  |
| Clerks, shipp ${ }^{\text {che }}$ | ${ }_{1}^{2}$ |  |  |
| Clerks, night .... | 2 | 2 |  |
| Clothing cutters | 2 |  |  |
| Coachman | 25 | 11 |  |
| Coallectors | 1 | i | 1 |
| Collectors ... | 25 | I |  |
| Cooks | 63 | 40 |  |
| Cookees | 3 | 1 | 1 |
| Coopers | 2 | 10 | 1 |
| Core makers | 12 | 17 | 5 |
| Dairy hands | 6 | 5 | 4 |
| Decorators | 1 |  |  |
| Delivery boys | 31 | 34 | 24 |
| Delivery men | 54 | 10 | 9 |
| Dishwasher | 36 | 25 | 25 |
| Distributors Draughtsmen | 33 5 | 37 | 32 |
| Edgerman | 1 |  |  |
| Erecting engineer | 1 | 1 | 1 |
| Dlectric lineman | 2 | 6 | 2 |
| Electricians ......... | 7 | 3 | 2 |
| Electrical engineer | 1 |  |  |
| Elevator boys |  | 2 | 2 |
| Elevator man | 8 | 2 | 2 |
| Elevator operator | 7 |  |  |
| Angineers | 75 | 9 |  |
| Engravers ... | 1 | 1 |  |
| Errand boy | 25 | - 15 | 14 |
| Factory hands | 553 | - 528 | 415 |
| Farm hands | 223 | 220 | 185 |
| Finishers | 4 | 2 | 2 |
| Firemen | 64 | 26 | 21 |
| Foremen (woods) | 2 |  |  |
| Gardener .. | 12 | 14 | 10 |
| Handy men | 18 | 14 | 13 |
| Harness maker | 1 |  |  |
| Harvesters | 18 | 18 | 18 |
| Haymakers | 6 | 6 | 6 |
| Horseman | 3 |  |  |
| Horseshoer | 1 |  |  |
| Hotel porters | 3 |  |  |
| Iron workers | 5 | i | 1 |
| Janitors | 35 | 7 | 6 |
| Kitchenman | 1 |  |  |
| Laborers .... | 5,114 | 5,283 | 4,976 |
| Lathe hands | 1 | 1 | 1 |
| Lathers | 7 | 9 | 7 |

MALE APPLICANTS FOR EMPLOYMENT, APPLICATIONS FOR HELP, AND POSITIONS FILLED, ETC.-Continued.

| Classification of_Positions | Number of Applications Filed. |  | Number of positions tilled.$\qquad$ |
| :---: | :---: | :---: | :---: |
|  | For employment. | For help. |  |
| Laundry man ........ | 4 | 2 | 2 |
| Lineman ........ | 1 | 1 | 1 |
| Lumber shovers | 6 | 6 | 6 |
| Lumber graders ...... | 3 | 8 | 3 |
| Machine (apprentices) | 2 |  |  |
| Machine hands |  | 2 |  |
| Machinists, ... | 55 | 47 | 28 |
| Machinists' helper | 29 | 19 | 10 |
| Mason, $\ldots$........... | 10 | 23 | 11 |
| Mason's helper | 1 | 1 | 1 |
| Meat cutter | 4 | 1 | 1 |
| Messenger boy | 3 | 4 | 3 |
| Millwright .... | 1 | 2 | 1 |
| Miners ... | 3 | 6 | 3 |
| Moulders | 43 | 49 | 24 |
| Moulders (brass) | 1 |  |  |
| Moulders' helpers | 1 |  |  |
| Newspaper work | 1 |  |  |
| Office boys ...... | -0 | 24 | 19 |
| Oftice work | 9 |  |  |
| Packers | 6 |  |  |
| Painters | 41 | 28 |  |
| Pan washers | 4 | 5 | 4 |
| Pantry man. | 1 | 1 | 1 |
| Paper haugers | 2 | 3 | 1 |
| Paper cutters | 1 |  |  |
| Pattern makers |  | 4 |  |
| Pipe fitters | 1 |  |  |
| Platers | ${ }_{2}^{2}$ |  | 5 |
| Plumbers .............. | 2 | ......... |  |
| Plumbers' helpers .... | 4 |  |  |
| Polishers ........... | 1 | 1 |  |
| Porters | 94 | 39 |  |
| Pourers |  | 10 |  |
| Printers | 5 | 1 |  |
| Proof readers | 1 |  |  |
| Repairers, clothing |  | 1 |  |
| Repairmen ............ | 1 | 2 | 1 |
| Reporters . | ${ }_{1}$ |  |  |
| Riggers ...... | 1 | 1 |  |
| Roofers | 1 |  |  |
| Salesman | 36 | 3 |  |
| Sausage maker | 2 | 1 | 1 |
| Saw filers ${ }^{\text {Saw mill hands }}$ | 22 | - $\begin{array}{r}1 \\ \hline\end{array}$ |  |
| Sawmill setters | 1 | 1 | 1 |
| Scalers.. | 2 |  |  |
| Sealers | 1 |  |  |
| Shinglers |  | 2 |  |
| Shippers ........................... | 1 |  |  |
| Shoe cutter | 1 |  |  |
| Shoemaker | 5 |  |  |
| Shopman | 31 | 27 | 19 |
| Sorters (lumber) .................... | 1 | 1 | 1 |

## MALE APPLICANTS FOR EMPLOYMENT, APPLICATIONS FOR HELP, AND POSITIONS FILLED, ETC.-Continued.

| Classification of Posinions. | Number of Applications Filed. |  | Number of positions filled. |
| :---: | :---: | :---: | :---: |
|  | For em-ployment- | For help. |  |
| Stenographers ..... | 17 | 3 | 3 |
| Steam fitters . | 1 |  |  |
| Stone cutter .......... | 1 |  | 1 |
| Structural iron workers |  | ${ }_{1}^{2}$ | 1 |
| Surveyors | 1 |  |  |
| Switchman .......... | 1 |  |  |
| Tailors \|apprentices) | ${ }_{6}$ |  | 2 |
| Tally men ...... | 6 | 4 3 | 3 |
| Tanners | 6 | 6 | 4 |
| Tannery hands |  | 4 | ........... |
| Teamsters ... | 205 | 170 | 150 |
| Time keepers | ${ }_{2}$ |  |  |
| Timber estimator | 1 | . | , |
| Tinners .... | 1 |  |  |
| Tool makers | 2 | 2 | $\cdots$ |
| Trool dresser ...... | 1 |  |  |
| Trimmers (trees) <br> Typesetters' ....... | 2 | 4 | 2 |
| Typewriter | 1 |  |  |
| Undertaker's assistant | 1 |  | 2 |
| Wagon maker | 2 |  |  |
| Waiters ........ | 16 | 9 | 6 |
| Warehouseman | 3 | 1 | 1 |
| Watchman | 29 |  |  |
| Weavers .......... | 2 | 4 | 1 |
| Wholesale house | 1 |  |  |
| Window washer | 2 | 2 |  |
| wire workers | 1 | 1 | 1 |
| Wire weaver |  |  |  |
| Wood carver |  | 3 |  |
| Wood chopper | 5 | 205 | 4 |
| Wood turner | 2 | 1 | 1 |
| W.ood workers | 3 | 5 | 2 |
| Total | 8,013 | 7,681 | 6,590 |

SHOWING, BY OCCUPATIONS, THE TOTAL NUMBER OI' THE FEMALE APPLICANTS FOR EMPLOYMENT, THE APPLICANTS FOR HELP AND THE POSITIONS FILLED IN MILWAUKEE AND SUPERIOR COMBINED, DURING THE YEAR ENDING;JUNE 28, 1902.

| Classification of Pusitions. | Number of Applications Filed. |  | Number of positions filled. |
| :---: | :---: | :---: | :---: |
|  | For employment. | For help. |  |
| Agents |  | 1 |  |
| Baker | 1 |  |  |
| Bookkeeper | 3 |  |  |
| Bottlers ... | 2. | 22 | 3 |
| Cash girls | 5 | 22 |  |
| Cashier ........ | 1 4 |  |  |
| Chambermaids | 44 1 | 42 | 29 1 |
| Chore girl .... | 28. | 3 | 3 |
| Cook ............................. | 65 | 72 | 47 |
| Cook (first) | 2 | 2 | 2 |
| Cook (second) | 1 | 1 |  |
| Day work ........ | 86 | 137 | 77 |
| $\underset{\text { Dish }}{\text { Ding }}$ washers ${ }^{\text {dirl }}$ | 11 | 13 | 10 |
| Dish washers |  | 474 | 302 |
| Domestics .................. | 325 |  |  |
| Dressmaker Factory work | 57 | 210 | 46 |
| Governess ... | 2 | 2 | 1 |
| Housekeeper | 21 | 14 | 7 |
| Hotel help | 3 | 8 | 3 |
| Housework ...... | 4 | 7 | 4 |
| Janitor ........ | 111 |  |  |
| Kitchen girls Laundress ... | 111 | 140 | 106 6 |
| Laundress | 6 |  |  |
| Laundry girls ........ | 5 | 8 | 5 |
| Nurses ..... | 12 | 9 | 8 |
| Nurse girls ... | 1 |  |  |
| Office work Packers and markers | 9 | 9 |  |
|  |  | 1 | 1 |
| Printers ........ | ${ }_{1}^{2}$ | ${ }_{2}^{1}$ | 1 |
| Restaurant girl | 27 | 23 | 20 |
| Scrub woman | 16 | 21 | 12 |
| Seamstress Servants | 51 | 67 | 40 |
|  |  |  |  |
| Sewing girls | 2 | 2 | 2 |
| Sorters ........ | 13 | 1 | 1 |
| Stenographers <br> Faiters | 18 | 25 | 10 22 |
| Wash woman | 25 | 23 | 22 |
| Work girls ......................... | 1 |  |  |
| Total | 989 | 1,370 | 790 |

In the preceding two tables, the first of which relates to males and the second to females, have been combined all the figures for the two offices. These tables thus show for the males and females, respectively, thre total number of the applications for employment and help filed and the number of positions filled.

The table for the male applicants show, among other things, that the total applications for employment was 8,013 ; that the applications for help numbered 7,681, and that 6,590 positions were filled.

The greatest number of the applications for employment were received from "common labor." Factory hands are the next in order in this respect, with farm hands, teamsters and carpenters in the order named. There are several other occupations in which figures are quite high, but those given are in the lead. What is true in this respect for the applications for employment, is practically true for the applications for help and the positions filled.

The table for the female applicants show that the applications for employment numbered 989 ; that the applications for help numbered 1,370 , and that the positions filled numbered 790.

Domestic and kindred occupations show the greatest number of applicants and positions filled.

In the following table the male applicants for employment have been classified according to the number of positions filled. This classification will be found interesting and should be studied in connection with the basic table.

> CLASSIFICATION OF POSITIONS FILLED.
> Males.

| Classification. | Number oc cupations. | Number. |  |  | Per Cent. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | App. for em-ployment. | App. for help. | Posi- tions filled. | App. | ( App- $\begin{gathered}\text { for } \\ \text { help. }\end{gathered}$ | Positions filled. |
| 50 positions and over | 5 | 6,251 | 6,382 | 5,855 | 78.01 | 83.09 | 88.84 |
| 25 positions but under 50. | 8 | 428 | 305 | -248 | 5.34 | ${ }_{3.97}$ | ${ }_{3.76}$ |
| 15 positions but under 25. | 8 | 269 | 251 | 166 | 3.36 | 3.27 | 2.52 |
| $\stackrel{\text { Under }}{ }$ positions but under 15. | 25 | 674 | 331 | 213 | 8.41 | 4.31 | 3.23 |
| Applications not filled. | 64 67 | 249 142 | 371 41 | 108 | 3.11 | 4.83 | 1.65 |
| Total | 177 | 8,013 | 7,681 | 6,590 | 100.00 | 100.00 | 100.00 |

This table is a sort of classified summary of the table for the total male applicants for both offices. The classifications are based upon the positions filled.

The first class in order includes all occupations in which 50 or more positions were filled. The positions filled in this class were 5,855 , or 88.84 per cent, of the total of all classes making an average of 1,171 positions to each of the 5 occupations. The applications for help in this class numbered 6,382 , or 83.09 per cent. of the total; and the applications for employment numbered 6,251 , or 78.01 per cent. of the total.

The occupations in this class were carpenters, factory hands, farm hands, laborers, and teamsters.

The second class, that for 25 but under 50 positions, includes 8 occupations, 428 applications for employment, 305 applications for help, and 248 positions filled. The occupations in this case were: Apprentices, chore boy, chore man, cooks, distributors, dish washers, machinists and porters.

The third class in order that for 15 but under 25 positions filled includes 8 occupations, 269 applications for employment, 251 applications for help and 166 positions filled. The occupations were: Barnmen, delivery boy, firemen, harvest hands, moulders, office boy, saw mill hands, and solicitors.

The two classes which follow include 5 but under 15 positions, and under 5 positions. The first of these includes 25 occupations and 213 positions filled, the second includes 64 positions and 108 positions filled.

The last class in order made up all occupations in which applications for employment and help were filed, but in which no position was filled. It includes 67 occupations, and the applicants for employment numbered 142, while the applicants for help numbered 41.

In the following two tables the male and female persons are classified in such a way as to make comparisons easier.

## CLAASSIFICATION OF POSITIONS FILLED.

Females.

| Classification. |  | Number. |  |  | Per Cent. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { App. } \\ \text { for } \\ \text { em- } \\ \text { ploy- } \\ \text { ment } \\ \hline \end{gathered}$ | $\begin{aligned} & \text { App. } \\ & \text { for. } \\ & \text { help. } \end{aligned}$ | $\begin{gathered} \text { Posi. } \\ \text { tions } \\ \text { filled. } \end{gathered}$ | $\begin{aligned} & \text { App. } \\ & \text { for } \\ & \text { em- } \\ & \text { ploy- } \\ & \text { ment. } \end{aligned}$ | $\begin{aligned} & \text { App. } \\ & \text { for } \\ & \text { help. } \end{aligned}$ | $\begin{aligned} & \text { Posi- } \\ & \text { tions. } \\ & \text { filled. } \end{aligned}$ |
| 50 positions and over |  | 522 |  |  |  | 55.39 |  |
| ${ }^{25} 5$ but under $50 \ldots \ldots$. | 4 | 217 | 391 | 162 | 22.05 |  | 20.61 |
| 5 but under $15 \ldots .$. | 8 | ${ }_{98}^{52}$ | - 108 | 42 | ${ }^{5.29}$ | 3.38 | 5.3 |
| Under $5 . . . . . . .$. | 15 | 75 | 108 | ${ }_{30}^{67}$ | ${ }^{9} 9.92$ | 7.92 | 8.52 |
| Under 5 not filled. |  | 20 | 1 |  | 2.03 | $\begin{array}{r}4.05 \\ .08 \\ \hline\end{array}$ | 3.82 |
| Total | 41 | 984 | 1,363 | 786 | 100.40 | 100.00 | 100.00 |

The preceding table is a summary relating to the female applicants. It includes those for both offices, and the classification, as in the table for the males, is based upon the positions filled.

The first class in order that for 50 positions and more filled, includes only 3 occupations, but while weak in point of occupations it is strong in point of the number of the applications, and positions filled. Thus it is seen that this class includes considerably over one-half of the applications and nearly twothirds of the positions filled.

The class " 25 but under 50 " has 4 occupations, 22.05 per cent. of the applications for employment, 28.68 per cent. of the applications for help, and 20.61 per cent. of the positions filled.

The remaining classes include but a small proportion of the applicants and positions filled.

The tables which follow deal with the respective number and per cent of the male and female applicants for each office as well as for the total of both offices.

NUMBER AND PER CENT. OF APPLICATIONS FOR EMPLOYMEN'T AND IIELP AND POSITIONS FILLED IN THE MILWAUKEE OFFICE DURING YEAR ENDING JUN'E 28, 1902.

Milwaukee.

| Classification. | Number. |  |  | Per Cent. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | App. for employment. | App. for help. | Positions filled. | App. for employment. | App. for help. | Posi- <br> tions <br> filled. |
| Male | 3,936 | 3,424 | 2,674 | 85.40 | 79.81 | 83.90 |
| Female | 673 | 866 | 511 | 14.60 | 20.19 | 16.10 |
| Total | 4,609 | 4,290 | 3,185 | 100.00 | 100.00 | 100.00 |

This table relates to the Milwaukee office. In this office applications for employment numbered 4,609, of which 3,936 , or 85.40 per cent. were for male, and 673 , or 14.60 per cent. were for female help.

The applications for help was 4,290 . Of this number 3,424 , or 79.81 per cent. were for male, and 866 , or 20.19 per cent. for female help.

The positions filled number 3,185 , of which 2,674 , or 83.90 per cent were with male and 511, or 16.10 per cent. with female help.

NUMBER AND PER CENT. OF APPLICATIONS FOR EMPLOYMEN'I AND
HELP AND POSITIONS FILLLED IN THE SUPERIOR OFFICE DURING YEAR ENDING JUNE 28, 1902.

Superior.

| Classification. | Number. |  |  | Per Cent. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | App. for employment. | App. for help. | Positions filled | App. for employ. ment. | App for help. | Posisions filled. |
| Male | 4,077 | 4,257 | 3,916 | 92.87 | 89.42 | 93.35 |
| Female | 316 | 504 | 279 | 7.13 | 10.58 | 6.65 |
| Total | 4,393 | 4,761 | 4,195 | 100.00 | 100.60 | 100.00 |

The total number of the applications for employment filed in the Superior office was 4,393 , of which 92.87 per cent. were from male and 7.13 per cent. from female persons.

Total applications for help were 4,761. Of these 89.42 per cent. were for male añd 10.58 per cent. for female help.

In this office 4,195 positions were filled. of which 3,916 , or 93.35 per cent. were filled with male help and 279 or 6.65 per cent. with female help.

NUMBER AND PER CENT. OF APPLICATIONS FOR EMPLOYMENT AND HELP AND POSITIONS FILLED IN MILWAUKEE AN'D SUPERIOR OFFICES FOR THE YEAR ENDING JUNE 28, 1902.

Total.

| Classification. | Number. |  |  | Per Cent. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | App. for employ. ment. | App. for help. | Posi tions filled. | App. for employment. | App. for help. | Positions filled. |
| Male ${ }_{\text {Female }} \ldots$ | 8,013 989 | 7,681 1,370 | 6,590 790 | 89.00 11.00 | 84.86 15.14 | 89.29 10.71 |
| Total .. | 9,002 | 9,051 | 7,380 | 100.00 | 100.00 | 100.00 |

This table gives the totals for both the Milwaukee and Superior offices. It shows that of the 9,002 applicants for employment 8,013 , or 89 per cent. were males and 989 , or 11 per cent. were females.

Of the 9,051 applications for help 7,681 , or 84.86 per cent. were for male and 1,370, or 15,14 per cent. for female help.

In all 7,380 positions were filled in both offices. Of these 6,590 , or 89.29 per cent. were filed with male, and 790 , or 10.71 per cent with female help.

The next preceding three tables are a summary of the totals as well as showing the applicants by sex. The first in order gives the males, females and total of both for the Milwaukee office; the second gives the same facts for the Superior office; and the third or last gives the totals or figures for both offices when combined.

In both offices the applications received and positions filled are reported into this bureau at the end of each week and the records of the same closed. It has often happened in the Milwaukce office, however, that the applications have been filled later on. In such cases the old application has been regarded as a new one and counted again. Thus, while not effecting in any way the number of the positions filled or reported in these pages, may, in one sense, or if the persons who make them
should be counted instead of the applications made by them, be said to have caused some duplications in the applications reported. It is of course plain that during a given period the same person may apply more than once. The question when this occurs is whether to count the subsequent visits or applications. In these records each applicant was counted regardless of whether the applicants had applied previously or not. Whether this has caused any duplications depends entirely upon whether the applicants or the applications should be counted. In order to open a way for either method he following lists have been prepared showing the number of male and female applicants respectively who secured positions on a subsequent application.

## Male.

Apprentices ..... 9
Barnman ..... $\stackrel{2}{2}$
Blacksmith ..... 6
Blacksmith's helper ..... 1
Bell boy ..... $\frac{1}{5}$
Cabinetmakers ..... $\stackrel{5}{22}$
Carpenters ..... 1
Chore boy
Chore men ..... 1
3
Clerks ..... 3
Clerks, grocer ..... 1
Clerks, hotel
Clerks, hotel ..... 1
5 ..... 1
5
Coachman ..... 5
Cooks
Cooks
5
Coremakers
1
1
Dairyman and wife ..... 1
1
Delivery boy
1
Distributors ..... 3
Electricians ..... 1
Engineer ..... 1
Erecting engineer ..... $\begin{array}{r}1 \\ 2 \\ \hline\end{array}$
Errand boy ..... 115
Factory hand
Factory hand
20
20
Farm hand .....
2 .....
2
Finishers ..... 4
Firemen
3
3
Gardeners ..... 1
Handy man
Handy man
1
Iron workers ..... 1
Janitors
133
133 ..... 14
Machinists
Machinists Machinists,
Machinists
helper ..... 5
Mason ..... 2
Messenger boy ..... 1
Millwright ..... 19
Moulders ..... 5
FREE EMPLOYMENT OFFICES.819
Painters ..... 5
Pan washer
Pan washer ..... 1
Paper hanger ..... 1
Porters
3
3
Repair men ..... 1
Sausage maker
1
1
Shoemaker
1
1
Solicitor
13
Stenographers ..... 2
Store room ..... 1
Tailors ..... 2
Teamsters ..... 17
Tool maker
1
1
Wagon maker ..... 1
1
Watchman ..... 1
Weaver
1
1
Wood carver
1
1
1
1
Wood chopper
Wood chopper ..... 1
Total ..... 467
POSITIONS SECURED AGAINST APPLICATIONS PREVIOUSLY FILED, OR ON A SUBSEQUENT APPLICATION.
Females.
Cash girl
Cooks ..... 2
5
Dining room girl ..... ${ }^{7}$
Domestics .... ..... 12
Housekeeper ..... 3
Kitchen girl ..... ${ }_{2}^{3}$
Printer ....... ..... 1
4
Seamstress ..... 1
Servants' ..... 12
Waitress ..... 4
Total ..... 64

From these two tables we see that 467 male persons and 64 female persons secured positions after the records of their first application had been closed and reported in to the bureau, or, in other words positions were found for them on a subsequent application. If this has caused any duplication, then, in crder to get at the absolute number of applications for ennployment and help, these figures for Milwaukee and for the total for both places should be reduced by the above figures.

The report for Milwaukee shows 3,939 applications for employment and 3,424 applications for help. If these figures are reduced by 467 the male applications for employment will number 3,469 and those for help 2,957.

The Milwaukee reports also show for the females 673 appli-
cations for employment and 802 for help. If these figures are reduced by 64 the balance will be 609 and 802 respectively.

The Superior office is not in any affected by this. But the totals for both offices should of course be reduced by the same figures.

After this reduction is made the figures for the males will read: Applications for employment 7,546; applications for help 7,214 ; and the positions filled 6,590 .

The figures in the totals for the females after being reduced by 64 will read: applications for employment 925 ; applications for help 1,299; positions filled 790.

The totals for both males and females after this correction should read: applications for employment 8,471; applications for help 8,520 ; positions filled 7,380 .

As said the positions filled are in no way affected by these corrections.

## FACTS FROM THE APPLICATIONS FOR EMPLOYMENT.

$\Lambda \mathrm{s}$ already explained, those who apply for employment are requested to fill out an application for the same which contains a number of questions that bear more or less remotely upon the present condition of the applicant. The real purpose of these questions is to obtain information that may be of value for statistical purposes, or that can be used as means through which some additional light concerning the condition of the big army of wage-earners, can be presented to the students and to the public. It should be understood, however, that the applicants are not obliged to fill out these applications in full. It is not a condition upon which their case will receive attention. The information they impart, outside of the mere facts that are absolutely necessary in order to obtain employment for them, is given voluntarily.

From about July 1st, 1901, to about January 1st, 1902, or during a period of six months, 3,890 persons, or a fraction over 82 per cent. of the total number who applied for employment, filled out one of these application blanks more or less fully. The information in these blanks has been compiled in eleven
tables which, together with an analysis of the same, is presented in this part.

The 3,890 persons included were classified into 36 separate or distinct trades or occupations and 5 miscellaneous classes. The 36 separate occupations need no explanation, as the name indicates their nature. In the case of the 5 miscellaneous classes, however, the situation is different, as each one of these classes is made up of persons of various occupations. Thus numbers 37 and 38 include the reports of 79 and 278 persons, respectively, who reported that they had no regular occupation but found employment at anything they could get. Number 39 was compiled from the reports of upholsterers, millers, electricians, wagonmakers, masons, harnessmakers, coopers, plumbers, book binders, shoemakers, roofers, tinners, foundrymen, all of which come under skilled trades. Number 40 includes photographers, druggists, collectors, artists, musicians, reporters. Number 41 includes gardeners, cruisers, lumber scalers, barbers, nurses, seamstresses, florists, bridgemen, bell ${ }^{\top}$ boys, laundrymen, watchmen, packers, deliverymen, bottlers, liverymen, stranders, soldiers, chippers, miners and woods foremen. Number 39 inc̣ludes̀ 42 persons, number 40 includes 32 persons, and number 41 includes 77 persons. These classifications are far from satisfactory for the best statistical purposes, but owing to the small number of reports in each occupation, and to other circumstances, it is the best that could be made without treating each occupation separately.

As stated above, the facts reported by the applicants for employment were compiled and arranged in eleven tables, each of which cover one page, and may be described as follows:

Table I shows the respective number of persons who resided in the city where the application was made or outside of said city; the respective number who were native born, naturalized, and not naturalized; and the respective number who were married and single.

Table II shows the respective number of persons whose last employment was in the city and outside of the city; the number who were born in Wisconsin, in other United States, and in other countries; and the number who desired employment in
their trade or occupation, and at some other work than their trade.

Table III gives the respective number who were members and who were not members of some labor or trade union; the number who were willing to accept employment away from the place or city where they lived and the number who were not willing to do so; and the number who left the last employer for a stated cause.

Table IV shows the respective number who were in good, fair, and poor health; the number who could read and write; and the respective number who could furnish references, and who could not furnish any.

Table V gives the classified age of the persons who were seeking employment. The classifications in this case run from 15 years and under to over 55 years of age.

Table VI shows the classified years those who sought employment had lived in this country.

Table VII relates to the length of time those who applied for employment had resided in this state. In this case the years of residence were classified in the same way, or upon the same basis, as in the table which precedes it, showing the years of residence in this country.

Table VIII shows the number of those seeking work who were married and the number of children to each family.

Table IX shows the number of families and the number of other persons than children each of these were suporting.

Table X shows the classified weekly earnings received by the employes from their last employer. The classification of earnings employed here is the same as that employed for our manufacturers' returns and also used in other parts of this report.

Table XI shows the classified time the different applicants had been out of employment, and the classified time they had remained with their last employer.

In the following pages these eleven tables are presented in full, and these presentations in turn are followed by a brief analysis of the main facts given in the tables:
place of residence, citizenship, conjugal relation.
Table I.


## SHOWING WHETHER LAST EMPLOYMENT WAS IN OR OUTSIDE THE CITY, PLACE OF BIRTH AND KIND OF EMPLOYMENT WANTED.

Table II.


SHOWING WHETHER MEMBER OF LABOR ORGANIZATION', AND WILLING TO GO WAY FROM CITY FOR EMPLOYMENT, CAUSE OF LEAVING LAST EMPLOYER.

Table III.


# SHOWING CONDITIONS AS TO HEALTH, ILLITERACY AND RUFERENCES. 

Table IV.


## CLASSIFIED AGE OF PERSONS SEEKING EMPLOYMENT.

Table V.


## CLASSIFIED YEARS IN THIS COUNTRY.

Table VI.


## CLASSIFIED YEARS IN THIS STATE.

Table VII.

| Occupation, |  |  | - |  |  |  | cis |  |  |  | 우ㅊㅜㅔ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Baker | 2 | 2 |  | 1. |  |  |  |  |  |  | 1 |
| 2. Blacksmith ... | 3 | 3 | 5 | 2 | $i$ | 2 | 2 | 1 | 1 |  |  |
| 3. Bl'ksm's h'lp'r | 7 | 1 |  | 1 |  |  |  |  |  |  |  |
| 4. Bookkeeper ... | 34 | 6 |  | 3 | 4 | 3 | 1 | 4 |  |  | 2 |
| 5. Brewer ....... |  |  | 1 | 1 | 1 | 1 |  |  |  |  |  |
| 6. Butcher . | 3 | 1 |  | 2. |  | 1 |  |  |  |  | 1 |
| 7. Carpenter .... | 24 | 3 |  | 7. | 6 | 1 | 3 |  | 3 | 2 | 3 |
| 8. Cigarmaker .. | 4 |  |  | 1. | 1 | 1 |  |  |  |  |  |
| 10. Coachman ...... | 35 3 | $\stackrel{9}{2}$ | 51. | 4 | 2 | 3 | 1 | 1 |  |  | 1 |
| 11. Cook | 11 | 18 | 14 | 5 | 3 | 7 |  | 3 |  |  | 2 |
| 12. Domestic | 46 | 22 | 21 | 8 | 7 | 8 |  |  |  |  |  |
| 13. Engineer | 15 | 3 | 11 | 8 | 1 | 4 | 2 | 1 | 3 | 1 | 3 |
| 14. Factory hand. | 69 | 12 | 13 | 8 | 12 | 13 | 7 | 2 | 1 |  | 2 |
| 15. Farm hand.... | 14 | 5 | 5 | 4 | , | 1 | 3 | 2 |  |  |  |
| 16. Fireman ...... | 7 | 6 | 8 |  | 5 | 2 | 1 |  | 1 |  |  |
| 17. Hotel worker. | 2 | 4 | 5 | 21. |  | 2 |  |  |  |  |  |
| 18. Janitor ....... | 1 |  |  | 1. |  | 1. | 1 |  | 1 | 1 | 1 |
| 19. Laborer ...... | 311 | 888 | 467 | 170 | 127 | 89 | 36 | 18 | 10 | 8 | 6 |
| 20. Machinist . | 17 | 5 | 5 | 4 | 1 | 1 | 1 | 2 | 1 |  |  |
| 21. Messenger boy | 6 | 1 |  | 1. |  |  |  |  |  |  |  |
| 22. Moulder . | 8 |  | 5 | 2 | 1 | 2 | 3 | 2 |  |  |  |
| 23. Painter . | 15 | 7 | 3 | 4 | 2 | 7 | 4 | 3 | 2 |  | 1 |
| 24. Porter .. | 7 |  | 1. |  |  | 2 | 1 |  |  | 1 |  |
| 25. Printer ... | 7 |  |  |  | 1 |  |  |  |  |  |  |
| 26. Railroad h'ds. | 10 |  |  |  |  |  |  |  |  |  |  |
| 27. Sailor ......... | 1 | 3 |  | 2 | 1 | 1 | 1 |  | 2 | 1 |  |
| 28. Salesman ..... | 9 | 3 | 2 | $1{ }^{1}$ | 1 | 1 | 1 |  | 1 |  | 2 |
| 29. Steam fitter.. | 2 | 1 | 3 | 2 |  | 1 | 2 |  |  |  |  |
| 30. Stenographer | 7 |  |  |  |  | 1 |  |  |  |  |  |
| 31. Student ....... | 91 |  |  | 1 |  |  |  |  |  |  |  |
| 32. Tailor .......... | 21 |  |  | 2 | 1 |  |  |  | 2 |  |  |
| 33. Tanner .. | 6 |  |  | 1 | 1 | 1 | 2 | 2 |  |  |  |
| 34. Teacher ....... | ${ }^{6}$ |  | 2. |  |  |  |  |  | , |  | 1 |
| 35. Teamster ..... | 19 |  | 2 | 4 | 2 | 4 | 2 |  | 2 |  |  |
| 36. Waiter ........ | 5 |  | $1)$ |  |  | 2 |  |  |  |  |  |
| 37. Miscellaneous | 28 | 71 | 71 | 3 | 71 | 7 |  | 4 |  | 2 | 3 |
| 38. Miscellaneous | 92 | $2{ }^{2}$ | 26 | 18\| | 17 | 11 | 2 | 3 |  | 1 | 2 |
| 29. Miscellaneous' | 13 | 5 | 8 | 21 |  | 4 |  |  |  | 1 | 1 |
| 40. Miscellaneous | 18 | 31 | $2 \mid$ | 2 |  | 1 | 2 |  |  |  |  |
| 41. Miscellaneous | 30 | 81 | 10 | 81 | 6 | 6 |  | 1 | 1 | 1 |  |
| Totals | 911 | 1,064 | 654 |  |  | 185 | 88 | 50 | 32 | 24 | 32 |

## NUMBER OF CHILDREN TO EACH FAMILY.

Table VIII.


## NUMBER OF OTHER PERSONS THAN' CHILDREN TO SUPPORT.

Table IX.

| Occupation. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Baker : . | 3 |  | 2 |  |  |  | 1 |
| 2. Blacksmith... | 8 | 7 |  |  |  |  | 1 |
| 3. Blacksmith's helper | 3 | 3 |  |  |  |  |  |
| 4. Bookkeeper <br> 5. Brewer | 21 | 14 | 7 |  |  |  |  |
| 6. Butcher | 3 | 1 |  |  |  |  | 2 |
| 7. Carpenter | 34 | 24 |  | 1 |  |  | 9 |
| 8. Cigarmaker | 4 | 4 |  | 1 |  | 1 | - |
| 9. Clerks ..... | 18 | 13 | 4 |  |  |  |  |
| 10. Coachman | 4 | 1 |  |  |  |  | 3 |
| 11. Cook | 26 | 16 | 7 |  |  |  | 3 |
| 12. Domestic | 13 | 3 | 3 |  |  |  | 7 |
| 13. Engineer | 37 | 22 | 3 |  |  |  | 12 |
| 14. Factory hand | 37 | 25 | 10 |  | 2 |  |  |
| 15. Farm hand | 9 | 2 |  |  |  |  | 7 |
| 16. Fireman | 8 | 8 |  |  |  |  |  |
| 17. Hotel worker | 2 | 1 | 1 |  |  |  |  |
| 18. Janitor | 5 | 2 |  |  |  |  | 3 |
| 19. Laborer | 281 | 193 | 17 | 1 | 2 |  | 68 |
| 20. Machinist | 13 | 10 | 2 |  |  |  | 1 |
| 21. Messenger boy |  |  |  |  |  |  |  |
| 22. Moulder . | 7 | 5 | 2 |  |  |  |  |
| 23. Painter | 18 | 12 | 3 | 3 |  |  |  |
| 24. Porter | 3 | 3 |  |  |  |  |  |
| 25. Printer | 1 |  |  | 1 |  |  |  |
| 26. Railroad hand | 5 | 1 | 1 |  |  |  | 3 |
| 27. Sailor | 7 | 2 |  |  |  |  | 5 |
| 28. Salesman | 9 | , |  |  |  |  |  |
| 29. Steam fitter | 2 | 1 | 1 |  |  |  |  |
| 30. Stenographer | 1 |  | 1. |  |  |  |  |
| 31. Student |  |  |  |  |  |  |  |
| 32. Tailor | 5 | 2 |  |  |  |  | 2 |
| 33. Tanner | 4 |  | 3 | 1 |  |  |  |
| 34. Teatcher | 41 | 1 |  | 1 |  |  | 2 |
| 35. Teamster \| | 14 | 7 | 2 |  |  |  | 5 |
| 36. Waiter | 2 | 2 |  |  |  |  |  |
| 37. Miscellaneous | 32 | 23 |  | 2 |  |  | 2 |
| 38. Miscellaneous | 46 | 32 | 12 |  |  | 2 |  |
| 59. Miscellaneous | 14 | 8 | 1 \| |  | 1 |  | 4 |
| 40. Miscellaneous | 11 | 8 | 31 |  |  |  |  |
| 41. Miscellaneous | 21 | 15 | 2 |  |  |  | 4 |
| Totals | 735 | 476 | 94 | 10 | 5 | 3 | 147 |

## CLASSIFIED WEEKLY EARNINGS, WHERE LAST EMPLOYED, OF PERSONS WHO APPLIED FOR EMPLOYMENT.

Table X.


## TIME OUT OF EMPLOYMENT AND TIME IN THE EMPLOY OF LAST LAS' EMPLOYER.

Table XI.


## ANALYSIS.

In the preceding tables are thus presented a great many facts that relate to the condition of a large proportion of those who, during the last six months of 1901, sought employment through the State Free Employment offices in Milwaukee and Superior. The actual number of persons included in these tables, or from whom more or less complete data were obtained, was 3,890 . As these facts are of considerable importance it was thought proper they should be explained more fully and hence the following brief analysis of the same is included.

In this analysis the first presentation in order will be the one which relates to the place of residence of the applicants. It is interesting to know whether the applicants lived in; or elsewhere than in the cities where the offices are located:


The total number of persons included in the investigation was 3,890 . The total number who reported as to whether they lived in the places where the offices are located was 3,882 , or practically entire number included. The above table shows that of those who thus reported as to place of residence 2,300 , or 59.25 per cent., lived in the place where the application was made, and that 1,582 persons, or 40.75 per cent., lived elsewhere than in these places.

The figures in the above table have been taken from the totals in table I, the table which shows the place of residence by occupation. Those who may desire to obtain the facts in detail for each occupation can do so by examining that table:

| Citizenship. | Number. | Per cent. |
| :---: | :---: | :---: |
| Native born | 2,481 | 63.78 |
| Naturalized | 1,035 374 | 26.60 9.62 |
| Not naturalized ....... | 374 | 9.62 |
| Total | 3,890 | 100.00 |

From this presentation, the second in order and which has also been compiled from table I, it appears that all the applicants reported as to their citizenship. From these reports it is seen that 2,481 persons, or 63.78 per cent. of the whole, were native born ; that 1,035 , or 26.60 per cent., were naturalized citizens ; and that 374 , or 9.62 per cent., were not naturalized. Almost 64 per cent. were thus native born, as against nearly 36 per cent. foreign born, and of the foreign born about 15 per cent. had failed to become naturalized. These figures represent, of course, the total number included. The proportion in each occupation may be readily obtained by examining the original table.

| Married or single. | Number. | Per cent. |
| :---: | :---: | :---: |
| Married Single | 735 29312 | 20.13 79.87 |
| Total | 3,647 | 100.00 |

The preceding presentation gives the number, respectively, of those who were married and of those who were single. Of the 3,647 persons who reported upon these points it appears that 735 , or 20.13 per cent., were married and that 2,912 , or 79.87 per cent., were single. In this case there were 243 persons who did not report as requested. The figures in the above presentation, as in the two which precede it, were taken from table I in the foregoing series in this portion.

Table II deals with the place where the applicants were employed last, the place where born, and the kind of work desired. The totals in each case are as follows:

| Where last employed. | Number. | Per cent. |
| :---: | :---: | :---: |
|  | 1,343 1,757 | $\begin{aligned} & 43.32 \\ & 56.68 \end{aligned}$ |
|  | 3,100 | 100.00 |

From this presentation it appears that 3,100 persons reported as to the place where they were last employed. Of these 1,343 persons, or 43.32 per cent., had been last employed in the city,
while 1,757 , or 56.68 per cent., had been employed elsewhere than in the city. As all but 1,582 persons regarded the city as their place of residence, it is evident that many had been employed away from their home.

| Place of birth. | Number: | Per cent. |
| :---: | :---: | :---: |
| Wisconsin | 1,023 | 26.30 |
| Other U. S. | 1,458 | 37.48 |
| Other countries | 1,409 | 36.22 |
| Total | 3,890 | 100.00 |

This table shows the place of birth. We find in it that 1,023 , or 26.30 per cent., of the applicants were born in Wisconsin; that 1,458 , or 37.48 per cent., were born in other United States states, and that 1,409 , or 36.22 per cent., were born in other countries. Of the total persons included, 2,481 were thus native born, while 1,409 , or 36.22 per cent., were born elsewhere than in the United States. These figures agree substantially with those in table on citizenship.

Kind of Work Desired:-Efforts were made to ascertain from the answers what proportion of the applicants desired employment at what they reported as their trade or occupation and what proportion in some other line, that is, in a new trade or occupation. The results of this are as follows:

| Kind of employment. | Number. | Per cent. |
| :---: | :---: | :---: |
| At their trade Other occupation | $\begin{array}{r} 3,278 \\ 490 \end{array}$ | $\begin{aligned} & 87.26 \\ & 12.74 \end{aligned}$ |
| Total | 3,768 | 100.00 |

All but 122 of the applicants replied directly or indirectly to this question. Of those who answered, 3,278 persons, or 87.26 per cent., sought employment at work which they regarded as their trade, or to which they had become accustomed. Those who gave common labor as their occupation could not be satisfactorily classified in all cases. Hence, in doūbtful instances, it was assumed they sought employment at some sort of work that could be classed as common labor.

The data in table III relates to whether member of labor or
trade union, and willing to accept employment elsewhere than in the city. The causes of leaving last employer are also given.

| Member of İabor union. | Number. | Per cent. |
| :---: | :---: | :---: |
| Not a member | 3,068 | 95.92 |
| Member . | 130 | 4.08 |
| Total | 3,198 | 100.00 |

From this it seems that 3,068 of the applicants, or 95.92 per cent., were not members of labor unions of any kind, and that 130 , or 4.08 per cent., were members of some sort of a union. Absolute reliance should not be placed in these figures, as there are reasons to believe that the answers on these points were, at least in some cases, misleaḍing.

| Willing to accept employment. | Number. | Per cent. |
| :---: | :---: | :---: |
| Nisewhere than in city | 2,676 | 77.86 |
| Only in city ......... | 761 | 22.14 |
| Total | 3,437 | 100.00 |

This presentation shows that 2,676 , or 77.86 per cent., of the persons reporting in this respect were willing to accept employment outside of the city, or in other words, away from their home, and that 761 , or 22.14 per cent., were not willing to go away from home for employment. Almost all of those who were glad to take employment away from home were single, or without family. Many, while they looked upon the city as their place of residence, were almost constantly employed elsewhere. In fact, they only came into the city when off for a rest or when looking for another job.

|  | Desired change. | Number. | Per cent. |
| :---: | :---: | :---: | :---: |
| Desired change |  | 368 | 15.18 |
| Work completed |  | 472 | 15.35 |
| Other causes |  | 1,373 | 60.77 |
| Total |  | 2,424 | 100.00 |

In this presentation it is shown that 368 persons, or 15.18 per cent., left their last employer simply because they desired a change; that 472 , or 15.35 per cent., left their last place because their work was completed; that 211 , or 8.70 per cent., left their work because of sickness; and that 1,373 persons, or 60.77 per cent., left for some other cause which is not specified here. The reason why so many of the causes for leaving their place were not specified in detail is simply this, that they were too numerous to be given in detail. They varied from a disagreement of some kind to a discharge for incompetency.

| Good health. | Number. | Per cent. |
| :---: | :---: | :---: |
| Good health | 3,495 | 97.63 |
| Fairly good health | 71 | 1.98 |
| Poor health ........ | 14 | . 59 |
| Total | 3,580 | 100.00 |

The condition of the applicants as to their health was quite fully reported. In most cases they reported their health as good. In fact those who so reported numbered 3,495 , or 97.63 per cent., of the whole number answering this question. About two per cent. said that their health was fairly good, while only 14 were in poor health. This is a good showing. In fact, it points to a condition in this respect that is certainly encouraging. Those in poor health were not as a rule found in any particular occupation, as is found from the fact that in table IV they are fairly well distributed among the different classes.

| Read and write. | Number. | Per cent. |
| :---: | :---: | :---: |
| Can read and writeCannot read and write | 3,404 | 97.24 |
|  | 107 | 2.76 |
| Total | 3,511 | 100.00 |

In table $I V_{i}$ is further seen what proportion could read and write. Those who possessed these accomplishments numbered 3,404 , or 97.24 per cent., of those reporting regarding it. Those who could not read and write were comparatively few in number, being only 107 , or 2.76 per cent. About the figures given
here there can be no mistake as the applicants were actually put to the test by being requested to fill out the application blank.

| References. |  | Number. | Per cent. |
| :---: | :---: | :---: | :---: |
| References |  | 2,134 | 74.98 |
| No references |  | 712 | 25.02 |
| Total | ............ | 2,846 | 100.00 |

The third class of information given in table IV relates to references. In this connection we find that 2,134 persons either had or could produce references from former employers, and that 712 persons did not have any such references, while 1,044 did not reply at all to this question. The proportion who would not answer this question is thus quite large. The reasons for not answering were not given, but the chances are that the omission is more often due to the fact that they had no references at all, than to any other cause. References are seldom obtained, either in the trades or by those engaged at common labor.

| Age. | Number. | Per cent. |
| :---: | :---: | :---: |
| 15 years of age and under | 28 | 0.79 |
| 16-20 years of age ......... | 608 | 17.28 |
| $21-25$ years of age | 865 | 24.57 |
| $26-30$ years of age . | 600 | 17.05 |
| $31-35$ years of age | 443 | 12.59 |
| $36-40$ years of age | 359 | 10.20 |
| 41-45 years of age | 257 | 7.33 |
| $46-50$ years of age | 166 | 4.71 |
| $51-55$ years' of age | 62 | 3.72 |
| Over 55 years ... | 131 | 3.72 |
| Total | 3,519 | 100.00 |

Table $V$ is devoted to the age of those who applied for employment. The ages reported were naturally so varied that they could not be given in detail. For this reason they were classified into five year periods. The table therefore shows by occupations the number who were 15 years or under, the number between 16 and 21 years, and so on until the 55 year, when all above this age are included in one class.

From this table as summarized above it is seen that only 28 persons were under 15 years of age, and that 131 persons, or
3.72 per cent. of the total reporting were 55 years of age. These are the two extreme figures. Between them there are eight classes each covering a period of five years. The number in each of these classes vary from 62 persons in that for those who were between 51 and 55 years, to 865 persons which is the number in the class 21 to 25 years of age. This class thus includes the greatest number of persons.

Taking the summary as a whole, we find that it includes 3,519 persons, of whom 2,101 were 30 years of age or under, and 2,544 were 35 years of age or less. About 73 per cent. were thus under 35 years of age while 27 per cent. were past this limit.

YEARS IN THIS COUN"IRY.

| Time. | Number. | Per cent. |
| :---: | :---: | :---: |
| Less than 1 year | 88 | 6.25 |
| 1 to 5 years inclusive | 212 | 15.04 |
| 6 to 10 years inclusive | 250 | 17.74 |
| 11 to 15 years inclusive | 248 | 17.62 |
| 16 to 20 years inclusive | 259 | 18.38 |
| 21 to 25 years inclusive | 144 | 10.22 |
| 26 to 30 years inclusive | 79 | 5.60 |
| 31 to 35 years inclusive | ${ }^{60}$ | -4.25 |
| 36 to 40 years inclusive | 31 | 2.20 |
| Over 40 years ........... | 38 | ? 3.70 |
| Total | 1,409 | 100.00 |

The preceding is a presentation of table VI. It shows the classified years in this country of those who had been born in some other country together with the per cent. of the number in each class.

In this presentation we find first that 88 applicants or 6.25 per cent. of those born elsewhere had been in this country less than one year; that 212 or 15.04 per cent. had been here from 1 to 5 years; that 250 or 17.74 per cent. had been here from 6 to 10 years; that 248 or 17.62 per cent. had been here from 11, to 16 years; that 259 persons, or 18.38 per cent. had made this country their home from 16 to 20 years. This embraces five of the classes and includes 1,047 of the applicants, or about three-fourths of the total number included. But continuing down the table we find further that 144 persons, or 10.22 per cent. had from 21 to 25 years residence here to their credit; that 79 or 5.60 per cent. counted their time at from 26 to 30
years; that 60 or 4.25 per cent. had been here from 31 to 35 years; that 31 , or about 2 per cent. were residents of a standing varying from 36 to 40 years; and 38 , or 2.70 per cent. had been in this country over 40 years.

The total number born elsewhere was as explained already 1,409 persons, which number constitute about 38.79 per cent. of the total number included in this investigation.

YEARS IN' WISCONSIN.

| Time. |  |
| :---: | :---: | :---: | ---: | ---: |

Table VII deals with the time the applicants had resided in this state. It gives these fact by industries and on the whole makes up a rather interesting exhibit.

The time in this state has been classified and the first class in order is that for those who had been since birth. The number in this class is 911 , or 25.74 per cent cent of those who reported regarding it. It will be noticed that this figure varies some from that in table II which shows the number born in this state. This difference is undoubtedly accounted for by the fact that there were applicants who while born in this state, had lived in some other state during shorter or longer periods, and therefore could not report that they had lived here since birth. The second class in order includes those whe had lived in the state less than 1 year, and this class is the largest of all including 1,064 persons, or 30.14 per cent. of the whole number reporting. The next class includes those who had lived here from. 1 to 5 years. Here we find 654 persons, or 18.24 per cent of the total. From this on beginning with the fourth class the presentation shows that 268 or 8.17 per cent. had lived in the state from 6 to 10 years; that 216 or 6.09 per cent are
in the class 11 to 15 years; that 185 persons or 5.23 per cent. were found in the class 16 to 20 years. The classes thus mentioned thus include all who had resided in the state 20 years and less than this time, while the remaining classes give those who had lived more than 20 years. Beginning thus with the seventh class we find that this class includes 88 persons, or 2.49 per cent of the whole; that 50 , or 1.42 per cent. had resided here from 26 to 30 years; that, 32 persons were in the class 31 to 35 years; that 24 persons were in the class 36 to 40 years; and that 32 persons, or .90 per cent. had made Wisconsin their home for over 40 years.

In considering the figures from another point of view it is found that 2,915 persons, or 82.29 per cent. had lived in the state from one day to 10 years; that 3,316 persons had lived here from one day to 20 years inclusive; while 226 persons, or 6.39 per cent. had had this state as a home more than 20 years.

The total number reporting in this respect is, as seen, 3,542 persons.

Table VIII in this series shows, by occupation or trades, the number who were married, and the number of children to each family. From the totals in this table the following exhibit is made up.

| Children. | Number. |
| :---: | :---: |

The whole number of families was 735 . Of these 579 or 78.8 per cent. had children, and 156 , or 21.2 per cent. had no children.

Of the whole number who were married 579 thus had children to bring up. In classifying the families according to the number of children it appears from the above presentation that

183 families, or 31.61 per cent. had one child each; that 130 families or 22.46 per cent. had two children each; that 94 families had three children each; that 65 families each had four children; that 41 families each had five children; that 34 families each had six children; that 18 families each had seven children; and that 14 families had more than seven children each. This table as a whole furnishes some interesting material for study and comparisons.

Table IX shows the number of othèr persons than children, such as parents and other relatives who were supported by the 735 families in question. The totals in this table are given in the following exhibit.

| Persons supported. | Number. | Percent. |
| :---: | :---: | :---: |
| 1 person | 476 | 80.95 |
| ${ }_{3}^{2}$ persons | 94 | 16.00 |
| 3 persons . | 10 | 1.70 |
|  | 5 3 | . 85 |
| Families having other persons besides children to support Families with only children to support <br> Total families |  |  |
|  | 588 147 | 100.00 |
|  | 735 |  |

From this we find that 588 families, or 71 per cent. of the total had other persons, or relatives besides their own children to support. Of these 476 families, or 80.95 per cent had one person each to support while 112 families had 2 or more persons each for whose support they were responsible.

The tenth table in the series deals with earnings. It gives by occupations the classified weekly earnings received from the last employer. The figures are summarized as follows:

| Classified weekly earnings. |
| :---: |

From the foregoing presentation we find that of the 3,890 persons investigated, 3128 reported as to earnings. Further it is seen that of those thus reported 226 persons, or 7.22 per cent. of the whole number reporting received less than $\$ 5.00$ per week; that 114, or 3.64 per cent received $\$ 5.00$ but under $\$ 6.00$ per week; that 156 received $\$ 6.00$ but under $\$ 7.00$. This brings us down to the fourth class in order that of $\$ 7.00$ but under $\$ 8.00$ which includes 323 persons, or 10.32 per cent. of the whole number. This class embraces those who received $\$ 1.25$ per day. Continuing down the list it is found that the class $\$ 8.00$ but under $\$ 9.00$ includes 113 persons, and that the class $\$ 9.00$ but under $\$ 10.00$ includes 401 persons, or 12.82 per cent of the total. This latter class comprises those who are paid at the rate of $\$ 1.50$ per day. In the balance of the table we see that 695 persons, or 22.22 per cent. received $\$ 10.00$ but under $\$ 12.00$; that 757 received $\$ 12.00$ but under $\$ 15.00$; that 317 persons received $\$ 15.00$ but under $\$ 20.00$ per week; while 26 persons or .83 per cent received $\$ 20.00$ per week or over.

The class which includes the greatest number of persons is that of $\$ 12.00$, but under $\$ 15.00$. The next class in this order of importance is that of $\$ 10.00$, but under $\$ 12.00$; while the third in order of importance is $\$ 9.00$, but under $\$ 10.00$ per week.

In looking over table IX it will be noticed that a great variety of occupations are included, occupations in which the earnings are derived from all possible sources. Thus there are the skilled trades and common laborer and many other callings, on the one hand, where the earnings usually are received in cash only. On the other hand there are women in the domestic service, farm hands and others whose wages consist not of cash alone, but of board and lodging. Then again there are porters and waiters whose earnings are made up in various ways. As the foregoing presentation includes all of the occupations in the table without reference to their duties or manner of payment, it must follow, as matter of course, that the figures there can not be safely compared with any other figures of earnings than such as cover the same field and have been obtained and com-
pleted in the same manner. This should be borne in mind. Those who desire material for comparison for individual occupations, however, can readily obtain it from table IX, where the figures for each are given in detail.

The two presentations which follow are made up with reference to showing the run of the earnings of those who do common labor and of those employed in the various skilled trades.

The following presentation includes those who gave common labor and factory work as this occupation as compiled from table IX:

| Classification. | Common Laborer. |  | Factory Hands. |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Number. | Per cent. | Number. | Per cent. |
| Under \$5 | 18 | . 96 | 11 | 8.87 |
| $\$ 5$ but under \$6 | 13 | . 70 | 9 | 7.26 |
| . $\$ 6$ but under $\$ 7$ | 69 | 3,69 | 6 | 4.84 |
| \$7 but under $\$ 8$ but under | 215 | 11.52 | 15 | 12.10 |
| $\$ 9$ but under $\$ 10$ | 59 208 | 3.16 11.14 | 4 | 3.22 |
| \$10 but under \$12 | 508 | 27.22 | 15 | 12.10 |
| \$12 but under \$15 | 604 | 32.35 | 17 | 13.71 |
| \$15 but under $\$ 20$ | 165 | 8.83 | 10 | 8.07 |
| \$20 and over | 8 | . 43 | 2 | 1.61 |
| Total reporting <br> Not reporting ............ | 1,867 393 | 100.00 | 124 23 | 100.00 |
| Total | 2,260 |  | 147 |  |

Here we find the classified earnings of 1,876 common laborers and of 124 skilled workers. For the common laborers it is found that 18 of them, or .96 per cent. of the total number reporting, received less than $\$ 5.00$ per week. This is a comparatively small proportion, and one that is not greatly increased until in the class $\$ 7.00$, but under $\$ 8.00$, which includes 215 persons, or 11.52 per cent. The next class in order has a very small per cent. of the total, but the class $\$ 9.00$, but under $\$ 10.00$, includes by far the greater proportion of the whole number. From the figures as a whole it clearly appears that $\$ 1.25, \$ 1.50, \$ 1.75$ and $\$ 2.00$ were the ruling rates of wages for those who gave common labor as their occupation.

The following includes carpenters, machinists, upholsterers, millers, electricians, wagonmakers, masons, harnessmakers,
coopers, plumbers, book binders, shoemakers, roofers, tinners, foundrymen, in about the same proportion.

SKILLED TRADES.

| Classified weekly earnings. | Number. | Per cent. |
| :---: | :---: | :---: |
| Under \$5 | 2 | 1,60 |
| $\$ 5$ but under \$6 | 4 | 1.60 |
| \$6 but under \$7 $\ldots$ | 4 | 3.20 |
| \$7 but under ${ }^{\$ 8} 88 \ldots$ | 4 | 3.20 4.00 |
| $\$ 9$ but under $\$ 10$ | 23 | 18.40 |
| \$10 but under \$12 | 16 | 12.80 |
| \$12 but under \$15 | 32 | 25.60 |
| \$15 but "ünder \$20 | 37 | 29.60 |
| \$zu and over |  |  |
| Number reporting | 125 | 100.00 |
| Not reporting | 15 |  |

In examining the above presentation many rather interesting features present themselves. Thus we find first that a comparatively small proportion of the whole received less than $\$ 1.50$ per day. In fact, the classes below $\$ 9.00$, but under $\$ 10.00$, include only 17 persons, or 13.60 per cent. of the number reporting. Those who are embraced in these classes were evidently only helpers or apprentices, as the wages of any competent workman in these trades were considerably above that given. The remaining classes beginning with $\$ 9.00$, but under $\$ 10.00$, show proportionately a very large number. This is substantiated by the fact that they include 108 of the 125 persons, or 86.40 per cent. of the same. The largest number is found in the class $\$ 15.00$, but under $\$ 20.00$; but this is closely approached by the class which precedes it, the one of $\$ 12.00$, but under $\$ 15.00$, per week.

Table XI, the last in the series, deals with the time out of employment, and the time with the last employer. The totals in the former case are as follows:

| Time.' | Number. | Per cent. |
| :---: | :---: | :---: |
| Less than 1 month | 2,494 | 83.53 |
| From 1 to 6 months | 2,429 | 14.37 |
| From 7 to 12 months | 39 | 1.30 |
| From 1 to 5 years | 23 | . 77 |
| Over 5 years | 1 | . 03 |
| Total ${ }^{\text {Total reporting }}$ | 2,986 | 100.00 |
| Total not reporting | 904 |  |
| Total included | 3,890 |  |

From this it appears that 2,986 persons out of the 3,890 included, reported as to the time they had been out of employment. Of this number 2,494 , or 83.53 per cent. of the total number reporting, had been out of work less than one month, and 429 , or 14.37 per cent., from 1 to 6 months. Of the remaining number 39 had been out of work from 7 to 12 months, and 23 had not had employment for periods varying from 1 to 5 years, while only one had been out of work more than five years.

The following exhibit deals with the time the applicants had remained in the employ of their last employer.


It is seen from these figures that 1,879 persons, or 80.36 per cent. of the number reporting upon it, remained with their last employer less than one year, in most cases a few weeks only; that 364 , or 15.57 per cent., had been in their last place from 1 to 5 years, that 66 had a record in this respect of from 6 to 10 years, and 29 of over 10 years.

This presentation contains many rather singular features. To many it will certainly be a surprise to learn that over 80 per cent. had remained less than one year with their last employer. This time certainly seems very short. What can possibly be the causes of it? Was it due to shiftlessness or to some-
thing else that can be attributed to the employes, or is it due to the character of the employment, or something about the employers? These are questions that certainly are difficult to answer. Perhaps table III offers a few explanations. In that table it was pointed out that in 472 cases the employes left because the job was completed; that 368 persons quit because they desired a change ; and that 1,373 had left for various other reasons which, while not given in detail, were mostly of a personal character. These facts of themselves are not much of an explanation, but they throw a great deal of light upon the circumstances surrounding the employment in the various occupations.

## PART VIII.

## Employment and Earnings in Wholesale and Retail Mercantile Establishments - In Six Skilled Industries-Official Salaries in Cities, etc.-Labor Organizations.

Under the above head is presented in the following pages a compilation of the reports of 74 wholesale mercantile establishments in this state. These reports include all persons, except superintendents, managers and partners who were employed by the establishments reporting, and relate to the classified weekly earnings, the number employed by months, the hours of labor daily, the mode and time of paying wages. The figures giving the number employed by months cover the entire year of 1900 and the first six months of 1901 . The facts as to earnings are those for the week in 1901 during which the greatest number were employed. The facts relating to hours of labor and modes and time of payment of salaries and wages are those for 1901 or those which prevailed at the time of reporting in July of that year. The schedules calling for these facts were sent out to the employers and were by them filled out and returned.

The data thus obtained was classified and compiled with reference to the line of business covered by the reports. In the following table is found the number of establishments in each class and the number of persons employed.

| Classifications ofIndustries. | 1900 |  | 1901 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Number establishments. | Number employed. | Number establishments. | Number employed. |
| Drugs ...... | 5 | 140 | 5 | 143 |
| Dry goods .... | 5 | 866 | 5 | 923 |
| Groceries ... . | 14 | 253 | 14 | 251 |
| Hardware ...... | 5 | 156 | 5 | 164 |
| Miscellaneous ... ... | 46 | 974 | 46 | 1,040 |
| Total | 75 | 2,389 | 75 | 2,521 |

Of the establishments thus included in this investigation 5 were engaged in the Wholesale Drug business, 5 in Dry Goods, 14 in Groceries, 5 in Hardware, and 46 in various other lines of business that have been grouped together under the head of Miscellaneous.

These 75 establishments together employed 2,389 persons in 1900 and 2,521 persons in 1901.

The first presentation in order relates to the classified weekly earnings and consists of six tables. The first of these shows the actual number of male persons who received classified weekly earnings. The second in order shows the actual number of females who received classified weekly earnings. The third table shows the total number of both males and females who received classified weekly earnings.

The fourth, fifth, and sixth tables in order relate to percentages. They show for the male, female, and total of both, respectively, the per cent. of the number in each class of the total persons employed.

All of the five industries are included in each of these tables. The classifications of earnings run from "under $\$ 5.00$ per week" up to " $\$ 20.00$ per week and over." That is, the classes are so arranged that the first in order will show all who received under $\$ 5.00$, the second all who received $\$ 5.00$ per week but less than $\$ 6.00$ and so on up to the last class which gives all who received $\$ 20.00$ and over per week.

The three tables which give the actual number of males, females and total are next in order.
total male person's receiving classified weekly earnings.

| Classification of weekly wages. | Drugs. | $\begin{gathered} \text { Dry } \\ \text { gooưs. } \end{gathered}$ | Groceries. | $\square$ Hardware. | Mis-cellaneous. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Under $\$ 5.00$ |  |  |  |  |  |  |
| $\$ 5.00$ but rinder $\$ 6.00$. | 15 |  | 8 | ${ }_{6}^{4}$ | 59 | 229 |
| 6.00 but under 7.00 | 4 | 34 | 4 | ${ }_{1}^{6}$ | 35 35 | 81 80 |
| 7.00 but under 8.00 | 5 | 18 | 12 | 10 | $\stackrel{36}{26}$ | 71 |
| ${ }_{9} .00$ but under 9.00 | 8 | 28 | 15 | 10 | 45 | 106 |
| 10.00 but under 12.00 | ${ }^{9}$ | 14 | 27 | 37 | 65 | 152 |
| 12.00 but under 15.00 | 18 | 26 | 50 | 39 | 107 | 240 |
| 15.00 but under 20.00 | 30 | 42 | 16 | 21 | 122 | 221 |
| 20.00 and over ...... | 21 | ${ }_{63}$ | 13 72 | 19 | 88 | 211 |
| Total |  |  |  |  |  |  |
|  |  |  | 253 | 172 | 700 | 1,695 |
| Percentage | 7.96 | 25.66 | 14.93 | 10.15 | 41.30 | 100.00 |

TOTAL FEMALE PERSONS RECEIVING CLASSIFIED WEEKLY
EARNINGS.

| Classification of weekly wages. | Drugs. | $\begin{aligned} & \text { Dry } \\ & \text { goods. } \end{aligned}$ | Groceries. | Hardware. | Mis-cellaneous. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Under $\$ 5.00 \ldots \ldots$ | 14 | 351 | 5 |  |  |  |
| \$5.00 but under $\$ 6.00$ |  | 63 | ${ }^{5}$ |  | 234 92 | 1594 |
| 6.00 but under 7.00 but under 8.00 |  | 54 | 3 |  | 32 | 159 89 |
| 8.00 but under 9.00 | 1 | 38 <br> 41 |  |  | 16 | 57 |
| 9.00 but under 10.00 |  | - 412 | 4 | 1 | ${ }_{14} 21$ | 69 |
| 10.00 but under 12.00 |  | 23 | $1^{*}$ | $\stackrel{1}{2}$ | 14 | 37 |
| 12.00 but under 15.00 | 3 | 24 |  | 1 | 6 | ${ }_{34}$ |
| 15.00 but under 20.00 |  | 30 | 2 | 1 | 2 | 34 34 |
| 20.00 and over |  | 8 |  |  | 1 | , |
| Total $\qquad$ Percentage | 111.00 | $\begin{array}{r} 644 \\ 58.44 \end{array}$ | 151.36 | 6 | 426 | 1,102 |
|  |  |  |  | . 54 | 38.66 | 100.00 |

TOTAL MALE AND FEMALE PERSONS RECEIVING CLASSIFIED
WEEKLY EARNINGS.

| Classification of weekly wages. | Drugs. | $\begin{aligned} & \text { Dry } \\ & \text { goods. } \end{aligned}$ | Groceries. | Hardware. | Mis-cellaneous. | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Under $\$ 5.00$ | 19 | 494 | 13 |  |  |  |
| \$5.00 but under \$6.00 | 5 | 99 | 4 | ${ }_{6}^{4}$ | 122 | 823 |
| ${ }^{6.00}$ but under 7.00 | 4 | 88 | 9 | 1 | 67 | 169 |
| 8.00 but under 9.00 | 8 | 56 | 12 | 10 | 42 | 128 |
| 9.00 but under 10.00 . | 9 | 69 | 19 | 12 | 66 | 175 |
| 10.00 but under 12.00 | 18 | 49 | . 51 | 38 | 79 | 179 |
| 12.00 but under 15.00 | 23 | 66 | ${ }_{16}$ | ${ }_{22}$ | 115 | 274 |
| 15.00 but under 20.00 | 30 | 61 | 45 | 19 | 128 90 | 255 |
| 20.00 and over | 21 | 71 | 72 | 25 | 124 | 313 |
| Total | 146 | 1,079 | 268 | 178 | 1,126 | 2,797 |
|  | 5.22 | 38.58 | 9.58 | 6.36 | 40.26 | 100.00 |

The table giving the number of male persons who received classified weekly earnings shows that the total males employed in all five industries was 1,695 . It further shows that, of these, 135 persons, or 7.96 per cent. were in establishments handling Drugs; that Dry Goods employed 435 persons, or 25.66 per cent; that Groceries employed 253 persons, or 14.93 per cent. ; that Hardware employed 172 persons, or 10.15 per cent.; and that Miscelianeous employed 700 persons, or 41.30 per cant.

In the table giving the number of female persons who received classified weekly earnings it is found that in the five industries 1,102 female persons were employed. Of these 11, or 1.00 per cent. were in Drugs; 644, or 58.44 per cent. in Dry-Goods; 15 or 1.36 per cent. in Groceries; 6, or . 54 per cent. in Hardware; and 426 female persons, or 38.66 per cent. were employed in the Miscellaneous.

Next is the table for the totals for both male and female persons. This table shows a total for all industries of 2,797 persons. Divided among the five industries the situation is as follows: Drugs employed 146 persons or 5.22 per cent. of the total; Dry Goods employed 1,079 persons, or 38.58 per cent. of the total; Groceries employed 268 persons, or 9.58 per cent.; Hardware employed 178 persons, or 6.36 per cent.; Miscellaneous employed 1,126 persons, or 40.26 per cent. of the total.

It has thus been pointed out how many male persons, and how many female persons as well as how many of both were employed for wages in the five whole sale industries which are included. It has also been shown what per cent. relation the respective numbers bore to the total.

The three tables which are next in order show the per cent. which the number in each class in each industry, constitutes of the total for the industry.

PER CENT. OF MALES.

| Classification of weekly earnings. | Drugs. | $\begin{aligned} & \text { Dry } \\ & \text { goods. } \end{aligned}$ | Groceries. | Hardware. | $\begin{aligned} & \text { Mis- } \\ & \text { cellan. } \\ & \text { eous. } \end{aligned}$ | Total per cent. male. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Under $\$ 5.00$ | 11.11 | 32.87 | 3.16 | 2.33 | 26.02 | 13.51 |
| $\$ 5.00$ but under $\$ 6.00$ | 3.70 | 8.28 | 1.58 | 3.49 | 10.84 | 4.78 |
| 6.00 but under 7.00 | 2.97 | 7.82 | 2.37 | . 58 | 5.95 | 4.72 |
| 7.00 but under 8.00 | 3.70 | 4.14 | 4.74 | 5.81 | 3.73 | 4.19 |
| 8.00 but under 9.00 | 5.93 | 6.43 | 5.93 | 5.81 | 5.86 | 6.25 |
| 9.00 but under 10.00 | 6.66 | 3.21 | 10.67 | 21.49 | 7.02 | 8.97 |
| 10.00 but, under 12.00 | 13.33 | 5.98 | 19.76 | 22.68 | 10.21 | 14.16 |
| 12.00 but under 15.00 | 14.82 | 9.66 | 6.33 | 12.21 | 11.37 | 13.04 |
| 15.00 but under 20.00 | 22.22 | 7.13 | 17.00 | 11.06 | 7.99 | 12.45 |
| 20.00 and over | 15.56 | 14.48 | 28.46 | 14.54 | 11.01 | 17.93 |
| Percentage | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |

PER CENT. OF FEMALES.

| Classification of weekly earnings. | Drugs. | $\begin{gathered} \text { Dry } \\ \text { goods. } \end{gathered}$ | Groceries. | Hardware. | Mis-cellaneous. | Total per cent. female. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Under $\$ 5.00$ | 36.37 | 54.50 | 33.33 |  | 54.93 | 53.90 |
| \$5.00 but under \$6.00 |  | 9.78 |  |  | 21.60 | 14.06 |
| 6.00 but under 7.00 |  | 8.39 | 20.00 |  | 7.51 | 8.08 |
| 7.00 but under 8.00 | 27.27 | 5.90 |  |  | 3.76 | 5.17 |
| 8.00 but under 9.00 | 9.09 | 6.37 | 26.67 | 33.33 | 4.93 | 6.26 |
| 9.00 but under 10.00 |  | 1.86 |  | 16.67 | 3.29 | 2.45 |
| 10.00 but under 12.00 |  | 3.57 | 6.67 | 33.33 | 1.88 | 3.09 |
| 12.00 but under 15.00 | 27.27 | 3.73 |  | 16.67 | 1.41 | 3.09 |
| 15.00 but under 20.00 |  | 4.66 | 13.33 |  | . 46 | 3.09 |
| 20.00 and over |  | 1.24 |  |  | . 23 | . 81 |
| Percentage | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |

PER CENT. OF TOTALS, OR OF BOTH MALES AND FEMALES.

| Classification. of weekly earnings | Drugs. | $\begin{gathered} \text { Dry } \\ \text { goods. } \end{gathered}$ | $\begin{aligned} & \text { Grocer- } \\ & \text { ies. } \end{aligned}$ | Hard. ware. | Mis-cellaneous. | Total. per centemployes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Under \$5.00 | 13.01 | 45.78 | 4.85 | 2.25 | 26.02 | 29.42 |
| $\$ 5.00$ but under $\$ 6.00$ | 3.42 | 9.18 | 1.49 | 3.37 | 10.83 | 8.44 |
| 6.00 but under 7.00 | 2.74 | 8.16 | 3.36 | . 56 | 5.95 | 6.04 |
| 7.00 but under 8.00 | 5.48 | 5.19 | 4.48 | 5.62 | 3.73 | 4.58 |
| 8.00 but under 9.00 | 6.16 | 6.39 | 7.09 | 6.74 | 5.86 | 6.26 |
| 9.00 but under 10.00 | 6.16 | 2.41 | 10.08 | 21.35 | 7.02 | 6.40 |
| 10.00 but under 12.00 | 12.33 | 4.54 | 19.03 | 23.03 | 10.22 | 9.79 |
| 12.00 but under 15.00 | 15.76 | 6.12 | 5.97 | 12.36 | 11.37 | 9.12 |
| 15.00 but under 20.00 | 20.55 | 5.65 | 16.79 | 10.67 | 7.99 | 8.76 |
| 20.00 and over | 14.39 | 6.58 | 26.86 | 14.05 | 11.01 | 11.19 |
| Percentage | 100.00 | 100.00 | 100:00 | 100.00 | 100.00 | 100.00 |

The above three tables giving the percentages should be read in connection with the tables which precede them, or the tables which contain the actual number. Together these six tables contain not only the number of persons but the calculations which have been made upon the numbers. The tables are thus closely related. This may be further illustrated by pointing out a few facts from the last or total column in each.

In the first table in order, the table giving, by industries, the male persons employed, it is seen that 229 persons of the 1,695 persons employed received under $\$ 5.00$ per week. In the fourth table in order, the one showing the per cent. of males, it is seen that the above 229 persons constituted 13.51 per cent. of the total or of the 1,695 persons. This is one illustration only of the many that might be given, but it shows fairly well how the one table helps to explain the other.

As a whole these six tables show what the earnings were of the male and female persons who were employed in the five industries included. In the Drug business for instance it is seen that of the 135 male persons employed in it 15 , or 11.11 per cent. earned less than $\$ 5.00$ per week; that of the 11 female persons who were employed here 4, or 36.37 per cent. earned less than $\$ 5.00$ per week; that of the total of both male and female or 146 persons, 19 or 13.01 per cent earned less than $\$ 5.00$ per week. This form of description could be applied to each class in each industry as well as to each class in the totals for all industries.

In Dry goods 32.87 per cent. of the males, 54.50 per cent. of the females and 45.78 per cent. of the total for both received less than $\$ 5.00$ per week.

In Groceries $3: 16$ per cent. of the males, 33.33 per cent. of the females and 4.85 per cent. of the total for both received less than $\$ 5.00$ per week.

In Hardware 2.33 per cent. of the males, none of the females, and 2.25 per cent of the total received less than $\$ 5.00$ per week.

In Miscellaneous 26.02 per cent. of the males, 54.93 per cent. of the females, and 26.02 per cent. of the total received less than $\$ 5.00$ per week.

Of the total for all industries 13.51 per cent. of the males,
53.90 per cent. of the females, and 29.42 per cent. of the total of both received less than $\$ 5.00$ per week.

A more satisfactory comparison of the earnings in the different industries will be found in the exhibit which follows:

MALIES.

| Classification of weekly wages. | Drugs. | $\begin{gathered} \text { Dry } \\ \text { goods. } \end{gathered}$ | Groceries. | Hardware. | Mis-cellaneous. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$12.00 and over | 52.60 | 21.27 | 51.79 | 37.81 | 30.37 | 43.42 |
| 9.00 and over | 72.59 | 40.46 | 82.22 | 81.98 | 47.60 | 66.55 |
| 7.00 and over | 82.22 | 51.03 | 92.89 | 93.60 | 57.19 | 76.99 |
| 5.00 and over | 88.89 | ${ }_{67.13-}$ | 96.84 | 97.67 | 73.98 | 86.49 |
| Under $\$ 5.00$ | 11.11 | 32.87 | 3.16 | 2.33 | 26.02 | 13.51 |

FEMALES.

| \$12.00 and ove | 27.27 | 9.63 | 13.33 | 16.67 | 2.10 | 6.99 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9.00 and over | 27.27 | 15.06 | 20.00 | 66.67 | 7.27 | 12.53 |
| 7.00 and over | 63.63 | 27.33 | 46.67 | 100.00 | 15.96 | 23.96 |
| 5.00 and over |  | 45.50 | 66.67 |  | 45.07 | 46.10 |
| Under \$5.00 | 36.37 | 54.50 | 33.33 |  | 54.93 | 53.90 |

TOTAL PERSONS EMPLOYED.

| $\$ 12.00$ and over $\ldots \ldots \ldots \ldots$ |
| ---: |
| 9.00 and over $\ldots \ldots \ldots \ldots$ |
| 7.00 and over $\ldots \ldots \ldots \ldots$ |
| 5.00 and over |
| Under $\$ 5.00 \ldots \ldots \ldots \ldots$ |

In this exhibit we find for the males, females and total persons separately, the per cent. of those who received $\$ 12.00$ per week or over this amount; the per cent. of those who received $\$ 9.00$ per week and over; the per cent. of those who received $\$ 7.00$ and over per week; the per cent of those who received $\$ 5.00$ per week and over; and the per cent. of those who received less than $\$ 5.00$ per week.

This exhibit affords a very good comparison of the weekly earnings. From it we see that both the male and female persons received the highest earnings in Drugs, Groceries, and Hardware; and that the lowest earnings in -both cases were found in Dry-goods and Miscellaneous.

Drugs had more persons who received $\$ 12$ and over per week than any other industry. When it came to those who received $\$ 9$ and over the situation had changed and the first place with 81.46 per cent. belonged to hardware, while groceries had the second place and drugs had fallen to the third. Hardware and
groceries in the order named also lead in the two classes which follow, or in the $\$ 7$ and over and $\$ 5$ and over, and it may be inferred from this that these two industries probably rank first in the vote of wages paid. They are so closely followed by drugs, however, that, while there is some variation from class to class the exact differences can hardly be pointed out.

Dry goods had the smallest propo in the class $\$ 12$ and over, as well as in all the other classes except the last, that of under $\$ 5$ per week. This, however, is enough to show that the earnings were lower in dry goods than in miscellaneous, and that in both of these they were lower than in the three other industries.

The presentations which are next in order consist of 10 tables. The first five of these show, for each of the five industries included, the number of persons employed by months in 1900. The five tables which follow these show, for the same industries, the number of persons employed by months for the first six months in 1901. From the figures for each month, for each industry has also been computed the range of employment and unemployment.

The meaning of terms range of employment and unemployment is plain. This range was arrived at by simply regarding the number for the month during which the greatest number were employed as full employment, expressing this as 100 and then ascertaining the per cent. relation which the number for each of the other months bore to that for the highest month, and regarding the difference as the range.

DRUGS-PERSONS EMPLOYED BY MONTHS IN 1900.

| Months. | Number persons. | Per cent. employed. | Per cent. unemployed. |
| :---: | :---: | :---: | :---: |
| January | 133 | 89.26 | 10.74 |
| February | 135 | 90.60 | 9.40 |
| March .. | 138 | 92.62 | 7.38 |
| April | 138 | 92.62 | 7.38 |
| May | 138 | 92.62 | 7.38 |
| June | 137 | 91.95 | 8.05 |
| July | 139 | 93.29 | 6.71 |
| August | 138 | 92.62 | 7.38 |
| September | 143 | 95.97 | 4.03 |
| October | 149 | 100.00 |  |
| Novem̆ber | 145 | 97.32 | 2.68 |
| December | 144 | 96.64 | 3.36 |
| Average | 140 | 93.96 | 6.04 |

DRY GOODS-PERSONS EMPLOYED BY MONTHS IN 1900.

| Months. | Number persons. | Per cent. employed. | Per cent. unemployed. |
| :---: | :---: | :---: | :---: |
| January | 724 | 65.70 | 34.30 |
| Mebruary | 756 | 68.60 | 31.40 |
| April | 816 | 74.05 | 25.95 |
| May . | 926 889 | 84.03 | 15.97 |
| June | 874 | 89.61 79.31 | 19.33 20.69 |
| July | 819 | 74.32 | 25.68 |
| August | 691 | 62.70 | 37.30 |
| September | 851 | 77.22 | 22.78 |
| October .. | 930 | 84.39 | 15.61 |
| November | 1,010 | 91.65 | 8.35 |
| December | 1,102 | 100.00 |  |
| Average | 866 | 78.58 | 21.42 |

GROCERIES-PERSONS EMPLOYED BY MONTHS IN 1900.


HARDWARE-PERSONS EMPLOYED MONTHLY IN 1900.

| Months. | Number persons. | Per cent. employed. | Per cent. unemployed. |
| :---: | :---: | :---: | :---: |
| January | 154 | 92.22 | 7.78 |
| February | 152 | 91.02 | 8.98 |
| March | 148 | 88.62 | 11.38 |
| April | 151 | 90.42 | 9.58 |
| May | 155 | 92.81 | 7.19 |
| July | 155 | ${ }_{92}^{92.81}$ | 7.19 |
| August | 154 | 92.22 | 7.78 |
| September | 159 | 95.21 | 4.79 |
| October ... | 167 | 100.00 | 4.79 |
| November | 167 | 100.00 |  |
| December | 159 | 95.21 | 4.79 |
| Average | 156 | 93.41 | 6.59 |

## MISCELLANEOUS--PERSONS EMPLOYED MONTHLY IN 1900.

| Months. | Number persons. | Per cent. employed. | Per cent. unemployed. |
| :---: | :---: | :---: | :---: |
| January | 900. | 84.27 | 15.73 |
| February | 904 | 84.64 | 15.36 |
| March ... | 908 | 85.02 | 14.98 |
| April ....... | 909 | 85.11 | 14.89 |
| May ...... | 908 | 85.02 87 | 14.98 |
| June | 930 1,012 | ${ }_{94.76}$ | + 5.24 |
| July ....... | 1,012 | 94.70 100.00 | 5.24 |
| $\underset{\text { September }}{\text { August }}$ | 1,066 | 100.81 99.81 | . 19 |
| October . | 1,037 | 97.10 | 2.90 |
| November | 1,049 | 98.22 | 1.78 |
| December | 1,000 | 93.63 | 6.37 |
| Average | 974 | 91.20 | 8.80 |

DRUGS-PERSONS EMPLOYED BY MONTHS, 6 MONTHS OF 1901.

| Months. | Number persons. | Per cent. employed. | Per cent. unemployed. |
| :---: | :---: | :---: | :---: |
| January | 146 | 100.00 |  |
| February | 144 | 98.63 |  |
| March .. | 144 | 98.63 9795 | 1.37 |
| April ..... | 142 | 97.95 | 2.74 |
| May . | 142 | 97.26 | 2.74 |
| Average | 144 | 98.63 | 1.37 |

'DRY GOODS-PERSONS EMPLOYED BY MONTHS, 6 MONTHS OF 1901.

| Months. | Number persons. | Per cent. employed. | Per cent. unemployed. |
| :---: | :---: | :---: | :---: |
| January | 824 | 81.50 | 18.50 |
| February | 793 | 78.44 | 21.56 9.50 |
| March ... | ${ }^{915}$ | ${ }_{99}^{90.50}$ | 9 .40 |
| April .... |  | 100.00 |  |
| May | 1,011 | 197.82 | 2.18 |
| Average | 913 | 90.31 | 9.69 |

GROCERIES-PERSONS EMPLOYED BY MONTHS, 6 MONTHS OF 1901.

| Months. | Number persons. | Fer cent. employed. | Per cent. unemployed. |
| :---: | :---: | :---: | :---: |
| January | 253 | 99.22 | . 78 |
| February | 253 | 99.22 | . 78 |
| March | 249 | 97.65 | 2.35 |
| April | 247 | 96.86 | 3.14 |
| June . | 250 | 98.04 | 1.96 |
|  |  | 100.0 |  |
| Average | 251 | 98.43 | 1.57 |

HARDWARE-PERSONS EMPLOYED MONTHLY, 6 MONTHS OF 1901.

| Months. | Number persons. | Per cent. employed. | Per cent. unemployed. |
| :---: | :---: | :---: | :---: |
| January | 164 | 98.20 | 1.80 |
| February | 161 | 96.41 | 3.59 |
| March . | 160 | 95.81 | 4.19 |
| May | 166 | 100.00 99.40 | $\ldots .10$ |
| June | 164 | 98.20 | 1.80 |
| Average | 164 | 98.20 | 1.80 |

MISCELLANEOUS-PERSONS EMPLOYED MONTHLY, 6 MONTHS OF 1901.

| Months. | Number persons. | Per cent. employed. | Per cent. unemployed. |
| :---: | :---: | :---: | :---: |
| January | 1,023 | 96.69 | 3.31 |
| February | 1,023 | 96.69 | 3.31 |
| March ... | 1,036 | 97.92 | 2.08 |
| April | 1,053 | 99.53 | . 47 |
| May | 1,058 | 100.00 |  |
| June | 1,048 | 99.05 | . 95 |
| Average | 1,040 | 98.30 | 1.70 |

The ten preceding tables relate to the number of persons employed by months and to the range of employment and unemployment, for 1900 , and for the first half of 1901.

These figures are not absolute. In the first place only a certain proportion of the establishments in the state are included. Then again by full employment is not meant that all who desire
employment has secured such. By full employment is simply meant that, during that month, all who could secure employment in these lines were then employed. In other words all places were then filled. Business during this month was the heaviest for the year, and in consequence of this more help was needed. During the other months business was lighter and less hands were therefore needed. The differences between the highest and the other months simply show the proportion of the employes who for business reasons were let out. The figures in the tables show fluctuations from month to month in the number employed and are therefore interesting.

TOTAL PERSONS- RANGE OF EMPLOYMENT IN 1900.

| Months. | Total number employed. | : Range of ?employment Per cent. | Range of unemployment. Per cent. |
| :---: | :---: | :---: | :---: |
| January | 2,161 | 81.15 | 18.85 |
| February | ${ }^{2,196}$ | 82.46 | 17.54 |
| March .. | 2,260 | 84.87 | 15.13 |
| April | $\stackrel{2,374}{2,340}$ | 89.15 87.87 | 10.85 12.13 |
| May | 2,346 | 88.10 | 11.90 |
| July | 2,379 | 89.34 | 10.66 |
| August | 2,306 | 86.59 | 13.41 |
| September | 2,474 | 92.90 | 7.10 |
| October . | ${ }_{2}^{2,537}$ | 95.27 | 4.73 |
| November | 2,627 | 98.65 | 1.35 |
| December | 2,663 | 100.00 |  |
| Average | 2,389 | 89.71 | 10.29 |

TOTAL PERSONS-RANGE OF EMPLOYMENT, 6 MONTHS OF 1901.

| Months. | Total number employed. | Range of employment. Per cent. | Range of unemployment. Per cent. |
| :---: | :---: | :---: | :---: |
| January | 2,410 | 91.74 | 8.26 |
| February | 2,374 | 90.37 | 9.63 |
| March | 2,504 | ${ }_{99}^{95.32}$ | 4.68 |
| April | $\stackrel{2}{2,617}$ | 99.62 100.00 | . 38 |
| May | 2,598 | 108.90 | 1.10 |
| Average | 2,522 | 96.00 | 4.00 |

In the above two tables is compiled the total persons employed by month, by the five wholesale industries included. The first in order gives these facts for the 12 months in T 900 together with range of employment and unemployment. The second in order shows these identical facts for the first half of 1901.

Take the table for 1900 first. In this the total number employed by the five industries each month is plainly shown. The month of January shows the smallest number, or only 2,161 persons. The month of December gives the greatest number, or 2,663 persons. December therefore shows full employment, while January shows 81.15 per cent. of full employment. The range of unemployment in January was therefore 18.85 per cent. In February more persons were employed than in January. During this month therefore the range of employment was greater and that of unemployment proportionately more narrow. The same tendency as for February is seen in March and April. In May, however, there was a slight reaction causing a slightly wider range. of unemployment for that month than for April. In June the tendency was again in the other direction, and continued, in this course until July when the proportion of unemployed was even smaller than in April. August shows some falling off in the number employed widening the range of unemployment from 10.66 per cent. into July to 13.41 per cent. With September the busy season had set in increasing considerably the number employed and thus reducing the range of unemployment. This same tendency was felt with increasing force in each month up to the end of December when the greatest number were employed and when there was no unemployment.

The total or summary table for the first half of 1901 comes next. In this case we find the greatest number employed in May and the smallest in February. May therefore had full employment, or 100 , and February the greatest range of unemployment, or 9.63 per cent. In January 8.26 per cent. were unemployed, in June 1.10 per cent. and in April .38 per cent. The range of unemployment for the first six months in 1901 was thus about the same as for the same period in 1900 though on the whole the total number employed was greater in 1901.

The average number employed was 2,389 in 1900 and 2,522 in 1901. The average range of unemployment for the whole year 1900 was 10.29 per cent., while for the six months in 1901 it was about 4.00 per cent.

The next table shows the number of establishments reporting as to the hours of labor daily in each.

NUMBER OF ESTABLISHMENTS REPORTING AS TO HOURS OF LABOR DAILY.

| Classification of hours. | Drugs. | $\begin{aligned} & \text { Dry } \\ & \text { goods. } \end{aligned}$ | $\begin{gathered} \text { Grocer- } \\ \text { ies. } \end{gathered}$ | Hardware. | Mis-cellaneous. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eight hours |  |  |  |  | 3 | 3 |
| Nine hours | 3 | 4 | 1 |  | 22 | 30 |
| Ten hours | 2 | 1 | 13 | 5 | 19 | 40 |
|  |  |  |  |  |  |  |
| Total | 5 | 5 | 14 | 5 | 46 | 75 |

This table relates to the hours of labor daily. The total number of establishments reporting upon this was 75 . Of these, 2 were in operation twelve hours daily; 40 were in operation ten hours daily; 30 establishments were in operation nine hours daily; 3 were in operation eight hours. These figures represent all industries included.

Taking each industry separately the same facts so far as they relate to the industry taken may be had. Thus it is found that of the 46 establishments in the miscellaneous column, 2 come in the twelve hour class, 19 in the ten, 22 in the nine, and 3 in the eight hour class.

In hardware only 5 establishments reported in this respect and all of these were in operation ten hours daily.

In groceries we find 1 establishment in operation nine hours and 13 ten hours daily.

Of the 5 dry goods establishments 4 are in the nine hour and 1 in the ten hour class.

Of the 5 drug establishments reporting, 3 were in operation nine hours and 2 ten hours daily.

This table should be read along with the one that follows giving the number and per cent. of persons who were employed at classified hours daily.

NUMBER OF PERSONS EMPLOYED AT CLASSIFIED HOURS DAILY.

| Classification of hours. | Drugs. | $\begin{aligned} & \text { Dry } \\ & \text { goods. } \end{aligned}$ | Grocer. ies. | Hardware. | Miscellan eous. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eight hours per day Nine hours per day Ten hours per day Twelve hours per day.... |  |  |  |  | 48 | 48 |
|  | 113 | 976 | 19 |  | 628 | 1,736 |
|  | 29 | 13 | 236 | 164 | 351 | ,793 |
|  |  |  |  |  | 21 | 21 |
| Total | 142 | 989 | 255 | 164 | 1,048 | 2,598 |

PER CENT. OF PERSONS EMPLOYED AT CLASSIFIED HOURS OF LABOR DAILY.

| Classification. | Drugs. | $\begin{gathered} \text { Dry } \\ \text { goods. } \end{gathered}$ | Groceries. | Hardware. | Mis-cellareous. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eight hours |  |  |  |  | 4.59 | 1.85 |
| Nine hours | 79.57 | 98.68 | 7.45 |  | 59.92 | 66.82 |
| Ten hours | 20.43 | 1.32 | 92.55 | 100.00 | 33.49 | 30.52 |
| Twelve hours |  |  |  |  | 2.00 | . 81 |
| Total | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |

The foregoing table which presented in two parts gives, in the first, the number of persons who were employed at classified hours daily, and, in the second, the per cent. of these persons.

The establishments reporting as to hours of labor employed as we see from the table 2,598 persons. Of these 21 , or .81 per cent., were employed twelve hours daily. We see further that 783 persons, or 30.52 per cent., were employed ten hours daily; that 1,736 persons, or 66.82 per cent., were employed nine hours; and that 48 , or 1.85 per cent., were employed eight hours daily. These facts apply to all of the five industries when combined.

In miscellaneous, the eight hour class includes 48 persons, or 4.59 per cent. of the 1,048 persons employed under this head. The nine hour class has 59.92 per cent. The ten hour class 33.44, and the twelve hour class 2 per cent. of the total.

In hardware all the employes came under the ten hour day.
In groceries, with a total of 255 persons, 7.45 per cent. came in the nine and 92.55 per cent. in the ten hour class.

Dry goods, with 989 employes, had 98.68 per cent. of these in the nine and 1.32 per cent. in the 10 hour class.

Drugs show 142 employes of whom 79.57 per cent. were employed nine, and 20.43 per cent. ten hours daily.

The following presentations relate to the payment of wages in the wholesale industries in the state.

Of the total persons employed in the wholesale houses 88.58 per cent. received their earnings weekly, and 11.42 per cent. monthly. This appears to be a fairly good illustration of the situation in this respect in this state.

In considering the table in detail, it is found that the figures for the individual industries vary some from the averages thus given. In drugs, for instance, only 65 per cent. of the employees were paid weekly, while 35 per cent. were paid monthly. This is offset by dry goods where 96.41 per cent. were paid weekly and only 3.59 per cent. monthly. In groceries again only 69.58 per cent. were paid weekly, while in hardware and miscellaneous the per cent. stood at 83.20 and 91.17 respectively. Weekly and monthly payment is thus the rule.

SHOWING, BY INDUSTRIES, THE NUMBER AND PER CENT. OF PERSONS WHO WIERE PAID MONTHLY AND WEEKLY IN 1900.

| Classification. | Number. |  |  | Per Cent. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weekly. | Monthly. | Total. | Weekly | Monthly. | Total. |
| Drugs | 91 | 49 | 140 | 65.00 | 35.00 | 100.00 |
| Dry goods | 835 | 31 | 866 | 96.41 | 3.59 | 100.00 |
| Groceries | 183 | 80 | 263 | 69.58 | 30.42 | 100.00 |
| ILardware | 128 | 28 | 156 | 83.20 | 16.80 | 100.00 |
| Miscellaneous | 888 | 86 | 974 | 91.17 | 8.83 | 100.00 |
| Total | 2,125 | 274 | 2,399 | 88.58 | 11.42 | 100.00 |

NUMBER AND PER CEN゙T. OF THOSE WHO RECEIVED THEIR WAGES IN CASII AND CHECKS, RESPECT'IVELY.

| Industries. | Number of Persons and How Paid. |  |  | Per Cent, of Persons and How Paid. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cash. | Check. | Total. | Cash. | Check. | Total. |
| Drugs | 146 |  | 140 | 100.00 |  | 100.00 |
| Dry goods | ${ }_{184}^{835}$ | 31 79 | $\begin{array}{r}866 \\ 263 \\ \hline\end{array}$ | 96.42 69.96 | 3.58 | 100.00 10000 |
| Hardware | 128 | 28 | 156 | 82.05 | 17.95 | 100.00 |
| Miscellaneous | 927 | 47 | 974 | 95.17 | 4.83 | 100.00 |
| Total | 2,214 | 185 | 2,399 | 92.29 | 7.71 | 100.00 |

In the wholesale lines included when considered as a whole, 2214 , or 92.29 per cent. of 2,399 persons investigated, received their earnings in cash, while only 185, or 7.71 per cent. were paid in checks.

Even here there is some variation as between the industries. In drugs all were paid in cash. In dry goods 96.42 per cent., and in groceries 69.96 per cent. were paid in cash. The figures for hardware shows that 82.05 per cent. were paid in cash and 17.95 per cent. in checks; while in miscellaneous 95.17 per cent. received cash for what they had earned.

Fewer persons are included in these two tables than in those ${ }^{\circ}$ by which they are preceded. It is believed, however, that the tables are comprehensive enough to fairly represent the situation in this state.

## EMPLOYMENT AND EARNINGS IN RETAIL MERCANTILE ESTABLISHMENTS.

Data relating to employment and earnings in retail mercantile establishments during the year 1900 and the first six months of 1901 were also obtained. These establishments were classified as follows:

CLASSIFICATION OF ESTABLISHMENTS AND NUMBER OF PERSONS INCLUDED.

| Classification. | 1900 |  | 1901 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Number } \\ & \text { establishments. } \end{aligned}$ | Number employed. | Number establishments. | Number emplosed. |
| Boots and shoes | 39 | ${ }_{71} 11$ | 39 17 | 122 73 |
| Butchers ......... | ${ }_{62}^{17}$ | 341 | 62 | 390 |
| Drugs ..... ........ | 81 | 230 | 81 | ${ }_{810}^{233}$ |
| Dry goods ......... | 58 | 786 | ${ }_{55}^{58}$ | 60 |
| Farm implements . | ${ }_{22}^{25}$ | 172 | 22 | 153 |
| Flour, feed, grain. | ${ }_{47}^{22}$ | ${ }_{331}$ | 47 | 318 |
| $\underset{\text { Furniture }}{\text { Fenal }}$ store $\ldots$.... | 556 | 2,064 | 556 | 2,187 |
| Groceries ........ | 58 | 241 | 118 | ${ }_{438}^{244}$ |
| Hardware ... .... | 118 | ${ }_{43}^{44}$ | 118 | 44 |
| Jewerry ${ }^{\text {retail.... }}$ | 15 | 639 | 15 | 672 |
| Lumber, retail | 115 | 571 | 115 | 583 |
| Total | 1,273 | 6,090 | 1,273 | 6,327 |

The number of establishments which reported was 1,273 . These have been classified into 14 separate industries and together employed on the average 6,090 persons in 1900 and 6,327 persons in 1901.

As between the different classes the establishments reporting varied in number from 15 in the case of retail lumber to 556 in the case of general stores. The number of persons employed as between the industries show even greater variations. Thus we find in 1900 that jewelry had 43 and general stores 2,064 persons, while in 1901 the variation was from 44 to 2,187 persons in the same industries.

The data obtained has been classified so as to show, by industries in 1900 and 1901, the classified weekly earnings, the
number of persons employed by months, the hours of labor daily, how often wages were paid, and whether it was paid in cash or checks.

The classified weekly earnings are shown by industries in a series of 14 tables. In these tables the amount of the weekly earnings appear in classified form. Then appear the number of males and females, respectively, whose weekly earnings came within each of these classes, together with the per cent. which the number in each class constitute of the total of all classes.

The number of persons employed by months is presented in 28 tables. The first half of these show, by industries, the number employed each month in 1900, and the second half, by industries, the number each of the six months in 1901. From the number each month has also been computed the range of employment and unemployment.

The hours of labor daily, by industries, are presented in two tables, one giving the actual number and the other the per cent. How often the salaries or wages were paid is presented by industries in one table, and this is also the case with the respective number of persons who received their earnings in cash and checks.

As in the case of wholesale establishments, these tables include all sorts of employes except superintendents, managers and partners.

The classified earnings are for the week in 1901 during which the greatest number of persons were employed.

BOOTS AND SHOES.

| Classification of Weekly Earnings. | Number. |  |  | $\mathrm{P}_{\mathbf{E}} \mathrm{R}$ Cent. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female. | Tctal. | Male. | Female. | Total. |
| Under $\$ 5.00$.............. | 14 |  | 18 | 12.72 | 23.53 | 14.17 |
| \$5.00 but under \$6.00 .. | 6 | 4 | 10 | 5.45 | 23.53 | 7.87 |
| \$6.00 but under $\$ 7.00$ but under $\$ 8.00$ | ${ }^{3}$ | 5 | 8 | 2.73 | 29.40 | 6.22 |
| \$8.00 but under $\$ 8.00$.. | 10 | 2 | 10 | 9.69 | 11.77. | 7.87 |
| \$9.00 but under $\$ 10.00$.. | 13 |  | 13 | 6.37 11.82 | 11.77 | 7.08 10.24 |
| $\$ 10.00$ but under $\$ 12.00 \cdots$ | 23 | 2 | 25 | 20.91 | 11.77 ${ }^{\text {a }}$ | 19.68 |
| \$12.00 but under $\$ 15.00$.. | 16 |  | 16 | 14.55 |  | 12.59 |
| \$15.00 but under $\$ 20.00$.. | 14 |  | 14 | 12.72 |  | 11.03 |
| \$20.00 and over | 4 |  | 4 | 3.64 |  | 3.25 |
| Total | 110 | 17 | 127 | 100.00 | 100.00 | 100.00. |
| Per cent. | 86.61 | 13.39 | 100.00 |  |  |  |

butchers.

| Classification of Weekly Earnings. | Number. |  |  | Per Cent. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female. | Total. | Male. | Female. | Total. |
| Under \$5.00 | 3 | 3 | ${ }_{5}^{6}$ | 4.17 | 50.00 17.00 | 7.69 6.41 |
| \$5.00 but under $\$$ | 5 | 1 | 5 | 5.55 6.94 | 17.00 | ${ }_{6.41}$ |
| \$6.00 but under $\$ 7.00$ | 14 |  | - | - 19.44 |  | 17.95 |
| \$8.00 but under ${ }^{\text {b }}$ \$9.00 | 7 | 1 | 8 | 9.72 | 17.00 | 10.26 |
| \$9.00 but under \$10.00 | 15 |  | 15 | 20.82 |  | 19.23 |
| \$ 10.00 but under $\$ 12.00$ | 13 |  | 13 | 18.08 |  | 16.67 |
| \$12.00 but under \$15.00 |  | 1 | 7 | 8.34 | 16.00 | 8.97 |
| \$15.00 but under \$20.00 | 5 |  | 5 | 6.94 |  | 6.41 |
| \$20.00 and over . |  |  |  |  |  |  |
| Total | 72 | 6 | 78 | 100.00 | 100.00 | 100.00 |
| Per cent. | 92.30 | 7.70 | 100.00 |  |  |  |

CLOTHING.

| Classification of Weekly Earnings. | Number. |  |  | Per Cent. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female. | Total. | Male. | Female. | Total. |
| Under $\$ 5.00$ | 23 | 19 | 42 | 7.24 | 27.55 | 10.82 |
| \$5.00 but under $\$ 6.00$ | 19 | 18 | 37 | 5.95 | 26.69 | 9.54 |
| \$6.00 lout under $\$ 7.00$ | 13 | 12 | 25 | 4.07 3.13 | 17.38 4.35 | 6.31 3.35 |
| \$700 but under $\$ 8.00$ | 10 | 3 | 13 | ${ }_{6.27}$ | 4.35 10.14 | 3.35 6.96 |
| \$8.00 but under $\$ 9.00$ | 20 | 7 | 46 | 6.27 12.86 | 10.14 7.25 | 11.85 |
| \$9.00 lut rinder $\$ 10.09$ | 41 | ${ }_{3}^{5}$ | 46 | 12.82 | 4.35 | 14.79 |
| \$10.00 but under $\$ 12.00$ | 54 60 | 2 | 67 | 18.81 | ${ }_{2.89}$ | 15.98 |
| \$12.00 but under ${ }^{\$ 15.00}$ | 60 52 | 2 | 52 | 16.31 |  | 13.45 |
| \$20.00 and over ........ | 27 |  | 27 | 8.44 |  | 6.95 |
| Total | 319 | 69 | 388 | 100.00 | 100.00 | 100.00 |
| Per cent. | 82.22 | 17.78 | 100.00 |  |  |  |

DRUGS.

| Classification of Weekly Earnings. | Number. |  |  | Per Cent. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female | Total. | Male. | Female. | Total. |
| Under $\$ 5.00$ | 65 | 7 | 72 | 28.63 | 41.15 | 29.50 |
| \$5.00 but under \$6.00 .. | 12 | 3 | 15 | 5.29 | 17.64 | 6.19 |
| \$6.00 but under \$7.00 .. | 12 | 2 | 14 | 5.29 4.41 | 11.77 5.89 | 5.74 4.10 |
| \$7.00 but under $\$ 8.00$.. | 10 | 1 | 11 | 8.41 | 11.77 | 8.61 |
| \$8.00 but under $\$ 9.00 \ldots$ | 19 | 2 | 11 9 | ${ }_{3.96}$ |  | ${ }_{3.69}$ |
| \$10.00 but under mut $\$ 10.00 \cdot \ldots$ | 26 |  | 26 | 11.44 |  | 10.66 |
| \$10.00 but under $\$ 12.00$ but under $\$ 15.00$.. | 31 | 1 | 32 | ! 13.66 | 5.89 | 13.10 |
| \$15.00 but under $\$ 20.00$.. | 31 | 1 | 32 | 13.66 | 5.89 | 13.10 |
| \$20.00 and over ........... | 12 |  | 12 | 5.29 |  | 5.31 |
| Total | 227 | 17 | 244 | 100.00 | 100.00 | 100.00 |
| Per cent. | 93.03 | 6.97 | 100.00 |  |  |  |

## DRY GOODS.



FARM IMPLEMEN'TS.

| Classification of Weekly Earnings. | Number: |  |  | Per Cent. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female. | Total. | Male. | Female. | Total. |
| Under $\$ 5.00$ | 3 | 2 | 5 | 3.57 | 100.00 |  |
| \$5.00 but under $\$ 6.00$ | 2 |  | $\stackrel{5}{2}$ | 2.38 | 1....... | ${ }_{2.35}$ |
| \$6.00 but under $\$ 7.00$ | 7 |  | 7 | 8.40 |  | 8.23 |
| \$8:00 but under $\$ 8.00$ | $\stackrel{2}{2}$ |  | 2 | 2.38 |  | 2.32 |
| \$9.00 but under $\$ 10.00$ | 10 20 |  | 10 | 11.90 | .......... | 11.62 |
| \$10.00 but under \$12.00 | 16 |  | 16 | 23.80 19.01 |  | 23.24 |
| \$12.00 but under \$15.00 | 15 |  | 15 | 17.85 |  | 18.56 |
| \$15.00 but under \$20.00 | 8 |  | 8 | 9.52 |  | 17.43 9.28 |
| \$20.00 and over ....... | 1 |  | 1 | 1.19 |  | 1.16 |
| Total | 84 | 2 | 86 | 100.00 | 100.00 | 100.00 |
| Per cent. | 97.68 | 2.32 | 100.00 |  |  |  |

FLƠUR, FEED AND GRAIN.

| Classification of Weekly Earnings. | Number. |  |  | Per Cent. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female. | Total. | Male. | Female. | Total. |
| Under $\$ 5.00 \ldots \ldots . . . .$. | 43 |  |  | 17.48 | 88.00 | 29.39 |
| \$5.00 but under $\$ 6.00$ | 8 | $\stackrel{2}{2}$ | 10 | 3.25 | 88.00 | 39.37 |
| \$7.00 but under $\$$ | 34 49 | ${ }_{2}^{2}$ | 36 | 13.82 | 4.00 | 12.16 |
| \$8.00 but under $\$ 9.00$. | $\stackrel{49}{28}$ | 2 | ${ }_{28}^{51}$ | 19.92 | 4.00 | 17.26 |
| \$9.00 but under $\$ 10.00$ | 29 |  | 129 | 11.38 |  | 9.46 9.79 |
| \$10.00 but under \$12.00 | 22 |  | 22 | 8.94 |  | 7.43 |
| \$12.00 but under \$15.00 | 20 |  | 20 | 8.13 |  | 6.74 |
| \$15.00 but under $\$ 20.00$ | 7 |  | $\begin{array}{r}7 \\ \hline\end{array}$ | $\stackrel{2.85}{2.8}$ |  | 6.74 2.87 |
| $\$ 20.00$ and over | 6 |  | 6 | 2.44 |  | 2.03 |
| Total | 246 | 50 | 296 | 100.00 | 100.00 | 100.00 |
| Per cent. | 83.11 | 16.89 | 100.00 |  |  |  |

FURNITURE.


GENERAL MERCHANDISE.

| Classification of Weekly Earnings. | Number. |  |  | Per Cent. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female | Total | Male. | Female. | Total. |
| Under \$5.00 ............... | 175 | 408 | 583 | 10.68 | ${ }_{21}^{44.93}$ | 22.89 12.68 |
| \$5.00 but under \$6.00.. | 127 | 196 | 323 <br> 314 | 11.53 | 13.77 | 12.33 |
| \$6:00 but under $\$ 7.00$.. | 189 | 125 87 | ${ }_{294} 21$ | 12.63 | 9.58 | 11.54 |
| \$7.00 but under $\$ 8.00 \cdot \cdots$ | 196 | 41 | 237 | 11.95 | 4.52 | 9.31 |
| \$8.00 but under $\$ 9.000 \cdot$ | 196 | $\stackrel{4}{8}$ | 187 | 10.92 | . 86 | 7.34 |
| \$9.00 but under $\$ 10.00 \cdot \cdots$ | 179 | 22 | 259 | 14.44 | 2.42 | 10.18 |
| \$10.00 but under $\$ 12.00$.. | 141 | 11 | 152 | 8.60 | 1.21 | 5.96 |
| \$12.00 but under $\$ 15.00000$ | 142 | 1 3 7 | $\begin{array}{r}145 \\ 143 \\ \hline\end{array}$ | 8.66 2.84 | .34 .78 | 5.69 2.08 |
| \$15.00 but under $\$ 20.00$ and over $\ldots \ldots \ldots$ | 46 | 7 | 53 | 2.84 | . 78 |  |
| Total | 1,639 | 908 | 2,547 | 100.00 | 100.00 | 100.00 |
| Per cent. | 64.35 | 35.65 | -00.00 |  |  |  |
| GROCERIES. |  |  |  |  |  |  |


| Classification of Weekly Earnings. | Number. |  |  | Per Cent. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female. | Total. | Male. | Female. | Total. |
| Under \$5.00 | 22 | 10 | 32 | 9.69 | 30.30 | 12.31 13.09 |
| \$5.00 but under $\$ 6.00$ | 23 | 11 | 34 23 | 10.13 | 21.21 | 8.85 |
| \$6.00 but under $\$ 7.00$ | 16 | 3 | 28 | 11.03 | 9.09 | 10.74 |
| \$7.00 but under $\$ 8.00$ | 21 | $\stackrel{3}{2}$ | 23 | 9.25 | 6.07 | 8.85 |
| \$8.00 but under $\$ 9.00$ | 32 |  | 32 | 14.10 |  | 12.31 |
| \$9.00 but under $\$ 10.00$ | 53 |  | 53 | 23.34 |  | 20.39 |
| \$10.00 but under ${ }^{1200}$ but inder $\$ 15.00$ | 20 |  | 20 | 8.81 |  | 7.69 |
| \$12.00 but under ${ }^{15.00}$ but under $\$ 20.00$ | 10 |  | 10 5 | 4.40 2.20 |  | 3.85 1.92 |
| \$20.00 and over ...... | 5 |  |  |  |  |  |
|  | 227 | 33 | 260 | 100.00 | ${ }^{100.00}$ | 100.00 |
| Per cent. | 87.30 | 12.70 | 100.00 |  |  |  |

IIARDWARE.

| Classification of Weekly Earnings. | (Number. |  |  | Per Cent. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female. | Total. | Male. | Female. | Total. |
| Under $\$ 5.00$ | 25 | 13 | 28 | 5.47 | 13.05 | 5.82 |
| \$5.00 but under $\$ 6.00$ | 15 |  | 20 | 13.28 | 21.74 | 4.10 |
| \$6.00 but under $\$ 7.00$ | 23 | 4 | 27 | 5.01 | 17.37 | 5.61 |
| \$7.00 but under \$8.00 | 46 | 4 | 50 | 10.01 | 17.57 | 10.40 |
| \$8.00 but under ${ }^{\text {d }}$ \$9.00 | 49 84 | 3 | 52 | 10.70 | 13.05 | 10.81 |
| \$10.00 but under \$12.00 | 84 75 | 1 3 | 85 | 18.34 | 4.57 | 17.67 |
| $\$ 12.00$ but under $\$ 15.00$ | 98 |  | 98 | 16.40 | 13.05 | 16.30 |
| \$15.00 but under $\$ 20.00$ | 37 |  | 37 | 21.40 |  | 20.40 |
| \$20.00 and over | 6 |  | 6 | 1.31 |  | 7.69 1.20 |
| Total | 458 | 23 | 481 | 100.00 | 100.00 | 100.00 |
| Per cent. | 95.20 | 4.80 | 100.00 |  |  |  |

JEWELIARS.

| Classification of Weekly Earningis. | Number. |  |  | Per Cent. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female. | Total. | Male. | Female. | Total. |
| Under $\$ 5.00$..... | 6 | 6 | 12 | 15.38 | 50.00 | 23.50 |
| \$5.00 but under $\$ 6.00$ | 4 | 3 | 7 | 10.24 | 20.00 | 13.73 |
| \$6.00 but under \$ $\$ 7.00$ | 1 |  | 1 | 2.56 |  | 1.96 |
| $\$ 7.00$ $\$ 8.00$ but under buder | 2 |  | $\stackrel{2}{2}$ | 5.12 |  | 3.92 |
| \$9.00 but under $\$ 16.00$ | ${ }_{1}^{6}$ | 3 | 9 | 15.38 | 25.00 | 17.66 |
| \$10.00 but under $\$ 12.00$ | 5 |  | 5 | 2.56 | ...... | 1.96 |
| \$12.00 but under \$15.00 | 8 |  | 8 | 20.48 | ....... | 9.80 |
| \$15.00 but under \$20.00 | 3 |  | 3 | 7.69 |  | 15.69 |
| \$20.0) and over | 3 |  | 3 | 7.69 |  | 5.89 5.89 |
| Total | 39 | 12 | 51 | 100.00 | 100.00 | 100.00 |
| Per cent. | 76.46 | 23.54 | 100.00 |  |  |  |

LUMBER.

| Classification of Weekly tiarnings. | Number. |  |  | Per Cent. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female. | Total. | Male. | Female. | ; Total. |
| Under $\$ 5.00 \ldots \ldots . .$. | 13 | 5 | 18 | 1.28 | 100.00 | 1.79 |
| $\$ 5.00$ but under $\$ 6.00$ | 3 |  | ${ }^{18}$ | 1.30 |  | 1.29 |
| \$6.00 but under $\$ 7.00$ | 193 |  | 193 | 18.98 |  | 18.89 |
| \$7.00 but under $\$ 8.00$ | 235 |  | 235 | 23.11 |  | 22.94 |
| \$8.00 but under ${ }^{\$ 9.00}$ but under $\$ 1000$ | 153 |  | 153 | 15.04 |  | 14.98 |
| \$10.00 but under \$12.00 | 185 |  | 94 185 | 9.24 18.19 | . | 9.19 |
| \$12.00 but under \$15.00 | 111 |  | 111 | 10.91 |  | 18.13 |
| \$15.00 but under \$20.00 | 20 |  | 20 | 1.97 |  | 10.86 |
| $\$ 20.00$ and over | 10 |  | 10 | . 98 |  | . 97 |
| Total | 1,017 | 5 | 1,022 | 100.00 | 100\|00 | 100.00 |
| Per cent. | 99.51 | . 49 | 100.00 |  |  |  |

MISCELLANEOUS.

| Classifijation of Weekly Earnings. | Number. |  |  | Per Cent. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female. | Total. | Male | Female. | Total. |
| Under \$5.00 | 53 | 40 | 93 | 8.70 | 37.38 | 12.99 |
| \$5.00 but under $\$ 6.00$ | 28 | 23 | 51 | 4.60 | 21.50 | 7.15 |
| \$6.00 but under $\$ 7.00$ | 21 | 17 | 38 | 3.45 | 15.89 | 5.30 |
| \$7.00 but under $\$ 8.00$ | 43 | 9 4 | ${ }_{41}$ | 6.08 | ${ }_{3} 8.44$ |  |
| \$8.00 but under $\$ 9.00$ | 37 | 4 | ${ }_{123}^{41}$ | 6.08 19.70 | 3.74 3.80 | 5.74 |
| \$9.00 but under $\$ 10.00$ | 120 | 3 7 | 123 | 19.70 16.75 | $\stackrel{3}{6.54}$ | 17.14 |
| \$10.00 but under $\$ 12.00$ | 102 | 7 | 109 95 | 14.94 | 3.74 | 13.29 |
| \$15.00 but under \$20.00 | 75 |  | 75 | 12.31 |  | 10.47 |
| \$20.00 and over ........ | 89 |  | 39 | 6.41 |  | 5.44 |
| Total | 609 | 107 | 716 | 100.00 | 100.00 | 100.00 |
| Per cent. | 85.06 | 14.94 | 100.00 |  |  |  |

The foregoing tables furnish a fairly good description of the classified earnings in the industries included. It is true that they do not give the absolute earnings of each person, nor do they permit of exact comparisons. But this is almost out the question under any method of description yet discovered. The number of persons who receive wages is so great, and the rate of wages and time of employment vary so much that exact measurements are seldom possible. The description presented, however, is as nearly complete as any that could have been given under the circumstances. It is not only a possible picture of the situation at the time, but the account is complete enough to furnish the necessary means for comparing the condition in these industries with that of others.

The tables have been combined into one, and the result of this combination is as follows:

TOTAL NUMBER AND PER CENT. OF MALES AND FEMALES RECEIVING CLASSIFIED WEEKLY EARNINGS.

| Classification of Weekly Earnings. | Number. |  |  | Per Cent. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Female. | Total. | Male. | Female. | Total. |
| Under $\$ 5.00 \ldots \ldots . . . . . .$. | 540 | 865 | 1,405 | 9.55 | 44.70 | 18.50 |
| \$5.00 but under $\$ 6.00$.. | 284 | 405 | 1,689 | 5.03 | 20.93 | 18.00 9.07 |
| \$6.00 but under \$7.00 .- | 556 | 273 | 829 | 9.81 | 14.11 | 10.91 |
| \$ $\$ .00$ but under ${ }^{\text {a }}$ ( $\$ 8.00$ | 689 592 | 157 | 846 | 12.18 | 8.11 | 11.14 |
| \$9.00 but under $\$ 10.00$ | 692 | ${ }_{34}^{92}$ | 684 | 10.46 | 4.76 | 9.12 |
| \$10.00 but under \$12.00 .. | 894 | 54 | ${ }_{946}$ | 15.32 | 1.76 | 9.63 |
| \$12.00 but under \$15.00 . | 755 | 32 | 787 | 13.34 | 1.69 | 12.46 |
| \$15.00 but under $\$ 20.00$.. | 457 | 10 | 467 | 13.34 8.08 | 1.65 | 10.26 |
| \$20.00 and over | \| 195 | 15 | 210 | 3.44 | . 77 | ${ }_{2.76}$ |
| Total | 5,659 | 1,935 | 7,594 | 100.00 | 100.00 | 100.00 |
| Percentages | 74.52 | 25.48 | 100.00 |  |  |  |

Having combined the 14 tables into one there is necessarily this result that the combination table will show the condition as a whole.

Among the first things to be noted in the above table is the total number of persons included in it. The total number of persons was 7,594 . Of these, 5,659 , or 74.52 per cent., were males, and 1,935, or 25.48 per cent. were females. About threefourths of those who are employed in the retail stores in this state are thus seen to be male persons.

The table as a whole is a good illustration of the earnings of those who are employed in the various mercantile establishments in this state. It also affords many opportunities for comparisons not only as between the males and females, but as between the earnings here and those of other occupations as given in this report. In order that it may be even more valuable from this point of view the table has been reduced into a still smaller form.

| Classification of Weekly Earnings. | Number. |  |  | Per Cent. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female. | Total. | Male. | Female. | Total. |
| Under $\$ 5.00$ per week | 540 | 865 | 1,405 | 9.55 | 44.70 | 18.50 |
| \$5.00 but under $\$ 7.00 \times$ | 840 | ${ }_{249}^{678}$ | 1,518 | 14.18 | 35.04 | 19.98 |
| \$7.00 but under ${ }^{\$ 9} 9.00$. | 1,281 | 249 86 | 1,530 | 22.64 | 12.87 | 22.09 |
| \$12.00 and over ........ | 1,407 | 57 | 1,464 | 24.86 | 2.94 | 19.07 |
| Total | 5,659 | 1,935 | 7,594 | 100.00 | 100.00 | 100.00 |

Here the table whhich includes all of the 14 industries has been reduced to a still smaller compass. This reduction was brought about by combining the classifications of earnings, so that these classes as they now stand are much fewer in number than is the case before the reduction was made. The purpose of this is, as has already been alluded to, to bring the facts into a form where they could be more easily studied and compared.

Dropping the number and taking up the percentages we find first that 9.55 per cent. of the males $; 44.70$ per cent. of the females, and 18.50 per cent. of the total for both received less than $\$ 5$ per week. This is the lowest class among those in which the earnings were divided; and it is worth noticing that while it included less than ten per cent. of the male persons, it has nearly 45 per cent. of the females. This is certainly a wide discrepancy and illustrates perhaps as forcibly as any figures that could be named the great difference that exists between the earnings of men and women even where they are engaged in the same kind of work.

Another step down the table and the second class, that of $\$ 5$ but under $\$ 7$ is reached. Here were found 14.18 per cent. of the male persons, 35.04 per cent. of the female, and 19.98 per cent. of the total. The difference in the earnings as between the two sexes was still very marked but not quite as much so as in the preceding class.

The third class that of $\$ 7$ but under $\$ 9$ includes 22.64 per cent. of the male persons, 12.87 per cent. of the female and 20.06 per cent. of the total. Here the situation had been reversed. In the two classes which preceded the proportion of females had been the largest, but in this case the males were in the lead and
very perceptibly so, though as a whole the two were closer together than in any other class.

In the class $\$ 9$ but under $\$ 12$ the relation was males 28.11, females 4.45 ; and total 22.09 per cent. At this point the earnings may be said to have been fair. The proportion of female persons in this class was extremely small.

The last class, $\$ 12$ and over, had still fewer females, in fact they amounted only to a little less than three per cent. Even the male persons show a decrease from the preceding class and the proportion is only at 24.86 per cent., while the total of both was 19.07 per cent.

It is further apparent that earnings at the rate of $\$ 1.50$ per day and over was received by 2,998 , or 52.97 per cent. of the male persons ; by 143 or 7.39 per cent. of the female persons; and 3,141 , or 41.16 per cent. of the total of both sexes.

These facts show not only that there is a great difference between the earnings of male and female persons even in mercantile establishments, but they indicate approximately at least the amount of this difference. Regarding the causes why the standard of earnings is so much higher for the men nothing is revealed, nor is this within the scope of this investigation.

In the following three tables an attempt has been made to so present the per cent. of the male, female, and total persons, respectively, by industries, that at least a rough comparison of the facts for each industry might be made possible.

SIIOWING, BY INDUSTRIES, THE PER CENT. OF MALE PERSONS RECEIVING CLASSIFIED WEEKLY EARNINGGS.

| Classification. | Under $\$ 5.00$. | $\$ 5.00$ but under \$7.00. | $\$ 700$ but under $\$ 9.00$. | $\begin{array}{\|} \$ 9.00 \mathrm{but} \\ \text { under } \\ \$ 12.00 . \end{array}$ | $\begin{gathered} \$ 12.00 \\ \text { and } \end{gathered}$ over. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Boots and shoes | 12.72 | 18.18 | 15.46 | 32.73 | 30.91 |
| Butchers | 4.17 | 12.49 | 29.16 | 38.90 | 15.28 |
| Clothing | 7.24 | 10.02 | 9.40 | 29.78 | 43.56 |
| Drugs | 28.63 | 10.58 | 12.78 | 15.40 | 32.61.. |
| Dry goods | 27.99 | 11.92 | 11.57 | 16.05 | 32.47 |
| Farm implements | 3.57 | 10.78 | 14.28 | 42.81 | 28.56 |
| Flour, feed, etc. | 17.48 | 17.07 | 31.30 | 20.73 | 13.42 |
| Furniture ... | 5.81 | 11.62 | 12.80 | 29.07 | 40.70 |
| General merchandise | 10.68 | 19.28 | 24.58 | 25.36 | 20.10 |
| Groceries | 9.69 | 17.18 | 20.28 | 37.44 | 15.41 |
| hardware | 5.47 | 8.29 | 20.71 | 34.74 | 30.79 |
| Jewelry | 15.38 | 12.80 | 20.50 | 15.46 | 35.86 |
| Iumber, retail | 1.28 | 19.28 | 38.15 | 27.43 | 13.86 |
| Miscellaneous | 8.70 | 8.05 | 13.14 | 36.45 | 33.66 |
| All industries | 9.55 | 14.18 | 22.64 | 28.11 | 24.86 |

SHOWING, BY INDUSTRIES, THE PER CENT. OF FEMALE PERSONS RECEIVING CLASSIFLED WEEKLY EARNINGS.


bHUWING, BY INDUSTRIES, THE PER CENT. OF THE TOTAL PERSONS RECEIVING CLASSIFIED WEEKLY EARNINGS.

| Classification. | $\begin{aligned} & \text { Under } \\ & \$ 5.00 . \end{aligned}$ | $\begin{gathered} \$ 500 \text { but } \\ =\text { under } \\ \$ 7.00 . \end{gathered}$ | $\$ 7.00$ but under $\$ 8.00$. | $\$ 9.00$ but under $\$ 12.00$ | $\begin{gathered} \$ 12.00 \\ \text { and } \\ \text { over. } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Boots and shoes | 14.17 | 14.09 | 14.95 | 29.92 | 26.87 |
| Butchers | 7.67 | 12.82 | 28.21 | 35.90 | 15.38 |
| Clothing | 10.82 | 15.85 | 10.31 | 26.64 | 36.38 |
| Drugs . | 29.50 | 11.93 | 12.71 | 14.35 | 31.51 |
| Dry goods | 40.85 | 27.90 | 11.24 | 7.95 | 12.06 |
| Farm implements | 5.81 | 10.58 | 13.94 | 41.80 | 27.87 |
| Flour, feed, etc. | 29.39 | 15.53 | ${ }_{12} 26.72$ | 17.22 | 11.14 |
| Furniture | 6.77 | 13.47 | 12.35 | 28.08 | 39.33 |
| General merchandise | 22.89 | 25.01 | 20.85 | 17.52 | 13.73 |
| Groceries | 12.31 | 21.94 | 19.59 | 32.70 | 13.46 |
| Hardware | 5.82 | 9.71 | 21.21 | 33.97 | 29.29 |
| Jewelry | 33.50 | 15.69 | 21.58 | 11.76 | 27.47 |
| Lumber, retail | 1.79 | 19.18 | 37.92 | 37.32 | 13.79 |
| Miscellaneous | 12.99 | 12.45 | 13.03 | 32.33 | 29.20 |
| Total | 18.50 | 19.98 | 20.06 | 22.09 | 19.07 |

While the above tables are intended as a comparison of the earnings in the various industries it is not claimed for them that they will show the exact difference in the earnings that is plainly detected as between these industries. Some of the reasons why the earnings as a whole cannot be measured down to the last fraction have already been mentioned. One thing, however, the tables do show and that is the per cent. of persons in each class. This, at the first glance, may not be regarded as of great importance. Upon a closer study, however, it will appear in a different light. It will be discovered that a comparison and study
of the classes will gradually lead to development of the situation as a whole, and thus in the end disclose what is after all the real standard of earnings in each case.

What has thus been said might be easily illustrated in various ways. Take dry goods and farm implements for example and a notable difference in the earnings in two cases will at once be discovered. In the lowest class in the table for the total, that of $\$ 5$ and under, are 40.85 per cent. of those who were employed in the dry goods line and only 5.81 per cent. of those who were employed in the farm implement line. These figures of themselves without any further inquiry would almost be sufficient for the forming of a judgment. But going to the next lowest class and it is found that the facts there simply confirm what has already been pointed out in the lowest class. In class $\$ 7$ but under $\$ 9$, made up mostly of those whose rate of wages was $\$ 1.25$, the per cent. of those in the farm implement business was 13.94 as against 11.24 in the dry groods line. In the class $\$ 9$ but under $\$ 12$, farm implements show almost six times as large a proportion as dry goods and in the last or highest class more than twice the proportion. But in other words these comparisons show that in dry goods the proportion of those employed largely predominate in the two classes for the lowest earnings, while for farm implements the proportion is much greater in the three higher classes of earnings. From this fact alone it is plain that the earnings were much higher in the farm implement line than in dry goods. It is of course a fact that in industries where the earnings were more nearly the same than was the case in the two which have just been used as illustrations such comparisons as those given are somewhat less of a success, but even in such cases the difference can usually be detected.

In the foregoing pages has thus been shown the "classified weekly earnings" in 14 retail mercantile lines. The facts included in this were presented both in tabular and textual form, and in this manner the condition in question is quite fully described. What has thus been shown may be regarded as the first part of this investigation.

The second part is next in order. This part relates to the number of persons employed by months and to the range of em-
ployment and unemployment. The range of employment is an important factor in the earnings and vitally affects the well being of the wage-earners. No statement of earnings or description of the conditions of labor can possibly be complete without some facts bearing upon the time it is possible to find something to do, or to keep employed.

BOUTS AND SHOES.
Persons Employed, by Months, and the Range of Employment and Unemployment in 1900 .

| Months. | Male. | Range of employmeut. Per cent. | Range of unemployment. Yer cent. |
| :---: | :---: | :---: | :---: |
|  | 116 | 96.67 | 3.33 |
| January | 114 | 95.00 | 5:00 |
| March ... | 114 | 95.00 | 5.00 |
| April .... | 114 | ${ }_{95}^{95.00}$ | $\stackrel{5}{5.00}$ |
| May ..... | 114 | 95.00 | 5.00 |
| June | 116 | 96.67 | 3.33 |
| July ........ | 116 | 96.67 | 3.33 |
| August .... | 117 | 97.50 | 2.50 |
| September | 117 | 97.50 | 2.50 |
| October ${ }^{\text {November }}$ | 120 | 100.00 | . 00 |
| December | 120 | 100.00 | . 00 |
| Average | 116 | 96.97 | 3.33 |

BU'LCHERS.
Persons Employed, by Months, and the Range of Employment and Unemployment in 1900.

| Months. | Male. | Range of employment. Per cent. | Range of unemployment. Per cent. |
| :---: | :---: | :---: | :---: |
| January | 71 | 98.61 | 1.39 |
| February | 71 | ${ }_{98.61}^{98.61}$ | 1.: $\%$ |
| March . | 72 | 100.00 | . 00 |
| April | 68 | 94.45 | 5.55 |
| May ...... | 68 | 94.45 | 5.55 |
| July …… | 71 | 98.61 | 1.39 |
| August .... | 71 70 | ${ }_{97}^{98.61}$ | 2.78 |
| September | 72 | 100.00 | . 00 |
| October .. | 72 | 100.00 | .00 |
| November | 72 | 100.00 | . 00 |
| Average | 71 | 98.61 | 1.39 |

## CLOTHING.

Persons Employed, by Months, and the Range of Employment and
Unemployment in 1900.

| Months. | Male. | Range of employment. Per cent. | Range of unemployment. Per cent. |
| :---: | :---: | :---: | :---: |
| January | 315 | 78.55 |  |
| March ${ }^{\text {February }}$ | 311 | 7.56 | 22.44 |
| April | 315 | 78.55 | 21.45 |
| May | 323 | 80.05 | 19.95 |
| June | 320 | ${ }_{79} 80$ | 19.45 |
| July ..... | 313 | 78.05 | ${ }_{20} 2.20$ |
| August ${ }_{\text {September }}$ | 316 | 78.80 | 21.20 |
| September | 380 | 94.76 | 5.24 |
| October N ( ${ }^{\text {Ovember }}$ | 401 | 100.00 | 5. 00 |
| Necember | 388 | 96.76 | 3.24 |
| December | 389 | 97.01 | 2.99 |
| Average | 341 | 85.04 | 14.96 |

DRY GOODS.
Persons Employed, by Months, and the Range of Employment and Unemployment in 1900.

| Months. | Male | Range of employment. Per cent. | Range of unemployment. Per cent. |
| :---: | :---: | :---: | :---: |
| January | 729 |  |  |
| February | 729 | 80.02 | 19.98 19.98 |
| March | 742 | 81.45 | 18.55 |
| April | 780 | 85.62 | 14.38 |
| June | 790 | 86.72 | 13.28 |
| July | 787 | 86.39 | 13.61 |
| Angust | 724 | 80.68 79.47 | 19.32 |
| Sentember | 790 | 86.72 | 20.53 |
| October . | 843 | 86.72 92.54 | 13.28 7.46 |
| November | 868 | 95.40 | 7.46 4.60 |
| December | 911 | 100.00 | . 00 |
| Average | 786 | 86.28 | 13.72 |

## DRUGS

Persons Employed, by Months, and the Range of Employment and

| Months. | Male. | Range of employment. Per cent. | Rance of unemployment. Per cont. |
| :---: | :---: | :---: | :---: |
| January | 224 | 95.32 | 4.68 |
| February | 224 | 95.32 | 4.68 |
| April ... | 224 | 95.32 | 4.68 |
| May . | 226 | 96.17 | 3.83 |
| June | 234 | 99.57 | 1.70 |
| July | 235 | 100.00 | . 43 |
| August ... | 235 | 100.00 | . 00 |
| September | 224 | 99.57 | . 48 |
| October ${ }^{\text {November }}$ | 227 | 96.60 | 3.40 |
| November | 228 | 97.02 | 2.98 |
| December | 235 | 100.00 | . 00 |
| Average | 230 | 97.87 | 2.13 |

FARM IMPLEMENTS.
Persons Employed, by Months, and the Range of Employment and Unemployment in 1900.

| Months. | Ma!e. | Range of employment. Yer cent. | Range of unemployment. 1 tr cent. |
| :---: | :---: | :---: | :---: |
|  | 49 | 65.33 | 34.67 |
| February . . | 46 | 61.33 | 38.67 |
| March ..... | 63 | 84.00 85.33 | 14.67 |
| April ...... | 64 64 | 85.33 85.33 | 14.67 |
| May ......... | 75 | 100.00 |  |
| June | 73 | 97.33 | 2.67 |
| August ...... | 60 | 80.00 89.33 | 10.67 |
| September | 63 | 89.00 80 | 16.00 |
| October ${ }^{\text {November }}$ | 60 | 80.00 | 20.60 |
| November | 47 | 62.67 | 37.33 |
| Average | 61 | 81.33 | 18.67 |

FLOUR, FEED AND GRAIN.
Persons Employed, by Months, and the Range of Employment and Unemployment in 1900 .

| Months. | Male. | Range of employment. Per cent. | Rance of unemplorment. Per cent. |
| :---: | :---: | :---: | :---: |
|  | 159. | 78.33 | 21.67 |
| Fanuary | 154 | 75.86 | 24.14 |
| March ... | 157 | 77.34 | 22.66 |
| April . | 167 | 82.27 80.30 | 17.70 |
| May | 1203 | 100.00 |  |
| June | 160 | 78.82 | 21.18 |
| Jugnst .... | 173 | 85.22 | 14.78 |
| $\underset{\text { September }}{ }$ | 195 | 96.06 | 3.94 |
| October ... | 188 | 92.61 | 7.39 |
| November | +168 | 88.76 | 17.24 |
| December |  |  |  |
| Average : | 172 | 84.73 | 15.27 |

FURNITURE.
Persons Employed, by Months, and the Range of Employment and Unemployment, in 1900.

| Months. | Male | Range of employment. Per cent. | Range of unemployment. Yer cent. |
| :---: | :---: | :---: | :---: |
| January | 329 | 95.36 | 4.64 |
| February | 325 | 94.20 | 5.80 |
| March | 330 | ${ }_{97} 95.65$ | ${ }_{2} .61$ |
| April | 336 334 | ${ }_{96.81}^{97.39}$ | 3.19 |
| May | - 40 | 98.55 | 1.45 |
| June | ${ }_{320}$ | 92.75 | 7.25 |
| July . | 322 | 93.33 | 6.67 |
| August ${ }_{\text {September }}$ | 325 | 94.20 | 5.80 |
| October | 333 | 96.52 | 3.48 |
| November | 335 345 | 97.10 100.00 |  |
| Décember |  |  |  |
| Average | 331 | 95.94 | 4.06 |

GENERAL MERCHANDISE.
Persons Employed, by Months, and the Range of Employment and Unemployment, in 1900.

| Months. | Male. | Range of employment. Per cent. | Range of unemployment. Per cent. |
| :---: | :---: | :---: | :---: |
| January |  |  |  |
| February | 1,937 | 83.89 | 16.11 |
| April | 1,956 | 84.71 | 15.29 |
| Mray . | + ${ }^{1,986}$ | 86.01 | 13.99 |
| June | 2,055 | 89.92 | 12.08 |
| July .- | 2,061 | ${ }_{89.26}$ | 11.00 |
| August ... | 2,042 | 88.44 | 11.56 |
| September | 2,067 | 89.52 | 10.48 |
| November | $\stackrel{2,176}{2,202}$ | 94.24 | 5.76 |
| December | 2,309 | 95.37 100.00 | 4.63 |
| Average | 2,064 | 89.39 | 10.61 |

GROCERIES.
Persons Employed, by Months, and the Range of Employment and Unemployment, in 1900.

| Months. | Malo. | Range of employment. Yer cent. | Range of unemployment. Per cent. |
| :---: | :---: | :---: | :---: |
| January | 237 | 96.34 | 3.66 |
| March | 236 | 95.93 | 4.07 |
| April .... | 234 | 95.12 | 4.88 |
| May . | 236 | 95.93 | 4.07 |
| June | 241 | ${ }_{97} 97.15$ | 2.85 |
| July . | 244 | 99.20 | 2.03 .80 |
| August | 246 | 100.00 | . 80 |
| September | 246 | 100.00 |  |
| November | 246 | 98.78 100.00 | 1.22 |
| December | 245 | 99.59 | . 41 |
| Average | 241 | 97.97 | . 2.03 |

## HARDWARE.

Persons Employed, by Months, and the Range of Employment and Unemployment, in 1900.

| Months. | Male. | Range of employment. Per cent. | Range of unemployment. Per cent. |
| :---: | :---: | :---: | :---: |
| January | 411 |  |  |
| February | 415 | 94.32 | 5.68 |
| March | 413 | 93.86 | 6.14 |
| April May | 418 | 95.00 | 5.00 |
| May | 425 | 96.59 | 3.41 |
| June | 433 | 96.14 | 3.86 |
| ${ }_{\text {Aupust }}$ | 435 | 98.86 | 1.14 |
| August ${ }_{\text {September }}$ | 435 | 98.86 | 1.14 |
| September October | 430 | 97.73 | 2.27 |
| N'ovember | 440 | 100.00 07 |  |
| December | 414 | 94.09 | 2.27 5.91 |
| Average | 424 | 96.36 | 3.64 |

JEWELERS.
Persons Employed, by Months, and the Range of Employment and Unemployment, in 1900.

| Months. | Male. | Range of employment. Per cent. | Range of unemployment. Per cent. |
| :---: | :---: | :---: | :---: |
| January | 43 | 84.31 | 15.69 |
| February | 41 | 80.39 | 17.61 |
| March . | 42 | 82.35 82.35 | 17.65 |
| April ... | 42 | 88.35 | 17.65 |
| May . | 42 | 82.35 | 17.65 |
| July : | 42 | 82.35 | 17.65 |
| August | 42 | 82.35 | 17.65 |
| September | 42 | 82.35 82.35 | 17.65 |
| October .... <br> November | 44 | 88.27 | 13.73 |
| December | 61 | 100.00 |  |
| Average | 43 | 84.31 | 15.69 |

LUMBER.
Persons Employed, by Months, and the Range of Employment and Unemployment, in 1900.

| Months. | Male. | Range of employment. Per cent. | Range of unemployment. Per cent. |
| :---: | :---: | :---: | :---: |
| January | 789 | 93.82 | 6.18 |
| February | 846 | 100.00 90.84 | 9.16 |
| Maril | 466 | 55.41 | 44.59 |
| May . | 547 | 65.04 | 34.96 |
| June | 519 | 61.71 | 38.29 |
| July | 511 | ${ }_{6} 60.76$ | 39.24 |
| August ${ }_{\text {S }}$ | 535 534 | 63.61 63.50 | 36.50 |
| September | 740 | 87.99 | 12.01 |
| November | 734 | 87.28 | 12.72 |
| December | 682 | 81.09 | 18.91 |
| Average | -639 | 75.98 | 24.02 |

## MISCELLANEOUS.

Persons Employed, by Months, and the Range of Employment and Unemployment, in 1900.

| Months. | Male. | Range of employment. Per cent. | Range of unemployment. Per cent. |
| :---: | :---: | :---: | :---: |
| January | 486 | 69.13 | 30.87 |
| February | 503 | 71.55 | ${ }_{28}^{28.45}$ |
| March ... | - 502 | 74.68 | 25.32 |
| April | 545 | 77.52 | 22.48 |
| May . . | 541 | 76.96 | 23.04 |
| July | 584 | 83.07 | 16.93 |
| August.... | 590 | 83.93 | 16.07 |
| September | 591 607 | 84.07 86 | 15.93 |
| October ${ }^{\text {November }}$ | $\stackrel{6078}{678}$ | 86.34 96.44 | 13.66 3.56 |
| December | 703 | 100.00 |  |
| Average | 571 | 81.22 | 18.78 |

## BOOTS AND SHOES.

Persons Employed, by Months, the first six months in 1901, and the Range of Employment and Unemployment.

| Months. | Male | Range of employment. Per cent. | Range of unemployment. Per cent. |
| :---: | :---: | :---: | :---: |
| January | 119 |  |  |
| February | 120 | 95.24 | ${ }_{4.76}$ |
| March | 120 | 95.24 | 4.76 |
| April | 123 | 97.62 | 2.38 |
| June . | 124 | 98.41 100.00 | 1.59 |
| Average | 122 | 96.83 | 3.17 |

## BUTCHERS.

Persons Employed, by Months, the first six mon'ths in 1901, and the Range of Employment and Unemployment.

| Months. | Male. | $\begin{aligned} & \text { Range of } \\ & \text { employment. } \\ & \text { Per cent. } \end{aligned}$ | Range of unemployment. Per cent. |
| :---: | :---: | :---: | :---: |
| January |  |  |  |
| February | 74 | 98.67 | 1.33 |
| March | 74 | 98.67 | 1.33 |
| May ... | 71 | 100.00 94.67 |  |
| June | 71 | 94.67 | $\begin{aligned} & 5.33 \\ & 5.33 \end{aligned}$ |
| Average | 73 | 97.33 | 2.67 |

## CLOTHING.

Persons Employed, by Months,' the first six months in 1901, and the Range of Employment and Unemployment.

| Months. | Male. | Range of employment. Per cent. | Range of unemployment. Per cent. |
| :---: | :---: | :---: | :---: |
| January | 387 |  |  |
| February | 377 | 94.25 | ${ }_{5} .75$ |
| March | 386 | 96.50 | 3.50 |
| May . | 393 | 98.25 | 1.75 |
| June | 398 400 | 99.50 100.00 | . 50 |
| Average | 390 | 97.50 | 2.50 |

## DRY GOODS.

Persons Employed, by Months, the first six moniths in 1901, and the Range of Employment and Unemployment.

| Months. | Male. | Range of employment. Per cent. | Range of unemployment. Per cent. |
| :---: | :---: | :---: | :---: |
| January | 762 | 88.40 | 11.60 |
| February | 765 | 88.75 | 11.25 |
| March .. | 768 | ${ }^{89} .60$ | 10.99 |
| April | 856 | 99.30 | . 6 |
| May | 884 | 19.26 | 1.74 |
|  |  |  |  |
| Average | 810 | 93.97 | 6.03 |

## DRUGS

Persons Employed, by Months, the first six months in 1901, and the Range of Employment and Unemployment.

| Months. | Male | Range of employment. Per cent. | Rance of unemployment. Per cent. |
| :---: | :---: | :---: | :---: |
| Tanuary | 228 | 93.06 | 6.94 |
| Fehruary | 228 | 93.06 | 6.94 |
| March | 228 | 93.06 | 6.94 |
| Anril May . | 234 | ${ }_{96}^{95.73}$ | 4.49 3.27 |
| June | 245 | 100.00 |  |
| Average | 233 | 95.10 | 4.90 |

## FARM IMPLEMENTS.

Persons Employed, by Months, the first six months in 1901, and the Range of Employment and Unemployment.

| Months. | Male. | Rance of employment Per cent. | Rance of unemployment Per sent. |
| :---: | :---: | :---: | :---: |
| January | 48 | 63.16 | 26.84 |
| February | 48 | 63.16 | 36.84 |
| March .. | ${ }_{6} 59$ | 77.63 88 | 17.11 |
| April | 63 66 | 82.89 86.84 | 13.16 |
| May | 66 76 | 100.00 |  |
| Average | 60 | 78.95 | 21.05 |

FLOUR, FEED, GRAIN.
Persons Employed, by Months, the first six months in 1901, and the Range of Amployment and Unemployment.

| 4tamim Months. | Male. | Range of employment. Fer cent. | Range of unemployment. Per cent. |
| :---: | :---: | :---: | :---: |
| January | 136 | 67.66 | 32.34 |
| February | 137 | 68.16 | 31.84 |
| March | 138 | 68.66 | 31.34 |
| April . | 144 | 71.64 | 28.36 |
| May | 159 | 79.10 | 20.90 |
| June | 201 | 100.00 |  |
| Average | 153 | 76.12 | 23.88 |

## FURNITURE.

Persons Employed, by Months, the first six months in 1901, and the Range of Employment and Unemployment.

| Months. | Male. | Range of employment. Per cent. | Range of unemployment. Per cent. |
| :---: | :---: | :---: | :---: |
| January | 315 | 96.63 | 3.37 |
| February | 309 | 94.79 | 5.21 |
| March | 311 | 95.40 | 4.60 |
| April | 325 | 99.69 | . 31 |
| May | 324 | 99.39 | . 61 |
| June | 326 | 100.00 |  |
| Average | 818 | 97.55 | 2.45 |

GENERAL MERCHANDISE.
Persons Employed, by Months, the first six months in 1901, and the Range of Employment and Unemployment.

| Months. | Male. | Range of employment. Per cent. | Range of unemp oyment. Per cent. |
| :---: | :---: | :---: | :---: |
| January | 2,163 | 93.39 | 6.61 |
| February | 2,131 | 92.01 | 7.99 |
| March . | 2,060 | 88.95 | 11.05 |
| April | 2,222 | 95.94 | 4.06 |
| May | 2,230 | 96.29 | 3.71 |
| June | 2,316 | 100.00 |  |
| Average | 2,187 | 94.43 | 5.57 |

## GROCERIES.

Persons Employed, by Months, the first six months in 1901, and the Range of Employment and Unemployment.

| Months. | Male. | Range of employment. Per cent. | Range of unemploy ment. Per cent. |
| :---: | :---: | :---: | :---: |
| January : | 242 | 97.98 | 2.02 |
| February | 241 | 97.57 | 2.43 |
| March | 242 | 97.98 | 2.02 |
| April | 244 | 98.79 | 1.21 |
| May | 245 | 99.19 | . 81 |
| June | 247 | 100.00 |  |
| Averages | 244 | 98.79 | 1.21 |

## HARDWARE

Persons Employed, by Months, the first six months in 1901, and the Range of Employment and Unemployment.

| Months. | Male. | Range of employment. Per cent. | Kange of unemployment. Per cent. |
| :---: | :---: | :---: | :---: |
| January | 426 | 94.67 | 5.33 |
| February | 431 | 95.78 | 4.22 |
| March | 428 | 95.11 | 4.89 |
| April . | 443 | 98.44 | 1.56 |
| May | 450 | 100.00 |  |
| June | 450 | 100.00 |  |
| Average | 438 | 97.33 | 2.67 |

## JEWELERS.

Persons Employed, by Months, the first six months in 1901, and the Range of Employment and Unemployment.

| Months. | Male. | Range of employment. Per cent. | Range of unemployment. Per cent. |
| :---: | :---: | :---: | :---: |
| January | 45 | 100.00 |  |
| February | 44 | 97.78 | 2.22 |
| March | 44 | 97.78 | 2.22 |
| May | 44 | 97.78 | ${ }_{2}^{2.22}$ |
| June | 44 | 97.78 | 2.22 |
| Average | 44 | 97.78 | 2.22 |

## LUMBER.

Persons Employed, by Months, the first six months in 1901, and the Range of Employment and Unemployment.

| Months. | Male. | Range of employment. Per cent. | Range of unemployment. Per cent. |
| :---: | :---: | :---: | :---: |
| January | 735 | 76.17 | 23.83 |
| February | 965 | 100.00 |  |
| March ... | 806 | 83.52 | 16.48 |
| April | 501 | 51.92 | 48.08 |
| May | 541 | 56.06 | 43.94 |
| June | 485 | 50.26 | 49.74 |
| Average | 672 | 69.64 | 30.36 |

MISCELLANEOUS.
Persons Employed, by Months, the first six months in 1901, and the Range of Employment and Unemployment.

| Months. | Male. | Range of employment. Per cent. | Range of unemployinent. Per cent. |
| :---: | :---: | :---: | :---: |
| January | 579 | 97.15 | 2.85 |
| February | 572 | 95.97 | 4.03 |
| March ... | ${ }_{592}$ | ${ }_{99}^{96.64}$ | 3.36 |
| May . | 583 | ${ }_{97.82}^{99.83}$ | 2.18 |
| June | 596 | 100.00 |  |
| Average | 583 | 97.82 | 2.18 |

In the preceding two series of tables has thus been shown the number of persons employed by months, and the range of employment in 14 mercantile industries in this state for the year 1900 and for the first six months of 1901 . There are thus two tables for each industry, one being devoted to facts for the former year, and one to those of the latter.

These tables are important. They show for each industry not only the number employed in each, but the extent of the variations in this respect from month to month. They are also made up in such a way that they may be readily studied and compared.

The following table includes all the industries for 1900 and hence constitutes a sort of a summary of the facts. for this year.

ALL INDUSTRIES.
Total Persons Employed by Months, and Range of Employinent and Unemployment, in 1900.

| Months. | Total number employed. | Rance of employment. Per cent. | Range of unemployment. Per cent. |
| :---: | :---: | :---: | :---: |
| January | 5,903 | 88.22 | 11.78 |
| February | 5,931 | 88.73 | 11.27 |
| March | 5,927 | 88.59 | 11.41 |
| April | 5,753 | 85.98 | 14.02 |
| May | 5,915 | 88.40 | 11.60 |
| June | 5,962 | 89.10 | 10.90 |
| July | 5,900 | 88.17 | 11.83 |
| August | 5,907 | 88.27 | 11.73 |
| September | 6,088 | 90.98 | 9.02 |
| October | 6,492 | 97.02 | 2.93 |
| November | 6,584 | 98.40 | 1.60 |
| December | 6,691 | 100.00 |  |
| Average | 6,090 | 90.98 | 9.02 |

Including all of the 14 retail lines it is seen from this table that the number employed each month in 1900 ranged from 5,753 persons in April to 6,691 in December, while the average was 6,090 persons. The difference between the greatest and smallest number was 938 .

As the greatest number of persons employed was 6,691 , it is proper to regard this figure as representing full employment, or as the figure upon which the range of unemployment should be based ; for it is plain that in December all were employed who could possibly obtain employment in the establishments included That December should show the greatest number is only what was to be expected in the retail line. This is the month when the holiday trade comes in, and when most of the stores sell more goods than at any other time during the year; and the greater the sales the greater is also the amount of the help needed.

The remaining eleven months show a smaller number, though in some cases the difference is not great. The number employed in November, for instance, amounted to about 98.40 per cent. of the greatest number, leaving only 1.60 per cent. unemployed. In October also conditions must have been favorable for at this time less than 3 per cent. were on the unemployed .list. In

September the range of unemployment stood at 9 per cent. and for August and July at 11.73 and 11.83 per cent. respectively. June shows a slightly narrower range, the midsummer trade requiring more help, but in May the range is about what it was in Septenber, while in April it is the widest of any month during the year, amounting to over 14 per cent. According to these figures the retail establishments needed less help in April than in any other month. During the first three months of the year the range was between 11 and 12 per cent., or approximately the same as in July and August.

The average stood at 6,090 persons, or within 90.98 per cent. of the highest number. The average range of unemployment was thus about 9 per cent.

The next table in order is a summary for the first six months of 1901. For this period is includes the same establishments as the table for 1900 :

## ALL INDUSTRIES.

Total Persons Employed, by, Months, the first Six Months of 1901, and the Range of Employment and Unemployment During this Period.

| Months. ${ }^{\text {] }}$ | Total number employed | Range of employment. Yer cent. | Range of unemployment. Per cent. |
| :---: | :---: | :---: | :---: |
| January | 6,259 | 97.37 | 2.63 |
| Mebruary | 6,437 | 100.00 |  |
| Mpril | 6,240 6,309 | 97.08 | 2.92 |
| May | 6,309 6,335 | 98.15 | 1.85 |
| June | 6,430 | 99.89 | 1.45 .11 |
| Average | 6,327 | 98.55 | 1.45 |

Here are the figures for the first six months of 1901. During this period the greatest number, or 6,437 persons, were employed in February, and the smallest number, or 6,240 persons were found for March.

Acsording to these figures February had full employment, and March the widest range of unemployment. The range, howcver, is narrow. In fact it falls below 3 per cent. at its widest point.

The average number employed was 6,327 persons, or 98.55 per cent. of the greatest number. This leaves the average range
of unemployment at less than one and one-half per cent. The fluctuations during this period are thus a trifle smaller than for the same period in 1900, and the average number employed, however, is greater.

Establishments employing 6,088 persons reported as to how often they paid their help for the services rendered and whether these payments were made in cash or by checks. These facts were compiled and presented in the following tables:

## NUMBER OF PERSONS WIIO RECEIVED TIIEIR SALARIES OR WAGES

 UPON DEMAND, OR WIEEKLY AND MONTHLY.| Industries. | Number of Persons, How Paid. |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Demand. | Weekly. | Monthly. | Total. |
| Boots and shoes |  | 106 | 10 | 116 |
| Butcher ${ }^{\text {i }}$.......... | 15 | 16 | 40 | 71 |
| Clothing | 26 | ${ }_{132} 29$ | 24 | 338 230 |
| Dry grag .ord | 15 | 132 | 17 | 786 |
| Farm implements | 16 | 23 | 22 | 61 |
| Flour, feed and grain | 29 | 126 | 9 | 164 |
| Furniture ... | 7 | 211 | 13 | 331 |
| General store | 497 | 853 | 714 | 2,064 |
| Groceries .. | 8 | 173 | 60 | ${ }_{423}$ |
| Hardware | 34 | 321 | 68 | 423 |
| Jewelers | 5 42 | 31 16 | 581 | 639 |
| Lumber Miscellaneous | 42 39 | 16 430 | 102 | 671 <br> 69 |
| Total | 754 | 3,590 | 1,744 | *6,088 |

PER CENT. OF PERSONS WHO RECEIVED THEIR SALARIES OR WAGES UPON DEMAND, OR WEEKIY AND MONTIILY.

| ES. | Per Cent. of Phrsóns, How Paid. |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Demand | Weekly. | Monthly. | Total. |
| Boots and shoes' |  | 89.08 | 10.92 | 100.00 |
| Butcher ......... | 21.13 | 22.53 | 56.34 6.90 | 100.00 100.00 |
| Clothing | ${ }_{9} 9.13$ | 85.63 57.39 | 3.938 | 100.00 |
| Dry grs | 1.91 | 95.93 | 2.16 | 100.00 |
| Farm implements | 26.23 | 37.70 | 36.07 | 100.00 |
| Flour, feed, grain | 17.68 | ${ }_{93} 76.83$ | 5.49 | 100.00 |
| Furniture | 2.11 | ${ }_{41} 93.96$ | 3.93 | 100.00 100.00 |
| General store | 24.08 3.32 | 71.78 | ${ }_{24} 24.90$ | 100.00 |
| Groceries ${ }^{\text {Inardware }}$..... | 8.04 | 75.88 | 16.08 | 100.00 |
| Jewelers | 11.63 | 72.09 | 16.28 | 100.00 |
| Lumber | ${ }_{6}^{6.57}$ | 2.51 | 90.92 | 100.00 |
| Miscellaneous | 6.83 | 75.31 | 17.86 | 100.00 |
| Total | 12.38 | 58.97 | 28.65 | 100.00 |

The two preceding tables relate to how often the employes received their earnings. Some were paid whenever they happened to ask for it. Others again were paid regularly every week, while there were again others who were paid monthly. The first table in order show the number in each case, and the second the per cent.

It is perhaps well to notice the totals first. As said above, 6,088 persons are included in these tables. Of these persons, 754 , or 12.38 per cent., were paid their wages off and on as they happened to ask for it. In a general way this can perhaps be said to amount to very much the same as weekly payments. The number paid weekly, regularly was 3,590 . This is about 58.97 per cent. of the total. If the former number of 12.38 per cent. who were on demand is regarded as being in this group, those paid weekly would number 4,344 persons, or 71.35 per cent. of the total. Those in the monthly group were 1,744 in number, or 28.65 per cent. of the total. If this grouping is correct weekly .. payment would seem to be the rule in nearly threefourths of the cases.

Considering the three groups separately, many facts might be adduced. Thus it is seen that in farm implements over 26 per cent. of the persons were paid on the demand while this was the case with over 24 per cent. in general stores, nearly 18 per cent. in flour and feed, and about 11.65 per cent. in jewelry. For the remaining industries the figures in the demand column are small except for butchers where they foot up to 21.13 per cent.

In lumber the number paid weekly is extremely small, amounting to only about two and one-half per cent. In three other cases butchers, farm implements, and general stores, the proportion is below 50 per cent. For the remaining industries it varies from about 60 to about 96 per cent.

Those paid monthly fall below 7 per cent. in clothing, dry goods, furniture and flour and feed. In eight others the number included varies from about 10 to about 36 per cent. and in one it stands at about 56 and in another at nearly 91 per cent. In this column therefore there is little or no uniformity as between the industries.

These facts show quite fully the general practices with regard to how often the employes are paid off. The next step will be to show how they are paid, that is how many are paid in cash and how many in checks.

NUMBER AND PER CENT. OF PERSONS WHO RECEIVED THEIR SAIAARIES AND WAGES IN CASII AND CHECKS, RESPECTIVELY.


Here we have a fairly good illustration of how many were paid cash and checks respectively.

Of the 6,088 persons included, 5,437 , or 89.32 per cent., were paid in cash, and 651 persons, or 10.68 per cent. were paid off in checks. Nine out of ten persons are thus receiving their earnings in cash.

Outside of butcher where all were paid in checks the proportion in this column is very small. In two industries only do they foot up to about one-fourth of the whole and in two others they make up about 16 per cent. in each case, while in the remaining 9 the per cent. is from about 10 down. Cash payments of salaries and wages in mercantile establishments can thus almost be said to be the rule in this state.

## EMPLOYMENT AND EARNINGS IN SIX SKILLED INDUSTRIES.

In the following pages are presented tables showing "summaries of the number of persons receiving classified weekly earnings in the skilled trades included," "persons employed by months," the "number and per cent. of hours of labor per day," the "number and per cent of persons who received their wages weekiy, semi-monthly, and monthly," whether paid "in cash, checks, or cash and checks," and the total yearly earnings of each industry together with the average number of men finding work and their average yearly earnings.

The tables include about twenty-five trades placed under six headings, viz: Carpenters, general contractors, masons and plasterers, painting and paper-hanging, plumbing, and miscellaneous. The latter includes about twenty occupations such as finishers, galvanizers, asphalt walk makers, sewer builders, house movers, well drillers, street pavers, etc.

The data contained in the tables were obtained direct from the employers themselves and apply only to employes working for wages, whether skilled or unskilled. What is meant by "unskilled" labor in this connection are those learning the trade either of carpenters, painters, paper hangers, plumbers, masons and plasterers, etc., or their helpers. Including this class with the "skilled" workmen, however, tends materially to lower the average yearly wage rate.

The principal facts collected in the investigation of these trades are set forth in six main tables. The first classifies the laborers into ten classes according to their weokly earnings. The first class embraces all persons receiving less than $\$ 5$ per week, the second, all persons who receive $\$ 5$ but less than $\$ 6$, etc., up to the class receiving $\$ 20$ per week and over. The first subdivision of the following table (I) shows the number of men belonging to each class in each industry, classified according to weekly earnings, together with the total for all industries; also
the total number receiving classified wages in each industry and the per cent. each of these numbers is of the whole.

The table shows that the greatest number of carpenters, general contractors, and painters and paperhangers received $\$ 12$ but under $\$ 15$, while the greatest number of masons and plasterers received $\$ 20$ and over and those belonging to the miscellaneous class and the plumbers received $\$ 9$ but under $\$ 10$ per week. Taken as a whole the greatest number $(2,494)$ received $\$ 12$ but under $\$ 15$ per week, while the smallest number for each and all industries received $\$ 5$, but under $\$ 6$.

The total number of persons included in this table is 6,996 . Of this number 1,549, or 22.14 per cent., were carpenters; $1,23 \dot{7}$, or 17.68 per cent., were employed as general contractors; 1,199 , or 17.14 per cent. were masons and plasterers ; 1,240 or 17.73 per cent., were employed in the miscellaneous occupations; 706, or 10.09 per cent., were painters and paperhangers; and 1,065 persons, or 15.22 per cent., were plumbers. Classified in order of numbers beginning with the largest working in each occupation, the carpenters come first, general contractors next, then masons and plasterers, followed by miscellancous, then painters and paperhangers with plumbers last.

The same information is found in the second sub-division of this table that is contained in the first. The first tells the story in numbers, the second in per cent. 60.88 per cent. of the carpenters, 38.56 per cent. of the general contractors, and 62.32 per cent. of the painters and paper hangers received $\$ 12.00$ but under $\$ 15.00$. 35.65 per cent. of the total also belongs to this class; while 26.85 per cent. of the plumbers and 56.53 per cent. of the persons belonging to the miscellaneous occupations received $\$ 9.00$ but under $\$ 10.00$. This leaves only one occupation the greatest per cent. of whose workmen received $\$ 20.00$ and over. Another interesting feature the table exhibits is that less than seven per cent. of the whole number of workmen in these six skilled industries received less than $\$ 8.00$ per week while over 93 per cent received $\$ 8.00$ per week and over.

The third subdivision shows the number and per cent. of all persons who received $\$ 9.00$ per week and over, $\$ 12.00$ per week and over, and under $\$ 12.00$. It will be noticed that only in
one class, that of the miscellaneous, do over 25 per cent. of the workmen receive less than $\$ 12.00$. See the following table.

## SUMMARIES OF THE NUMBER OF PERSONS RECEIVING CLASSIFIED WEEKLY EARNINGS IN THE SKILLED TRADES INCLUDED.

| Classification of weekly earnings. | Car- <br> pen- <br> ters. | General con-trac- tors. |  | Mis-cellın-eous- | Painters, paperhang. ers. | $\begin{aligned} & \text { Plumb } \\ & \text { ers. } \end{aligned}$ | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Under \$5.00 per week |  | 2 |  |  |  |  |  |
| \$5.00 but under $\$ 6.00$ | 1 |  |  | $\stackrel{31}{2}$ | 19 | 63 | 122 |
| $\$ 6.00$ but under $\$ 7.00$ | 10 | 7 | $3^{\prime}$ | 12 | 18 | 45 | 18 |
| $\$ 7.00$ but under $\$ 8.00$ | 16 | 24 | 13 | 32 | 8 | 25 | 118 |
| \$8.00 but under $\$ 9.00$ | 18 | 17 | 10 | 48 | 15 | ${ }_{24}$ | 132 |
| \$10.00 but under $\$ 10.00$ | 189 | 215 | 207 | 701 | 66 | 286 | 1,664 |
| \$12.00 but under $\$ 15.00$ | $\stackrel{270}{943}$ | 221 | 146 | 133 | 83 | 225 | 1,078 |
| \$15.00 and under \$20.00 | 100 | 170 | 253 | $\begin{array}{r}208 \\ 58 \\ \hline\end{array}$ | 440 | 149 | 2,494 |
| \$20.00 and over ....... | 100 | 104 | 285 | 58 15 | 50 5 | 213 | 844 |
| Total |  |  |  |  |  |  |  |
| Total | 1,549 | 1,237 | 1,199 | 1,240 | 706 | 1,065 | 6,996 |
| Per cent. | 22.14 | 17.68 | 17.14 | 17.73 | 10.09 | 15.22 | 100.00 |

SUMMARIES OF THE PER CENT. OF PERSONS, IN' THE SKILLED TRADES INCLUDED, WHO RECEIVED CLASSIFIED WEEKLY EARNINGS

| Classification of weekly earnings. | Car-penters. | General con-tractors. | $\left\lvert\, \begin{gathered} \text { Masons } \\ \text { and } \\ \text { plas- } \\ \text { terers. } \end{gathered}\right.$ | Mis-cellaneous. | Painters, paper hangers. | $\begin{aligned} & \text { Plumb } \\ & \text { ers. } \end{aligned}$ | Per cent. of total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Under $\$ 5.00$ | . 13 | . 16 | . 42 | 2.50 |  |  | 1.74 |
| \$5.w but under $\$ 6.000$ |  |  |  |  | 2.69 | ${ }_{1}^{5.92}$ |  |
| \$6.00 but under $\$ 7.00$ |  | . 57 | . 25 |  | . 2.58 | 1.22 | . 26 |
| \$7.00 but under $\$ 8.00$ | 1.03 | 1.94 | 1.08 | 2.58 | ${ }_{1}^{2.55}$ | 4.23 | 1.36 |
| \$8.00 but under $\$ 8.00$ | 1.16 | 1.37 | . 84 | ${ }_{3.87}$ | ${ }_{2}^{1.13}$ | ${ }_{2}^{2.35}$ | 1.69 |
| \$10.00 but under $\$ \$ 10.00$ | 12.20 | 17.39 | 17.26 | 56.53 | 9.35 | 26.85 | 1.89 |
| \$12.00 but under ${ }_{\$ 10.00}$ | 17.43 | 77.86 | 12.18 | 10.73 | 11.76 | 21.12 | 15.41 |
| \$15.00 but under $\$ 20.00$ | 60.88 6.46 | 38.56 <br> 13 | 23.10 | 16.77 | 62.32 | 13.99 | 35.65 |
| \$20.00 and over . | 6.46 | 13.74 8.41 | 21.10 23.77 | 4.68 | 7.08 | 20.00 | 12.06 |
| Totals | 100.00 | 100.00 | 100.00 |  |  |  |  |
|  |  |  |  | 100.00 | 100.00 | 100.00 | 100.00 |

COMPARISON OF CLASSIFIED WEEKLY EARNINGS IN TIIE SKILLED TRADES INCLUDED.

Number.

| Classification of weekly earnings. | Car-penters | General con-tractors. | $\begin{gathered} \text { Masons } \\ \text { and } \\ \text { plas- } \\ \text { terers. } \end{gathered}$ | Mis-cellaneous. | Painters, paper. hangers. | $\begin{gathered} \text { Plumb- } \\ \text { ers. } \end{gathered}$ | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$9.00 and over | 1,502 | 1,187 | 1,168 | 1,115 | 644 | 895 | 6,511 |
| \$12.00 and over | 1,043 | 751 | 815 | 281 | 495 | 384 | 3,769 |
| Under \$12.00. | 506 | 486 | 384 | 959 | 211 | 681. | 3,227 |
| Per cent. |  |  |  |  |  |  |  |
|  | 23.07 | 18.23 | 17.94 | 17.12 | 9.89 | 13.75 | 100.00 |
| \$12.00 and over | 27.67 | 19.93 | 21.62 | 7.46 | 13.13 | 10.19 | 100.00 |
| Under \$12.00 . | 15.68 | 15.06 | 11.90 | 29.71 | 6.54 | 21.11 | 100.00 |

Table II is an exhibit showing how many persons are employed each month during the year for all industries. In every instance except "painting and paper hanging" the smallest number was employed in February, and in the case of "painting and paperhanging" the smallest number was employed in January. The greatest number of carpenters and general contractors found work in August, masons and plaster-. ers, in September, miscellaneous, in July, painters and paperhangers in May, and the plumbers and the greatest number for all industries found work in June. In comparing each industry with the total, that of the plumbers more nearly corresponds with the total than any other. This denotes that this industry is less effected by the seasons of the year than any other. While there was an average of 684 that found work in this industry during the whole year, there was only a variation of 276 between the number finding work in February and the number finding work in June. The carpenters, with an average of 836 working the entire year, had a variation of 369 between the month having the greatest, and the month having the smallest number employed. On the same basis, with an average of 627 , there was a variation of 669 in the contractor's industry; with an average of 612 , the masons and plasterers varied 661 ; with an average of 699 , miscellaneous industries varied 768 ; with an average of 434, the painters and paperhangcrs yaries 473 . This is interesting because it shows the effect
the seasons have upon occupations. But this does not account for the whole difference. It will be noticed that the industry which can use the greatest number of skilled workmen has the least variation in the number employed. Take the carpenters as an illustration. While the skilled workmen of this industry may not be able to do out-door work in winter, he very profitably employs himself in-doors in the manufacture of such articles as casings, frames, etc., to be utilized in his out-door work. The same is more or less true of the plumbers. On the other hand, those employed in the miscellaneous occupations are not, to any great degree, skilled workmen; and this very fact determines to a large extent the occupation which a man follows. In these occupations a few skilled workmen can lay out and prepare work for a large number of unskilled laborers. The same may be said of the general contractors.

The total for all industries was 3,892 . The number working at the carpenter's trade was 21.48 per cent. of this, the general contractors, 16.11 per cent., the masons and plasterers, 15.72 per cent., miscellaneous, 17.96 per cent., painters and paperhangers, 11.15 per cent., and the plumbers 17.58 per cent.

Part two of table II expresses the same thing in percentages that part one expresses in numbers. The greatest number found employed in any one month for each industry and the total is taken as 100 per cent., and the other numbers in each industry are percentages of this greatest number found at work in the various other months of the year.

Part three of this same table expresses just the opposite of part two. Instead of showing the per cent. of employment it shows the per cent. of unemployment. The percentages are here obtained by subtracting each per cent. in the preceeding table from 100 pér cent. or the greatest number employed in any one month. Under the head of carpenters only 37.12 per cent. of those employed in August were unemployed in February while 73.19 per cent. of the general contractors were unemployed. 76.24 per cent. of the masons and plasterers working in September were unemployed in February. 68.45 per cent. of those employed in miscellaneous occupations working in July were unemployed in February. 67.77 per cent. of the
painters and paperhangers working in May were unemployed in January. 34.76 per cent. of the plumbers and 57.25 per cent. of all persons working in June were not working in February. See table as follows.

SUMMARY OF TIEE PERSON'S EMPLOYED BY MONTHS.

| Months. | Carpenters. | General contractors. | Masons and plasterers. | Miscellaneous | Painters and paper hangers. | $\underset{\text { ers. }}{\text { Plumb- }}$ | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Jąnuary .... | 624 | 246 | 226 | 402 | 225 | 553 | 2,276 |
| February ... | 620 | 245 | 206 | 354 | 248 | 518 | 2,191 |
| March .. | 732 | 281 | 328 | 383 | 355 | 538 | 2,617 |
| April | 812 | 515 | 601 | 405 | 593 | 672 | 3,598 |
| May ... | 921 | 720 | 762 | 812 | 698 | 751 | ${ }^{4,664}$ |
| June ... ......... | 956 | 829 | 819 | 1,067 | 660 | 794 | ${ }_{5}^{5,032}$ |
| July ........ .... | 986 | 871 | 865 | 1,122 | 423 | 791 | 4,918 |
| August ..... $\ldots$, | 947 | 880 | 867 | 935 | 457 | 783 | 4,869 |
| September ${ }_{\text {October }}$.... ... | ${ }_{936}^{947}$ | 840 | 816 | 875 | 466 | 725 | 4,678 |
| November ......... | 826 | 722 | 615 | 648 | 356 | 703 | 3,870 |
| December .. .. | 686 | 462 | 416 | 412 | 277 | 651 | 2,904 |
| Average | 836 | 627 | 612 | 699 | 434 | 634. | 3,892 |
| Per cent. | 21.48 | 16.11 | 15.72 | 17.96 | 11.15 | 17.58 | 100.00 |

SUMMARY OF THE RANGE OF EMPLOYMENT BY MONTHS.

| Months. | Carpenters. | General contractors. | Masons and plasterers. | Miscelleneous. | Painters and paper hangers. | $\begin{gathered} \text { Plumb. } \\ \text { ers. } \end{gathered}$ | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| January | 63.29 | 26.91 | 26.07 | 35.83 | 32.23 | 69.65 | 44.41 |
| February | 62.88 | 26.81 | 23.76 | 31.55 | 35.53 | $65.24^{*}$ | 42.75 |
| March .. | 74.24 | 30.74 | 37.83 | 34.13 | 50.89 | 67.76 | 51.06 |
| April | 82.35 | 56.35 | 69.32 | 36.10 | 87.53 | 84.63 94 | 70.20 |
| May | 93.41 | 78.77 | 87.89 | 72.37 | 100.00 94 | 94.58 100.00 | 100.00 |
| June | ${ }_{99} 96.96$ | 99.70 | 94.46 | 100.00 | 65.04 | 92.44 | 98.11 |
| July ... | 99.80 100.00 | 95.30 100.00 | 99.27 | 186.89 | 60.60 | 99.60 | 95.96 |
| August ${ }_{\text {September }}$ | 100.00 96.05 | +96.28 | 100.00 | 83.33 | 65.47 | 98.61 | 95.00 |
| September | ${ }_{94.93}$ | 91.90 | 94.12 | 77.99 | 66.76 | 91.31 | 90.89 |
| November | 83.77 | 78.99 | 70.93 | 57.75 | 51.00 | 88.54 | 73.56 |
| December | 69.58 | 50.55 | 47.93 | 36.72 | 39.69 | 81.99 . | 56.66 |
| Average | 84.77 | 68.61 | 70.62 | 62.31 | 62.44 | 86.20 | 75.80 |

SUMMARIES OF THE RANGE OF UNEMPLOYMENT, BY MONTHS.

| Months. | Carpenters. | General contractors. |  | Miscellaneous. | Painters and paper hangers. | $\begin{aligned} & \text { Plumb- } \\ & \text { ers. } \end{aligned}$ | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| January | 36.71 | 73.09 | 73.93 | 64.17 | 67.77 | 30.35 | 55.59 |
| February | 37.12 | 73.19 | 76.24 | 68.45 | 64.47 | 34.76 | 57.25 |
| March | 25.76 | 69.26 | 62.17 | 65.87 | 49.11 | 32.24 | 48.94 |
| April | 17.65 | 43.65 | 30.68 | 63.90 | 12.47 | 15.37 | 29.80 |
| May | 6.59 | 21.23 | 12.11 | 27.63 | . 00 | 5.42 | 9.00 |
| June | 3.04 | 9.30 | 5.54 | 4.90 | 5.40 | . 00 | . 00 |
| August | . 20 | 4.70 | $\stackrel{.}{4.73}$ | 13.00 | 34.96 | 5.57 | 1.89 |
| September | 3.95 | 3.72 | 4.00 | 16.67 | 39.40 34.53 | 1.40 | 4.04 5.00 |
| October | 5.07 | 8.10 | 5.88 | 22.01 | 33.34 | 8,67 | 9.11 |
| November | 16.23 | 21.01 | 29.07 | 42.25 | 49.00 | 11.46 | 26.44 |
| December | 30.42 | 49.45 | 52.02 | 63.28 | 60.31 | 18.01 | 43.34 |
| Average | 13.23 | 31.39 | 29.38 | 37.69 | 37.56 | 13.80 | 24.20 |

Table III exhibits "by months, the number and per cent. of the hours of labor per day" for each industry. In general, more laborers work eight hours for a day's work in winter than in summer. In the case of carpenters, this is true both winter and summer. An average of 465 or 55.62 per cent. work eight hours for a day's work, 109 or 13.04 per cent. work nine hours for a day's work, and 262 , or 31.34 per cent. work ten hours for a day's work throughout the year.

More general contractors work eight hours for a day's work in winter than in summer. On an average 471, or 77.21 per cent. of the total averages, work 10 hours for a day's work, while only 55 or 9.02 per cent. work 8 hours, and 84 or 13.77 per cent. work nine hours for a day.

Among the masons and plasterers, the number was more evenly divided between those working ten and those working eight hours per day. An average of 268 or 43.79 per cent. worked eight hours and 265 or 43.31 per cent. worked ten hours for a day's work, while only 79 , or 12.90 per cent: worked nine hours.

Under miscellaneous occupations the numbers varied more widely. In every month of the year more men worked ten hours for a day's work than either eight or nine. An average of 563 or 80.55 per cent. of the whole number, worked ten hours throughout the year, while only 63 , or 9.01 per cent. worked eight hours, and 73 or 10.44 per cent. worked nine hours.

Practically all in these trades work ten hours per day in July. It seems as if the element of skill might enter into even the number of hours men work for a day.

The table exhibits just the opposite tendency among the painters and paperhangers. A great majority worked eight hours throughout the year. An average of 335 , or 77.37 per cent. worked eight hours a day while only 19, or 4.39 per cent. worked nine hours and 79 , or 18.24 per cent. worked ten hours for a day.

The Summary shows that in Nov., Dec., Jan., Feb. and March most of the laborers in the six skilled trades worked eight hours for a day's work while during the remainder of the year the greatest number worked ten hours. On an average 1,926 , or 49.37 per cent. worked ten hours, 480 , or 12.31 per cent. worked nine hours, and 1,495 , or 38.32 per cent. worked eight hours for a day's work. The following is the table:

CARPEN'TERS.
Giving, by Months', the Number and Per cent. of the Hours of Labor per Day.

| Months. | Hours of Labor per Day. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number. |  |  |  | Per Cent. |  |  |  |
|  | 8 hours or less. | $\stackrel{9}{\text { heurs. }}$ | $\begin{gathered} 10 \\ \text { hours. } \end{gathered}$ | Total persons. | 8 hours or less. | $\begin{gathered} 9 \\ \text { hours. } \end{gathered}$ | $\xrightarrow{10} \text { hours. }$ | Total |
| January | 488 | 25 | 111 | 624 | 78.20 | 4.01 | 17.79 | 100.00 |
| February | 517 | 40 | 63 | 620 | 83.39 | -6.45 | 10.16 | 100.00 |
| March | 453 | 85 | ${ }_{279}^{194}$ | 812 | $\stackrel{1}{5.54}$ | 10.10 | 34.36 | 100.00 |
| April | 431 | 130 | 360 | 921 | 46.80 | 14.11 | 39.09 | 100.00 |
| May | 422 | 146 | 388 | 956 | 44.14 | 15.27 | 40.59 | 100.00 |
| July | 467 | 151 | 368 | 986 | 47.36 | 15.31 | ${ }_{39} 37.33$ | 100.00 |
| August | 457 | 141 | 391 | ${ }_{947}^{989}$ | 47.21 | 14.26 | 39.53 38.86 | 100.00 |
| September | 446 | 133 | 398 298 | ${ }_{936}^{947}$ | 49.36 | 18.80 18.8 | 38.84 31.84 | 100.00 |
| October ${ }^{\text {November }}$ | 462 | 113 | 201 | ${ }_{826}^{936}$ | 61.99 | 13.68 | 24.33 | 100.00 |
| December | 478 | 90 | 117 | 685 | 69.78 | 13.14 | 17.08 | 100.00 |
| Average | 465 | 109 | 262 | 836 | 55.62 | 13.04 | 31.34 | 100.00 |

## GENERAL CONTRACTORS.

Giving, by Months', the Number and Per cent. of the Hours of Labor per Day.


## MASONS AND PLASTERERS.

Giving, by Months, the Number and Per cent. of the Hours of Labor per Day.

| Months. | Hours of Labor Per Day. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number. |  |  |  | Per Cent. |  |  |  |
|  | 8 hours or less. | $\underset{\text { hours. }}{9}$ | $\stackrel{10}{\text { hours. }}$ | Total personis. | 8 hours or less. | $\stackrel{9}{\text { hours. }}$ | $\begin{aligned} & 10 \\ & \text { hours. } \end{aligned}$ | Total. |
| January | 141 | 43 | 42 | 226 | 62.39 | 19.03 | 18.58 | 100.00 |
| February | 140 | 25 | 41 | 206 | 67.96 | 12.14 | 19.90 | 100.00 |
| March | 206 | 33 | 89 | 328 | 62.81 | 10.06 | 27.13 | 100.00 |
| April | 294 | 44 | 263 | 601 | 48.92 | 7.32 | 43.76 | 100.00 |
| May | 318 | 74 | 370 | 762 | 41.73 | 9.71 | 48.56 | 100.00 |
| June | 293 | 90 | 436 | 819 | 35.78 | 10.99 | 53.23 | 100.00 |
| July ... | 357 | 94 | 414 | 865 | 41.27 | 10.87 | 47.86 | 100.00 |
| August | 320 | 109 | 397 | 826 | 38.74 | 13.20 | 48.06 | 100.00 |
| September | 305 | 143 | 419 | 867 | 35.18 | 16.49 | 48.33 | 100.00 |
| October | 320 | 128 | 368 | 816 | 39.22 | 15.69 | 45.09 | 100.00 |
| November | 260 | 131 | 224 | 615 | 42.28 | 21.30 | 36.42 | 100.00 |
| December | 261 | 33 | 122 | 416 | 62.74 | 7.93 | 29.33 | 100.00 |
| Average | 268 | 79 | 265 | 612 | 43.79 | 12.90 | 43.31 | 100.00 |

## MISCELLANEOUS.

Giving, by Months, the Number and Per cent. of the Hours of Labor per Day.

| Months. | Hours of Labor Per Day. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number. |  |  |  | Per Cent. |  |  |  |
|  | 8 hours or less. | $\underset{\text { hours. }}{9}$ | $\begin{gathered} 10 \\ \text { hours } \end{gathered}$ | Total hours. | 8 hours or less. | $\begin{gathered} 9 \\ \text { hours. } \end{gathered}$ | $\begin{aligned} & 10 \\ & \text { hours } \end{aligned}$ | Total. |
| January ... ........... | 72 | 151 | 179 | 402 | 17.91 | 37.56 | 44.53 | 100.00 |
| February | 74 | 114 | 166 | 354 | 20.91 | 32.20 | 46.89 | 100.00 |
| March .. | 64 | 100 | 219 | 383 | 16.71 | 26.11 | 57.18 | 100.00 |
| April | 60 | 40 | 305 | 405 | 14.81 | 9.88 | 75.31 | 100.00 |
| May . | 55 | 27 | 730 | 812 | 6.77 | 3.33 | 89.90 | 100.00 |
| June | 55 | 31 | 981 | 1,067 | 5.15 | 2.91 | 91.94 | 100.00 |
| July | 58 | 30 | 1,034 | 1,122 | 5.17 | 2.67 | 92.16 | 100.00 |
| August ..... .......... | 56 | 24 | 895 | 975 | 5.74 | 2.46 | 91.80 | 100.00 |
| September .. | 54 | 23 | 858 | 935 | 5.78 | 2.46 | 91.76 | 100.00 |
| October .......... ... | 56 | 64 | 755 | 875 | 6.40 | 7.31 | 86.29 | 100.00 |
| November | 72 | 149 | 427 | 648 | 11.11 | 22.99 | 65.90 | 100.00 |
| December | 84 | 126 | 202 | 412 | 20.59 | 30.58 | 49.03 | 100.00 |
| Average ... ... | 63 | 73 | 563 | 699 | 9.01 | 10.44 | 80.55 | 100.00 |

## PAINTING AND PAPERHANGING.

Giving, by Months', the Number and Per cent. of the Hours of Labor per Day.

| Months. | Hours of Labor Per Day. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number. |  |  |  | Per Cent, |  |  |  |
|  | 8 hours or less. | $\begin{gathered} 9 \\ \text { hours. } \end{gathered}$ | $\begin{gathered} 10 \\ \text { hours. } \end{gathered}$ | Total hours. | 8 hours or less. | $\stackrel{9}{\text { hours. }}$ | $\begin{gathered} 10 \\ \text { hours. } \end{gathered}$ | Total. |
| January | 209 |  | 16 | 225 | 92.89 |  | 7.11 | 100.00 |
| February | 224 | 5 | 19 | 248 | 90.32 | 2.02 | 7.66 | 100.00 |
| March . | 207 | 16 | 32 | 255 | 81.18 | 6.28 | 12.54 | 100.00 |
| April | 446 | 28 | 119 | 593 | 75.21 | 4.78 | 20.07 | 100.00 |
| May | 478 | 65 | 155 | 6698 | 68.48 | 9.31 2.27 | ${ }_{29}^{22.85}$ | 100.00 100.00 |
| June | 448 322 | 12 | 120 | 454 | 70.93 | 2,64 | 26.43 | 100.00 |
| August | 300 | 12 | 111 | 423 | 70.92 | 2.84 | 26.24 | 100.00 |
| September | 346 | 12 | 99 | 457 | 75.71 | ${ }_{8}^{2,63}$ | 21.66 | 100.00 |
| October . . | 372 | 38 | 56 | 466 | 79.83 | 8.15 | 12.02 | 100.00 |
| November | 303 | 26 | 27 | 356 | 85.11 | 7.30 | 7.59 | 100.00 |
| December | 262 | 3 | 12 | 277 | 94.59 | 1.08 | 4.33 | 100.00 |
| Average | 335 | 19 | 79 | 433 | 77.37 | 4.39 | 18.24 | 100.00 |

## PLUMBERS.

Giving, by Months, the Number and Per cent. of the Hours of Labor per Day.

| Months. | , Hours of Labor Per Day. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number. |  |  |  | Per Cent. |  |  |  |
|  | 8 hours or less. | $\begin{gathered} 9 \\ \text { hours. } \end{gathered}$ | $\begin{gathered} 10 \\ \text { hours. } \end{gathered}$ | Total hours | 8 hours or less. | $\stackrel{9}{\text { hours. }}$ | 10 hours. | Total. |
| January | 315 | 77 | 161 | 553 | 56.96 | 13.92 | 29.12 | 100.00 |
| February | 287 | 79 | 152 | 518 | 55.41 | 15.25 | 29.34 | 100.00 |
| March | 265 | 88 | 185 | 538 | 49.26 | 16.36 | 34.38 | 100.00 |
| April | 299 | 112 | 261 | 672 | 44.49 | 16.67 | 38.84 | 100.00 |
| May | 309 | 140 | 302 | 751 | 41.15 | 18.64 | 40.21 | 100.00 |
| June | 320 | 152 | 322 | 794 | 40.30 | 19.14 | 40.56 | 100.00 |
| July | 288 | 132 | 314 | 734 | 39.24 | 17.98 | 42.78 | 100.00 |
| August | 341 | 106 | 344 | 791 | 43.11 | 13.40 | 43.49 | 100.00 |
| September ... ...... | 321 | 125 | 337 | 783 |  | 15.96 | 43.04 | 100.00 |
| October . ........... .. | 289 | 130 | 306 | 725 | ¢9.86 | 17.93 | 42.21 | 100.00 |
| November . ${ }^{\text {a }}$..... .. | 340 | 129 | 234 | 703 | 48.36 | 18.35 | 33.29 | 100.00 |
| December | 330 | 122 | 199 | 651 | 50.69 | 18.74 | 30.57 | 100.05 |
| Average ... ... | 309 | 116 | 260 | 685 | 45.11 | 16.93 | 37.96 | 100.00 |

## SUMMARY.

Giving, by Months', the Number and Per cent. of the Hours of Labor per Day.

| Months. | Hours of Labor Per Day. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number. |  |  |  | Per Cent. |  |  |  |
|  | 8 hours or less. | $\stackrel{9}{\text { hours }}$ | $\begin{gathered} 10 \\ \text { hours. } \end{gathered}$ | Total hours. | 8 hours or less. | $\stackrel{9}{\text { hours. }}$ | $\begin{gathered} 10 \\ \text { hours } \end{gathered}$ | Total. |
| January | 1,357 | 370 | 569 | 2,276 | 58.74 | 16.26 | 25.00 | 100.00 |
| February | 1,341 | 340 | 510 | 2,191 | 61.20 | $15.52 \cdot$ | 23.28 | 100.00 |
| March | 1,359 | 370 | 888 | 2,617 | 51.93 | 14.14 | 33.93 | 100.09 |
| April | 16572 | 334 | 1,692 | 3,598 | 43.69 | 9.28 | 47.03 | 100.00 |
| May | 1,613 | 451 | 2,606 | 4,664 | 34.58 | 9.67 | 55.75 | 100.00 |
| June | 1,568 | 450 | 3,107 | 5,125 | 30.60 | 8.78 | 60.62 | 100.00 |
| July | 1,512 | 432 | 3,088 | 5,032 | 30.05 | 8.58 | 61.37 | 100.00 |
| August | 1,494 | 410 | 3,114 | 5,018 | 29.77 | 8.17 | 62.06 | 100.00 |
| September | 1,502 | 458 | 2,909 | 4,869 | 30.85 | 9.41 | 59.74 | 100.00 |
| October | 1,538 | 611 | 2,509 | 4,658 | 33.02 | 13.12 | 53.86 | 100.00 |
| November | 1,538 | 945 | 1,387 | 3,870 | 39.74 | 24.42 | 35.84 | 100.00 |
| December | 1,568 | 599 | 737 | 2,904 | 53.99 | 20.63 | 25.38 | 100.00 |
| Average | 1,495 | 480 | 1,926 | 3,901 | 38.32 | 12.31 | 49.37 | 100.00 |

Table IV shows the frequency of paying wages, whether monthly, semimonthly, or weekly. An average of 589 carpenters, or 70.51 per cent. of the whole number, were paid every two weeks; 230, or 27.51 per cent. every week, while only 17, or 2.04 per cent. were paid once a month. The percentage of those paid weekly in summer was greater than in winter whilo the opposite is true in the case of semi-weekly payments; the former varied about 11 per cent, and the latter about 13 per cent. In the list of monthly payments the variation is less than $21 / 2$ per cent.

General contractors did not. pay monthly wages in winter and not to exceed 3.75 per cent. of the total wages in summer. A greater per cent. of weekly wages was paid in winter than in summer while the opposite is true with semi-monthly wages. The former varied about $201 / 2$ per cent. and the latter about $191 / 2$ per cent. This is in direct contrast with the carpenters. An average of 308 general contractors, or 49.12 per cent. of the total average, received their wages weekly, and the same number and per cent. received their wages semi-monthly; but only an average of 11 or 1.76 per cent. received their wages monthly.

No masons and plasterers received monthly wages, while 140, or 22.88 per cent. of the whole received weekly wages and 472 , or 77.12 per cent. semi-monthly wages. A greater per cent. received weekly wages in summer than winter and the opposite was true in regard to semi-monthly wages. The former varied 9.68 per cent. and the latter the same.

An average of 505 , or 72.25 per cent. of the persons working in the miscellaneous occupations, received weekly wages; 141, or 20.17 per cent. reeived semi-monthly wages; and 53 , or 7.58 per cent. .received monthly wages. $\Lambda$ greater per cent. received weokly wages in summer than in winter, while the opposite is true with those receiving semi-monthly and monthiy wages.

The same general characteristics hold for the painters and paperhangers as for the miscellaneous occupations. An average of 177 , or 70.29 per cent. of the whole, received weekly wages, 71 , or 28.29 per cent. semi-monthly, and only 3 , or 1.19 per cent. received monthly wages.

In case of the plumbers, none received monthly wages while
on an average of over 90 per cent. received weekly wages; and less than 10 per cent. were paid semi-monthly. The regular variations between the wages paid in winter and those of summer that appeared in the other skilled trades did not appear in this one. The number that received weekly, or semi-monthly wages in June, is about the same in December. Throughout the whole year the number did not vary in either case 6.71 per cent.

A general survey of all six of the skilled trades is exhibited in the summary of this table. On the whole, the summary brings out the same characteristics as the plumbers, except that the per cent. of difference between those who received weekly and semi-monthly wages was not so marked. The summary also contains a small per cent. that received monthly wages while the plumber's contains none. The per cent. of weekly or semi-monthly wages did not vary over 5.22 per cent. during the whole year, while the monthly wages varied less than $13 / 4$ per cent. On an average, 1,980 , or 53.37 per cent. of all wage earners, received their wages weekly, 1,645 , or 44.34 per cent. semi-monthly, and 85 , or 2.29 per cent. monthly.

Following this summary is a table showing how often establishments pay wages. The trades of masons and plasterers, and plambers made no monthly payments, while only one establishment in each of the trades of general contractors, and painters and paperhangers paid monthly wages, four establishments under the head of miscellaneous occupations paid monthly, and three carpentry establishments paid monthly. This makes a total of only nine, or 1.51 per cent. of the whole number. On the other hand 378 , or 63.42 per cent. paid weekly, and 209 , or 35.07 per cent. paid semi-monthly. It will be noticed that the percentages of establishments which paid weekly or semimonthly payments do not correspond with the percentage of persons who received such payments. This probably means that the large establishments employing a large number of hands do not go to the extra trouble of paying every week. The tables above referred to are as follows:

## CARPENTERS.

Showing the Number and Per cent. of Persons Who Received Their Wages Weekly, Semi-monthly, and Monthly.

| Months. | Number of Persons. |  |  |  | Per Cent. of Persons. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Week1 y . | $\left\lvert\, \begin{gathered} \text { Semi- } \\ \text { month. } \\ \text { ly. } \end{gathered}\right.$ | $\begin{gathered} \text { Month- } \\ 1 \mathrm{y} . \end{gathered}$ | Total. | Weekly. | Semimonth 1 y . | Month1 y . | Total. |
| January | 122 | 494 | 8 | 624 | 19.55 | 79.17 | 1.28 | 100.00 |
| February | 121 | 494 | 2 | 617 | 19.61 | 80.07 |  |  |
| March .. | 197 | 523 | 10 | 730 | 26.99 | 71.64 | 1.37 | 100.00 |
| April | 241 | 555 | 16 | 812 | 29.68 | 68.35 | 1.97 | 100.00 |
| May | ${ }_{278}^{272}$ | 628 | $\stackrel{21}{25}$ | ${ }_{936}^{921}$ | ${ }_{29.08}^{29.53}$ | 68.19 | 2.61 | 100.00 |
| June | ${ }_{302}$ | 653 | ${ }_{26}^{25}$ | ${ }_{986}^{906}$ | ${ }_{30.63}$ | 66.73 | 2.64 | 100.00 |
| July . | ${ }_{293}^{392}$ | 669 | ${ }_{27}^{26}$ | 989 | 29.63 | 67.64 | 2.73 | 100.00 |
| September | 268 | 656 | 23 | 947 | 28.30 | 69.27 | 2.43 | 100.05 |
| October . | 270 | 647 | 19 | 936 | 28.85 | 69.12 | 2.03 | 100.00 |
| November | 248 | 561 | 17 | 826 | 30.02 | 67.92 | 2.06 | 100.00 |
| December | 151 | 524 | 11. | 686 | 22.01 | 76.89 | 1.06 | 100.00 |
| Average | 230 | 589 | 17 | 836 | 27.51 | 70.45 | 2.04 | 100.00 |

## GENERAL CONTRACTORS.

Showing the Number and Per cent. of Persons Who Received Their Wages Weekly, Semi-weekly, and Monthly.

| Months. | Number of Persons. |  |  |  | Per Cent of Persons. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Week ly. | Semi-month$1 y$. | Month$1 y$. | Total. | Weekly | Semi-monthly. | $\begin{gathered} \text { Month- } \\ \text { ly. } \end{gathered}$ | Total. |
| January | 163 | 83 |  | 246 | 66.26 | 33.74 33.88 |  | 100.00 100.00 |
| February | 162 | 83 |  | 245 | 66.12 50.89 | 33.88 49.11 |  | 100.00 100 |
| March | 143 | 138 |  | 515 | 48.54 | 49.32 | 2.14 | 100.00 |
| April | 250 358 | 254 335 | 11 | 715 | 49.72 | 4.383 | 3.75 | 100.00 |
| May | 358 | 335 418 | 24 | 829 | 46.68 | 50.42 | 2.90 | 100.00 |
| July | 413 | 433 | 25 | 871 | 47.42 | 49.71 | 2.87 | 100.00 |
|  | 422 | 473 | 19 | 914 | 46.17 | 51.75 | 2.08 | 103.00 |
| September | 404 | 464 | 12 | 880 | 45.91 | 52.73 | 1.36 | 100.00 |
| October | 384 | ${ }_{368}^{448}$ | 8 | 840 722 | 45.72 47.92 | 53.33 50.97 | 1.11 | 100.00 100.00 |
| November | ${ }_{246}^{346}$ | 368 196 | 8 | 722 462 | 47.58 | 42.42 | 1.11 |  |
| December |  |  |  |  |  |  |  |  |
| Average | 308 | 308 | 11 |  | 49.12 | 49.12 | 1.76 | 100.00 |

## MASONS AND PLASTERERS.

Showing the Number and Per cent. of Persons Who Received Their Wages Weekly, Semi-monthly, and Monthly:

| Monthar. | Number of Persons. |  |  |  | Per Cent. of Persons. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weekly. | Semi $_{i}$ $\operatorname{mon}_{1} \mathrm{~h}$ 15 . | $\begin{gathered} \text { Month } \\ \text { ly. } \end{gathered}$ | Total. | Weekly. | Semi- month ly. | $\begin{gathered} \text { Month- } \\ \text { ly. } \end{gathered}$ | Total. |
| January | 45 | 181 |  | 226 | 19.91 | 80.09 |  | 100.00 |
| February | 44 | 162 |  | 206 | 21.36 | 78.64 |  | 100.00 |
| March .. | 73 | 255 |  | 328 | 22.26 | 77.74 |  | 100.00 |
| April | 151. | 450 |  | 601 | 25.12 | 74.88 |  | 100.00 |
| May | 192 | 570 |  | 762 | 25.20 | 74.80 |  | 100.00 |
| June | ${ }_{190}$ | 598 |  | 819 | 26.991 | 73.01 |  | 100.00 |
| July ... | 190 | 675 |  | 865 | 21.97 | 78.03 |  | 100.00 |
| August | 188 | 638 |  | 826 | 22.76 | 77.24 |  | 100.00 |
| September | 214 | 653 |  | 867 | 24.68 | 75.32 |  | 100.00 |
| October .. | 177 | 639 |  | 816 | 21.69 | 78.31 |  | 100.00 |
| November | 114 | 501 |  | 615 | 18.54 | 81.46 |  | 100.00 |
| December | 72 | 344 |  | 416 | 17.31 | 82.69 |  | 100.00 |
| Average | 140 | 472 |  | 612 | 22.88 | 77.12 |  | 100.00 |

## MISCELLANEOUS.

Showing the Number and Per cent. of Persons Who Received Their Wages Weekly, Semi-weekly, and Monthly.

| Months. | Number of Persons. |  |  |  | Per Cent. of Persons. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weekly. | Semimonth ly. | Monthly. | Total. | Weekly. | Semi-monthly. | $\begin{gathered} \text { Month- } \\ \text { Iy. } \end{gathered}$ | Total. |
| January | 256 | 104 | 42 | 402 | 63.68 | 25.87 | 10.45 | 100.00 |
| February | 253 | 61 | 40 | 354 | 71.47 | 17.23 | 11.30 | 100.00 |
| March | 246 | 95 | 42 | 383 | 64.23 | 24.80 | 10.97 | 100.00 |
| April | 263 | 116 | 26 | 405 | 64.94 | 28.64 | 6.42 | 100.00 |
| May | 601 | 154 | 57 | 812 | 74.01 | 18.97 | 7.02 | 100.00 |
| June | 828 | 162 | 77 | 1,067 | 77.60 | 15.18 | 7.22 | 100.00 |
| July | 838 | 196 | 88 | 1,122 | 74.69 | 17.47 | 7.84 | 100.00 |
| August | 701 | 187 | 87 | 975 | 71.90 | 19.18 | 8.92 | 100.00 |
| September | 683 | 195 | 57 | 935 | 73.65 | 20.86 | 6.09 | 100.00 |
| Octoner | 636 | 190 | 49 | 875 | 72.69 | 21.71 | 5.60 | 100.00 |
| November | 464 | 133 | 51 | 648 | 71.60 | 20.53 | 7.87 | 100.00 |
| December | 291 | 100 | 21 | 412 | 70.63 | 24.27 | 5.10 | 100.00 |
| Average | 505 | 141 | 53 | 699 | 72.25 | 20.17 | 7.58 | 100.00 |

## PAINTING AND PAPER-HANGING.

Showing the Number and Per cent. of Persons Who Received Their Wages Weekly, Semi-monthly, anu Monthly.

| Months. | Number of Persons. |  |  |  | Pes Cent, of Persons. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weekly. | Semi- month $1 y$. | Month- <br> ly. | Total. | Weekly. | Semi-month1 y . | $\begin{gathered} \text { Month- } \\ \text { ly. } \end{gathered}$ | Total. |
| January | 88 | 46 | 3 | 137 | 64.23 | 33.58 | 2.19 | 100.00 |
| February | 93 | 51 | 3 | 147 | 63.27 | 34.69 | 2.04 | 100.00 |
| March .. | 132 | 68 | 3 | 203 | 65.02 | 33.50 | 1.48 | 100.00 |
| April | 245 | 89 | 3 | 337 | 72.70 | 26.41 | . 89 | 100.00 |
| May | 289 | 106 | 3 | 298 | 72.61 | 26.64 | . 75 | 100.00 |
| June | 278 | 101 | 3 | 382 | 72.77 | 26.44 | . 79 | 100.00 |
| July | 196 | 73 | 3 | 272 | 72.06 | 26.84 | 1.10 | 100.00 |
| August | 181 | 62 | 5 | 248 | 72.98 | 25.00 | 2.02 | 100.00 |
| September | 182 | 70 | 3 | 255 | 71.37 | 27.45 | 1.18 | 100.00 |
| October | 208 | 71 | 3 | 282 | 73.75 | 25.18 | 1.06 | 100.00 |
| November | 131 | 63 | 3 | 197 | 66.50 | 31.98 | 1.52 | 100.00 |
| December | 97 | 55 | 3 | 155 | 62.58 | 35.48 | 1.94 | 100.00 |
| Average | 177 | 71 | 3 | 251 | 70.52 | 28.29 | 1.19 | 100.00 |

## PLUMBERS.

Showing the Number and Per cent. of Persons Who Received Their Wages Weekly, Semi-monthly, and Monthly.

| Months. | Number of Persons. |  |  |  | Per Cent, of Persons. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weekly. | Semi-monthly. | $\begin{gathered} \text { Month- } \\ 1 \mathrm{y} . \end{gathered}$ | Total. | Weekly. | Semi. monthly. | Month- <br> ly. | Total. |
| January | 505 | 48 |  | 553 | 91.32 | 8.68 |  | 100.60 |
| February | 478 | 40 |  | 518 | 92.28 | 7.72 |  | 100.00 |
| March | 497 | 41 |  | 538 | 92.38 | 7,62 |  | 100.00 |
| April | 618 | 54 |  | 672 | 91.96 | 8.04 |  | 100.00 |
| May | 696 | 55 |  | 751 | 92.68 | 7.32 |  | 100.00 |
| June | 731 | 63 |  | 794 | 92.06 | 7.94 |  | 100.00 |
| July | 672 | 62 |  | 734 | 91.55 | 8.45 |  | 100.00 |
| August | 680 | 111 |  | 791 | 85.97 | 14.03 |  | 100.00 |
| September | 683 | 100 |  | 783 | 87.23 | 12.77 |  | 100.00 |
| October | 645 | 80 |  | 725 | 88.96 | 11.04 |  | 100.00 |
| November | 634 | 69 |  | 703 | 90.19 | 9.81 |  | 100.00 |
| December | 603 | 48 |  | 651 | 92.63 | 7.37 |  | 100.00 |
| Average | 620 | 64 |  | 684 | 90.65 | 9.35 |  | 100.00 |

## SUMMARY.

Showing the Number and Per cent. of Persons Who Received Their Wages Weekly, Semi-monthly, and Monthly.

| Months. | Number of Persons. |  |  |  | Per Cent. of Persons. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weekly. | Semi- month-monthly. | Month- ly. | Total. | Weekly. | Semimonth. 1 y . | $\begin{gathered} \text { Month- } \\ \text { ly. } \end{gathered}$ | Total. |
| January | 1,179 | 956 | 53 | 2,188 | 53.88 | 43.70 | 2.42 | 100.00 |
| February | 1,151 | 891 | 45 | 2,087 | 55.15 | 42.69 | 2.16 | 100.00 |
| March | 1,288 | 1,122 | 55 | 2,465 | 52.25 | 45.52 | 2.23 | 100.00 |
| April | 1.768 | 1,518 | 56 | 3,342 | 52.90 | 45.42 | 1.68 | 100.00 |
| viay | 2,408 | 1,848 | 108 | 4,364 | 55.18 | 42.35 | 2.47 | 100.00 |
| June | 2,723 | 1,995 | 129 | 4,847 | 56.18 | 41.16 | 2.66 | 100.00 |
| August | 2,465 | 2,140 | 138 | 4,850 4,743 | 53.83 51.97 | 43.24 | ${ }_{2}^{2.93}$ | 100.00 |
| September | 2,434 | 2,138 | 95 | 4,667 | 52.15 | 45.81 | 2.91 | 100.00 |
| October | 2,320 | 2,075 | 79 | 4,474 | 51.80 | 46.38 | 1.76 | 100.00 |
| November | 1,937 | 1,695 | 79 | 3,711 | 52.20 | 45.67 | 2.13 | 100.00 100.00 |
| December | 1,480 | 1,267 | 35 | 2,782 | 53.20 | 45.54 | 1.26 | 100.00 |
| Average | 1,980 | 1,645 | 85 | 3,710 | 53.37 | 44.34 | 2.29 | 100.00 |

TABLE SHOWING THE NUMBER OF ESTABLISHMENTS WHICH PAID WEEKLY, MONTHLY, OR SEMI-MONTHLY WAGES.

| Establishments. | Number of Establishment |  |  |  | Per Cent. of Establishments |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weekly. | Semi-month$1 y$. | $\begin{gathered} \text { Month- } \\ \text { ly. } \end{gathered}$ | Total. | Week ly. | Se mimonth. ly. | $\begin{gathered} \text { Month- } \\ \text { ly. } \end{gathered}$ | Total. |
| Carpenters ...... | 53 | 83 | 3 | 129 | 38.13 | 59.71 | 2.16 | 100.00 |
| Gen'l Contractors .. | 46 | 30 | 1 | 77 | 59.74 | 38.96 | 1.30 | 100.00 |
| Masons, Plasterers . | 21 | 64 11 | 4 | 85 89 | 24.71 | 78.29 | 1.79 | 100.00 |
| Painting, Paper $\ddot{\mathrm{I}}$ 'g ${ }^{\text {a }}$ | 83 | 14 | 1 | 89 98 | 83.15 | 12.36 | 4.49 | 100.00 |
| Plumbers.. . | 101 | 7 |  | 108 | 93.52 | 6.48 | 1.02 | 100.00 100.00 |
| Total | 378 | 209 | 9 | 596 | 63.42 | 35.07 | 1.51 | 100.00 |

Table V shows the "number and per cent." of persons "who received their wages in cash, checks and cash and checks." On the average each industry paid more of their men in cash than in any other way, varying from 48.49 per cent. to 88.25 per cent. of the number employed, while the number paid in "cash and checks" vary from 4.72 per cent. to 11.27 per cent. This leaves the percentage of those paid in checks ranging from 4.15 per cent. to 40.19 per cent.

While the number of men working at the carpenter's trade varied from 614 in January to 986 in July, the per cent. of those paid in cash varied only from 54.70 per cent. in October to 64.23 per cent. in August; the per cent. of those paid in checks varied from 28.12 per cent. in August to 37.70 per cent. in September, and, of those paid in cash and checks varied from 3.75 per cent. in January, to 7.80 per cent. in October. The averages show that 497 , or 60.09 per cent. of the whole were paid in cash; 277 , or 33.50 per cent. were paid in checks; and 53 , or 6.41 per cent. in cash and checks.

The whole number of general contractors paid wages varied from 245 in February to 914 in August, while the percentages of those paid in cash varied from 40.03 per cent. in November to 56.91 per cent. in January, those paid in checks from 36.53 per cent. in May to 45.57 per cent. in November, and those paid in cash and checks, from 6.50 per cent in January to 14.93 per cent in December. On the average 304, or 48.49 per cent. of the whole number, received their wages in cash, 252 , or 40.19 per cent. in checks, and 71 , or 11.32 per cent. in cash and checks.

The number of masons and plasterers who received wages varied irom 206 in February to 869 in July. The percentages of those who received cash varied from 51.06 in November to 72.82 in February, those who received checks, from 23.33. in February to 41.46 in November, and those who received both cash and checks, from 3.99 in January to 18.13 in April. Of the whole number who received wages 55.07 per cent. or 337 , were paid in cash, 33.66 per cent. or 206 in checks; and 11.27 per cent. or 69 , in both cash and checks.

The total number of men that worked in the miscellaneous occupations who received wages varied from 354 in February to 1,122 in July. The percentages of those paid in cash varied from 69.90 in January to 88.00 in June; those who received checks, from 9.19 in June to 23.63 in January; those who received both cash and checks, from 2.81 in June to 8.49 in November. An average of 576 , or 82.40 per cent. of the total were paid in cash, 90 , or 12.88 per cent. were paid in checks, 33 , or 4.72 per cent. were paid in both cash and checks.

The total number of painters and paperhangers who received wages during any one month varied from 225 in January to 698 in May. The percentages of those paid in cash varied from 85.58 in August to 91.13 in February; those paid in checks from 2.82 in February to 5.51 in July; and those paid in cash and checks, from 5.35 in March to 9.93 in August. This was the only industry that paid more men in both cash and checks than in checks alone. An average of 383 , or 88.25 per cent of the total average, received their wages in cash, 18, or 4.15 per cent. "received wages in checks, and 33, or 7.60 per cent. received their wages in both cash and checks.

The total number of plumbers who received wages during the year varied from 518 in February to 794 in June. The percentages of those who received cash varied from 68.96 in March to 74.43 in May; of those who received their wages in checks, from 15.41 in July to 19.47 in August; and those who were paid in both cash and checks varied from 19.45 per cent. in September to 12.82 in March. The average number who received cash wages during the year was 492 , or 71.93 per cent. of the total average. Those paid in checks averaged 121, or 17.69 per cent. of the total, and those paid in both cash and checks averaged 71 , or 10.38 per cent. of the total average of 684.

The summary for all industries exhibits about the same general characteristics as each industry. The number of men paid during the year varied from 2,191 in February to 5,125 in June, the number gradually increased from the former to the latter, then decreased again with the same regularity to the former. The percentages, on the other hand, did not rise and fall in the same way. 61.21 per cent. of those who worked in June were paid in cash, while 70.29 per cent. who worked in February were paid in the same way. The percentages paid in checks varied from 22.32 in February to 28.58 in November, and those paid in both cash and checks varied from 6.75 in January to 9.53 in November. A total average of 2,589 , or 66.52 per cent. of the total average working during the year, received their wages in cash, those paid in checks averaged 971 , or 24.94 per
cent. of the whole, and those paid in both cash and checks numbered 332 , or 8.54 per cent. of the whole.

It will be noticed by comparing the totals for each summary that they do not correspond with one another. To illustrate, none of the totals in the summary showing the number paid "weekly, semi-monthly or monthly," correspond in a single instance with the totals in the summary showing "whether paid in cash, checks, and cash and checks. Nor do the totals for one industry correspond with the totals for the same industry in another place. The discrepancy in any case arises from the fact that in some instances those making their reports to this office answered questions bearing upon one or the other of these topics and failed to answer them in other instances. Nevertheless the exhibits as they stand are approximately correct. The following is the table above discussed:

## CARPENTERS.

Showing the Number and Per cent. of Carpenters Who Received their Wages In Cash, Checks, and in both Cash and Checks.

| Months. | Number of Persons. |  |  |  | Per Cent. of Persons. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cash, | Checks | $\begin{gathered} \text { Cash } \\ \text { and } \\ \text { checks. } \end{gathered}$ | Total. | Cash. | Checks | Cash and checks. | Total. |
| January | 391 | 200 | 23 | 614 | 63.68 | 32.57 | 3.75 | 100.00 |
| February | 391 | 201 | 28 | 620 | 63.06 | ${ }_{92} 32.42$ | 4.52 | 100.00 10000 |
| March .. | 443 | 245 | 44 | 732 | 60.52 | 33.47 <br> 32.88 | 6.01 5.05 | 100.00 100.00 |
| April | 504 | ${ }_{318}^{267}$ | 41 | ${ }_{921}$ | 62.07 | ${ }_{34.53}$ | 6.30 | 100.00 |
| May | 545 605 | 318 | ${ }_{64}$ | $\stackrel{956}{95}$ | 63.29 | ${ }_{30.02}^{34}$ | 6.69 | 100.00 |
| June | 598 | 313 | 75 | 986 | 60.6 | 31.74 | 7.61 | 100.00 |
| August | 571 | 250 | 68 | 889 | 64.23 | 28.12 | 7.65 | 100.00 |
| September | 526 | 357 | 64 | 947 | 57.54 | 37.70 | 6.76 | 100.00 |
| October | 512 | 351 | 73 | 936 | 54.70 | 37.50 | 7.80 | 100.60 |
| November | 465 | 301 | 60 | 826 | 66.30 | 36.44 33.53 | 6.12 | 100.00 100.00 |
| December | 414 | 230 | 42 | 686 | 60.35 |  |  |  |
| Average | 497 | 277 | 53 | 827 | 60.09 | 33.50 | 6.41 | 100.00 |

## GENERAL CONTRACTORS.

Showing the Number and Per cent. of General Contractors who Received their Wages in Cash, Checks, and both Cash and Checks.

| Months. | Number of Persons. |  |  |  | Per Cent. of Persons. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cash. | Checks | $\left\|\begin{array}{c} \text { Cash } \\ \text { and } \\ \text { checks } \end{array}\right\|$ | Total. | Cash. | Checks | Cash and checks. | Total. |
| January | 140 | 90 | 16 | 246 | 56.91 | 36.59 | 6.50 | 100.00 |
| February | 132 | 94 | 19 | 245 | 53.88 | 38.37 | 7.75 | 100.00 |
| March | 139 | 113 | 29 | 281 | 49.47 | 40.21 | 10.32 | 100.00 |
| April | 277 | 189 | 49 | 515 | 53.79 | 36.70 | 9.51 | 10000 |
| May | 374 | 263 | 83 | 720 | 51.94 | 36.53 | 11.53 | 100.00 |
| June | 409. | 329 | 91 | 829 | 49.34 | 39.69 | 10.97 | 100.00 |
| July .. | 422 | 359 | 90 | 871 | 48.45 | 41.22 | 10.33 | 100.00 |
| August | 471 | 337 | 106 | 914 | 51.53 | 36.87 | 11.60 | 100.00 |
| September | 419 | 361 | 100 | 880 | 47.61 | 41.02 | 11.37 | 100.00 |
| October ... | 391 | 347 | 102 | 840 | 46.55 | 41.31 | 12.14 | 100.00 |
| November | 289 | 329 | 104 | 722 | 40.03 | 45.57 | 14.40 | 100.00 |
| December | 185 | 208 | 69 | 462 | 40.05 | 45.02 | 14.93 | 100.00 |
| Average | 304 | 252 | 71 | 627 | 48.49 | 40.19 | 11.32 | 100.00 |

## MASONS AND PLASTERERS.

Showing the Number and Per cent. of Masons and Plasterers who received their Wages in Cash, Checks, and both Cash and Checks.

| Months- | Number of Persons. |  |  |  | Per Cent. of Persons. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cash. | Checks | Cash and checks. | Total. | Cash. | Checks | Cash and checks. | Total. |
| January- | 143 | 74 | 9 | 226 | 63.27 | 32.74 | 3.99 | 100.00 |
| February | 150 | 46 | 10 | 206 | 72.82 | 22.33 | 4.85 | 100.00 |
| March | 178 | 101 | 49 | 328 | 54.27 | 30.79 | 14.94 | 100.00 |
| April | 325 | 167 | 109 | 601 | 54.08 | 27.79 | 18.13 | 100.00 |
| May | 415 | 236 | 111 | 762 | 54.46 | 30.97 | 14.57 | 100.00 |
| June | 420 | 292 | 107 | 819 | 51.28 | 35.65 | 13.07 | 100.00 |
| July | 478 | 300 | 91 | 869 | 55.01 | 34.52 | 10.47 | 100.00 |
| August... | 463 | 271 | 92 | 826 | 56.05 | 32.81 | 11.14 | 100.09 |
| September | 481 | 301 | 85 | 867 | 55.48 | 34.72 | 9.80 | 100.00 |
| October .. | 441 | 287 | 88 | 816 | 54.05 | 35.17 | 10.78 | 100.00 |
| November | 314 | 255 | 46 | 615 | 51.06 | 41.46 | 7.48 | 100.00 |
| December | 241 | 142 | 33 | 416 | 57.94 | 34.13 | 7.93 | 100.00 |
| Average | 337 | 206 | 69 | 612 | 55.07 | 33.66 | 11.27 | 100.00 |

## MISCELLANEOUS.

Showing the Number and Per cent. of Persons in the Miscellaneous Occupations who Received their Wages in Cash, Checks, and Cash and Checks.


## PAINTING AND PAPERHANGING.

Showing the Number and Per cent. of Painters and Paperhangers who Re. ceived their Wages in Cash, Checks, and Cash and Checks.

| Months. | Number of Persons. |  |  |  | Per Cent. of Persons. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cash. | Checks |  | Total. | Cash. | Checks | $\begin{gathered} \text { Cash } \\ \text { and } \\ \text { checks. } \end{gathered}$ | Total. |
| January | 205 | 7 | 13 | 225 | 91.11 | 3.11 | 5.78 | 100.00 |
| February | 226 | 7 | 15 | 248 | 91.13 | 2.82 | 6.05 | 100.00 |
| March . | 320 | 16 | 19 | 355 | 90.14 | 4.51 | 5.35 | 100.00 |
| April | 520 | 25 | 48 | 593 | 87.69 | 4.22 | 8.09 | 100.00 |
| May | ${ }_{5}^{613}$ | 32 | 53 44 | 698 | 87.82 88.94 | 4.4 .59 | 6.67 | 100.00 |
| June | ${ }_{396}$ | $\stackrel{29}{29}$ | 44 33 | 454 | 87.22 | 5.51 | 7.27 | 100.00 |
| August | 362 | 19 | 42 | 423 | 85.58 | 4.49 | 9.93 | 100.00 |
| September | 397 | 19 | 41 | 457 | 86.87 | 4.16 | 8.97 | 100.00 |
| October . | 412 | 18 | 36 | 466 | 88.41 | 3.86 | 7.73 | 100.00 |
| November | 310 | 11 | 35 | 356 | 87.08 | 3.09 | 9.83 | 100.00 |
| December | 247 | 9 | 21 | 277 | 89.17 | 3.25 | 7.58 | 100.00 |
| Average | 383 | 18 | 33 | 434 | 88.25 | 4.15 | 7.60 | 100.00 |

## PLUMBERS.

Showing the Number and Per cent. of Plumbers who Received their Wages in Cash, Checks, and in both Cash and Checks.


## SUMMARY FOR ALL IN'DUSTRIES.

Showing the Number and Pèr cent. of all Persons who Received their Wages in Cash, Checks, and in both Cash and Checks.

| Months. | Number of Persons. |  |  |  | Per Cent. of Persons. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cash. | Checks | Cash and checks. | Total. | Cash. | Checks | Cash and checks. | Total. |
| January. | 1,548 | 565 | 153 | 2,266 | 68.31 | 24.94 | 6.75 |  |
| February | 1,540 | 489 | 162 | 2,191 | 70.29 | ${ }_{22.32}^{24.94}$ | 6.75 | 100.00 |
| March ... | 1,737 2422 | 640 840 | 240 | 2,617 | 66.37 | 24.46 | 9.17 | 100.00 |
| May . | 3,426 | 840 1,060 | 336 408 | 3,598 4,664 | 67.32 | ${ }_{2}^{23.35}$ | 9.33 | 100.00 |
| June | 3,547 | 1,165 | 413 | 5,125 | 68.53 | ${ }_{22}^{22.72}$ | 8.75 | 100.00 |
| July | 3,388 | 1,239 | 405 | 5,032 | 67.33 | 22.73 24.62 | 8.06 8.05 | 100.00 100.00 |
| August | 3,243 | 1,243 | 432 | 4,918 | 65.94 | 24.62 25.27 | 8.05 8.79 | 100.00 100.00 |
| September | 3,170 | 1,292 | 407 | 4,869 | 65.11 | 26.54 | 8.35 | 100.00 |
| October | 3,017 | 1,236 | 405 | 4,658 | 64.77 | 26.53 | 8.70 | 100.00 |
| November | 2,395 | 1,106 | 369 | 3,870 | 61.89 | 28.58 | 9.53 | 100.00 |
| December | 1.870 | 781 | 253 | 2,904 | 64.40 | 26.89 | 8.71 | 100.00 |
| Average | 2,589 | 971 | 332 | 3,892 | 66.52 | 24.94 | 8.54 | 100.00 |

Table VI shows the total amount paid in wages for each industry and the total for all industries, the average number of men working in each, the total average, and also the average yearly earnings. General contractors, masons and plasterers, and plumbers received about the same yearly earnings. The average yearly earnings of carpenters, and painters and paperhangers are also about the same, while those working in the miscellaneous occupations fall nearly $\$ 100$ below the average and over $\$ 156$ below the highest average yearly wages. One reason for this is, as has been pointed out before, that there are undoubtedly more unskilled laborers in this class than in either of the others. The table is as follows:

SHOWING WAGES PAID IN EACH INDUSTRY, AVERAGE NUMBER OF MEN, AND THE AVERAGE WAGES PAID TO EACH.

| Industries. |
| :---: |

## SALARIES AND WAGES IN OITIES AND VILLAGES.

The facts which are presented in the following pages under the above head relate to the earnings of a large number of persons who in one capacity or another are employed by the city and village corporations in this state. At the time of the last U. S. census, or in 1900, there were in Wisconsin 115 cities and 145 villages and their number is almost constantly increasing. But they are not only increasing numerically, but they are growing in size and importance. Their government is becoming more complex, and new functions are added from time to time. In order to carry on these governments or the duties devolving upon them a large staff of employes are needed. Each city has its officials and other employes, some of whom are elected by the people directly, others appointed by some one in authority, and still others who are employed in some other way. Nearly all of these receive compensation for their services in the form of salaries and wages, and as their number is quite large, constituting a considerable proportion of the wage-earning population, the amount of their earnings is of considerable importance. The purpose of this part is to show what these earnings are, or, in other words, to shed enough light upon them to enable comparisons between the earnings of those who are employed by municipal corporations on the one hand, and of those who are employed in private employments on the other.

The data for this purpose we endeavored to obtain through correspondence. Schedules were prepared and forwarded to each place. A few replied promptly; others did so after repeated appeals; but the majority paid no attention to our inquirics. The result of the whole effort was that we succeeded in obtaining replies from only 140 of the 250 places to which the schedules were sent. Nor were the replies, on the whole, satisfactory. While the schedule covered a great deal of ground the only points upon which fairly reliable data was obtained was the rate of the earnings or wages paid. The reason mostly given for
incomplete reports and for the failure to report was that the records of the city were kept in such shape that the facts desired could not be had without too much trouble, even if they could be had at all.

The data has been classified and presented with reference to occupations, as the nature of the duties performed. The first presentation in order relates to the earnings of the legal advisers of the cities, the city attorney.

City ATTORNEYS.

\begin{tabular}{|c|c|c|c|c|c|}
\hline Yearly salary \& No. of places. \& Total. \& Yearly salary. \& No. of places. \& Total. <br>
\hline \$1,300 per year \& 1 \& \$1,300 00 \& \$150 per year \& 3 \& \$450 00 <br>
\hline 1,200 per year \& 1 \& 1,200 00 \& 108 per year \& 1 \& 10800 <br>
\hline 900 per year \& 1 \& 93000 \& 100 per year \& 9 \& 90000 <br>
\hline 600 per year \& 6 \& 3,600 00 \& 90 per year \& 1 \& 9000 <br>
\hline 540 per year \& 1 \& ${ }^{2} 54006$ \& 75 per year \& 2 \& 15000 <br>
\hline 500 per year \& 3 \& 1,500 0 \& 50 per year \& 2 \& <br>
\hline 480 per year \& 2 \& 980
400

000 \& 30 per yeur \& 2 \& 6000
2500 <br>
\hline ${ }^{400}$ per year \& $\frac{1}{3}$ \& 400
900
900 \& 25 per year \& \& <br>
\hline 200 per year \& 3 \& 6000 C \& Total \& 47 \& \$14,129 00 <br>
\hline 175 per year \& 1 \& 17500 \& Average \& \& 30060 <br>
\hline
\end{tabular}

The preceding presentation shows the yearly salary of 47 city attorneys. The salary of each is given separately, and in looking at the table it is seen that it varies from $\$ 1,300$ per year down to $\$ 25$. The highest amount was paid in one case only. Six cities each paid $\$ 600$ annually to their attorney, and three paid $\$ 500$. In nine cases the salary was only $\$ 100$ per year, while in 11 it was less than this amount. The average amount to each attorney was about $\$ 300.60$ per year.

The amounts thus given seem extremely low, the average being even below the earnings for common labor. It should be born in mind, however, that the larger cities in the state where the salaries are comparatively the highest did not report in these cases and are therefore not included, and that the attorneys included are only giving a part of their time to the duties for which the amounts given are received.

EN'GINEERS.

| Yearly salary. | No. of places. | Total. | Yearly salary. | No. of places. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| \$1,400 per year | 1 | \$1,400 00 | \$300 per year | 1 | \$300 00 |
| 1,300 per year | 1 | 1,300 00 | 237 per year | 1 | 23700 |
| 1,200 per year | 2 | 2,400 00 | 170 per year | 1 | 17000 |
| 1,000 per year | 1 | $\begin{array}{r}1,00000 \\ 700 \\ \hline\end{array}$ | Total | 15 | \$11,647 00 |
| 600 per year | 6 | 3,600 00 | Average |  | 77600 |
| 540 per year | 1 | 54000 |  |  |  |

Fifteen cities reported as to the salary of its city engineer and these reports are summarized in the above table. The salaries varied from $\$ 1400$ to $\$ 170$ per year, with an average of $\$ 776$ per year. Not many of the engineers included here gave their entire time to their official duties.

CITY AND VILLAGE CLERKS.

| Yearly salary. | No. of <br> places. | Total. |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

The above table is a very good illustration of the salaries received by the city and village clerks. Very few of the larger cities are included even in this table as is plain from the figures. The salaries range all the way from $\$ 1700$ per year to $\$ 5$ depending upon the city and the work and responsibilities in-volved. In all, 143 cities or clerks are included and these together received during the year the sum of $\$ 29,545$ or an average of about $\$ 2006.70$ to each.

Fifteen clerks received $\$ 600$ or more; eleven received from $\$ 400$ to $\$ 600$; fifteen drew from $\$ 200$ to $\$ 400$ per year. From this it appears that 142 received less than $\$ 200$ per year. It is plain from these figures that only a small proportion received enough to pay them for devoting all their time to their official duties.

- CITY AND VILLAGE TREASURER.

| Yearly salary. | No. of places. | Total. | Yearly salary. | No. of places. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| \$1,600 per year | 1 | \$1,600 00 | \$100 per year | 7 | \$700 00 |
| 1,200 per year | 1 | 1,200 00 | 93 per year | 1 | 9300 |
| 1,000 per year | $\stackrel{2}{2}$ | 2,000 00 | 80 per year | 1 | 8000 |
| 800 per year | 1 | 1,800 800 1 | 75 per year | 2 | 115000 |
| 800 per year 600 per year | $\stackrel{1}{2}$ | 1,200 00 | 50 per year | 4 | 20000 |
| 540 per year | 2 | 1,080 00 | 25 per year | 3 | 7500 |
| 500 per year | 3 | 1,500 00 | 20 per year | 1 | 2000 |
| 400 per year |  | 40000 |  |  |  |
| 300 250 per yer year | 3 | 900 250 000 | Total ${ }_{\text {Average }}$ | 40 | $\begin{array}{r} \$ 14,168 \\ 35420 \\ 30 \end{array}$ |
| 250 per year |  |  |  |  |  |

Here we find the yearly salary of each of 40 city and village treasurers. The salaries run all the way from $\$ 20$ up to $\$ 1,600$, which latter is the highest figure, while the average to each is $\$ 354.20$ per share.

STREET COMMISSIONERS, SUPERINTENDENTS, AND INSPECTORS.

| Yearly salary. | No. of places. | Total. | Yearly salary. | No. of places. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| \$1,200 per year | 1 | \$1,200 00 | \$ $\$ 12.00$ per year | 1 | \$31200 |
| 900 per y ear | 1 | 90000 | 180.00 per year | 1 | 18000 |
| 800 per year | 1 | 80000 | 165.00 per year | 1 | 16500 |
| 788 per year | 1 | 78800 | 157.00 per year | ${ }_{2}^{2}$ | 31500 |
| 750 per year 600 per year | 4 | $\begin{array}{r}750 \\ 2,400 \\ \hline 00\end{array}$ | 150.00 per year | 3 | 40500 |
| 565 per year | 1 | 56500 | 115.84 per year | 1 | 11584 |
| 541 per year | 1 | 54100 | 105.00 per y year | 1 | 10500 |
| 540 per year | 1 | 54000 | 90.00 per year | 3 | 27000 |
| 500 per year | 1. | 50000 | 86.50 per year | 1 | 8650 |
| 480 per year | 1 | 480 450 00 | 75.00 66.00 per yer year | 1 | 7500 6600 |
| 450 per year 430 per year | 1 | 45000 <br> 430 <br> 00 | 66.00 65.00 per yer year | 1 | 6600 13000 |
| 420 per year | 1 | 42000 | 50.00 per y year | 1 | 5000 |
| 400 per year | 4 | 1,600 00 | 37.00 per year | 1 | 3700 |
| 396 per year | 1 | 39600 | 33.00 per year | 1 | 3300 |
| 360 per year 322 per year | 1 | 720 320 | otal | 48 | \$16,447 34 |
| 322 per year | 1 |  | Average |  | \$342 65 |

Here is a statement of the earnings of street commissioners, superintendents and inspectors. The number of such officers
included is 48 and their total salary for the year was $\$ 16,447.34$ which makes the average to each about $\$ 342.65$.

Considered in detail the table shows that all kinds of salaries were paid. The highest is that of $\$ 1,200$; the next in order is $\$ 900$, then come $\$ 800,788$, and $\$ 750$. In each one of these cases there is only one person who receives the salaries named. Four street officers received $\$ 600$ each. From this each class has only one person each down to the one of $\$ 400$ per year which includes four persons. The decrease is gradual. Eleven received from $\$ 100$ to $\$ 200$ per year and another eleven persons received less than $\$ 100$ per year.

ASSESSORS.

| Yearly salary. | No. of <br> places. | Total. |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |

CITY PHYSICIANS.

| Yearly salary. | No of places. | Total. | Yearly salary. | No. of places. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| \$480 per year | 1 | $\$ 48000$ | \$110 per year | 1 | \$110 00 |
| 420 per year | 1 | 420000 | 100 per year | 2 | 20000 |
| 400 per year | 2 | 80000 |  | 1 | 7600 |
| 300 per year | 1 | 300 250 200 | 20 per year | 1 | 7000 2500 |
| 250 per year | $\frac{1}{6}$ | 250 1,200 00 | 25 per year | 1 |  |
| 120 per year | 1 | 12000 | $\begin{gathered} \text { Total } \\ \text { Average } \end{gathered}$ | 19 | $\$ 4.05100$ $\$ 213$ |

HEALTH OFFICERS.

| Yearly salary. | No. of places | Total. | Yearly salary. | No. of places. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| \$600 per year | 1 | \$600 00 | $\$ 40$ per year | ${ }_{2}^{2}$ | \$80 00 |
| 420 per year | 1 | 42000 | 35 per year | 2 | 7000 |
| 250 per year | 1 | 25000 | 26 per year | 1 | 2600 |
| 248 per year | 1 |  | 25 per year | 1 | 7500 |
| 200 per year | 5 | 1,000 150 100 | 20 per year | 1 | 2000 |
| ${ }_{100}^{150}$ per yer year | 1 | 150 100 00 | 10 per year | ${ }_{2}^{2}$ | 1000 |
| 75 per year | 1. | 7500 |  |  |  |
| 50 per year | 3 | 15000 | Total | 28 | $\begin{array}{r} \$ 3,29400 \\ \$ 11765 \end{array}$ |

POOR COMMISSIONERS.

| Yearly salary. | No. of places. | Total. | Yearly salary. | No. of places. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| \$600 per year | 4 | \$2,400 00 | \$150 per year | 1 | $\$ 55000$ |
| 500 per year | 1 | 50000 | 100 per year | 2 | 20000 |
| 450 per year | 2 | 90000 420 00 | Total | 12 | \$4,930 00 |
| 360 per year | 1 | 36000 | Average |  | \$411 00 |

CHIEIS OF POLICE OR MARSHALS.

| Yearly salary. | No. ef places. | Total. | Yearly salary, | No. of places. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| \$1,080.00 per year | 1 | \$1,080 00 | \$200.00 per year | 1 | \$200 00 |
| 1,000.00 per y ear | 1 | 1,000 00 | 180.00 per year | 1 | 90000 |
| 1,900.60 per vear | 4 | 3,600 00 | 150.00 per y ear | 1 | 15000 |
| 840.00 per year | 1 | 84000 | 145.00 per year | 1 | 14500 |
| 730.00 per year | 1 | 73000 1,44000 | 144.00 per year | $\stackrel{2}{5}$ | 28800 600 |
| 720.00 625.00 per yer year | ${ }_{1}^{2}$ | $\begin{array}{r}1,440 \\ 62500 \\ \hline\end{array}$ | 120.00 per y year 108.00 per y | 5 | 60000 43200 |
| 600.00 per year | 11 | 6,60000 | 100.00 per y ear | ${ }^{6}$ | 60000 |
| 540.00 per year | 3 | 1,620 00 | 96.00 per year | 1 | 9600 |
| 500.00 per year | 4 | 2,000 00 | 90.00 per year | 1 | 9000 |
| 480.00 per year | 8 | 3,840 00 | 80.00 per year | 1 | 8000 |
| 456.25 per year | 1 |  | 70.00 per year | 1 |  |
| 420.00 per year | 7 | 2,940 1,600 00 | 62.00 per year 60.00 per year | $\frac{1}{5}$ | 6200 30000 |
| 400.00 390.00 per y y year | 4 | 1,600 390 3 | 60.00 50.00 per year year | - ${ }^{5}$ | 30000 500 |
| 365.00 per year | 1 | 36500 | 45.00 per year | 1 | 4500 |
| 360.00 per year | 2 | 72000 | 40.00 per year | 1 | 4000 |
| 350.00 per year | 1 | 35000 | 30.00 per year | 4 | 12000 |
| 300.00 per year | 4 | 1,200 00 | 25.00 per year | 3 | 7500 |
| 250.00 per year |  | 50000 |  |  |  |
| ${ }_{210.00}^{240.00 ~ p e r ~ y e r ~ y e a r ~}$ | 1 | 96000 210 | Total Average | 120 | $\$ 37.92925$ |
| 210.00 per year | 1 | 21000 | Average |  | \$316 08 |

The above table relates to chiefs of police and police marshals. In larger places where several policemen are employed
the man at the head of the police force is usually called the chief. In smaller places on the other hand where only one man or so is emnloyed for police duty this man, who has various duties to look after, is generally called marshal.

The number of chiefs and marshals included in above table is 120. The total salary of these amounted to $\$ 37,929.25$ or an average to each of $\$ 316.08$.

Only two chiefs received $\$ 1,000$ or over, while 27 received from $\$ 500$ up to $\$ 900$ both inclusive. Thirty-seven received from $\$ 200$ to $\$ 400$ inclusive, and 54 received less than $\$ 200$ per annum.

POLICEMEN AND WATCHMEN.

| Yearly salary. | No. em. ployed. | No of places. | Total. | Yearly salary. | No.employed. | No. of places. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$620.00 | 8 | 1 | \$4,960 00 | \$365.00 | 3 |  | \$1,095 00 |
| 600.00 | 19 | 5 | 11,400 00 | 360.00 | 2 | 2 | ${ }^{720} 00$ |
| 576.00 | 4 | 1 | 2,304 00 | 300.00 | 4 | 4 | 12,000 00 |
| 560.00 | ${ }_{2}$ | 1 | 1,120 00 | 150.00 | 3 | 1 | 45000 |
| 540.00 | 26 | 8 | 14,04000 | 120.00 . | 1 | 1 | 12000 |
| 500.00 480 | 4 | 5 | 20,00000 | 40.00 . | 1 | 1 | 4000 |
| 480.00 456.00 | 3 | 5 | 1,440 00 | 25.00 | 1 | 1 | 2500 |
| 456.00 450 | 5 2 | ${ }_{1}^{2}$ | $\begin{array}{r}2,280 \\ 900 \\ 900 \\ \hline\end{array}$ | 13.25 | ${ }_{2}^{2}$ | 1 | 2650 |
| 420.00 | 1 | 1 | 42000 | 12.50 | 2 | 1 | 2500 |
| 407.00 | 3 | 1 | 1,221 00 | Total | 97 | 44 | \$64,176 50 |
| 400.00 | 1 | 1 | 40000 | Average |  |  | \$661 85 |

The preceding presentation shows the earnings of 97 policemen and watchmen employed in 44 cities and villages in the state. In considering the table in detail it is seen that one city employing eight policemen paid them for their services at the rate of $\$ 620$ per year; that five cities employing 19 policemen paid each $\$ 600$ per annum ; that two places paid $\$ 576$ and $\$ 560$ respectively to the one man each of these places employed; that 26 persons, employed in 8 cities received $\$ 540$ per year; that 4 policemen ïn two cities received $\$ 500$; that 15 persons employed in eleven places received from $\$ 400$, to $\$ 500$ per annum, and that 9 persons employed in nine places were paid at a rate varying from $\$ 300$ to just below $\$ 400$ per year. It can perhaps be said that those who have thus been enumerated give their entire time to their official duties. About 10 persons employed in six places received less than $\$ 200$ per year, and it is likely that none of these gave their entire time to these duties.

FIREMEN.

| Yearly salary. | No. employed. | No. of places. | Total. | Yearly salary. | No. employed. | No. of places. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$1,200.00 | 1 | 1 | \$1,200 00 | \$175.00 ....... | 1 | 1 | $\$ 17500$ |
| 1,110.00 | 1 | 1 | 1,110 00 | \| 150.00 ....... | 11 | 2 | 1,650 200 200 |
| 900.00 | 2 | 2 | 1,800 00 | 100.00 | $\stackrel{2}{2}$ | 1 | 15000 |
| 876.00 | 1 | 1 | 87600 <br> 840 | 75.00 60.00 | 1 | 1 | $\underline{60} 00$ |
| 840.00 720 | 1 | 1 | 840 720 00 | 54.00 | 1 | 1 | 5400 |
| 720.00 600.00 | 18 | 5 | 10,800 00 | 50.00 | 3 | 2 | 15000 |
| 540.00 | 61 | 6 | 32,940 00 | 25.00 | 3 | 2 | 7500 |
| 510.00 | 2 | 2 | 1,020 00 | 22.75 | 11 | 1 | 25000 |
| 500.00 | 17 | 2 | 8,500 00 | 20.00 | 2 | 1 | 4000 |
| 480.00 | 3 | 3 | 1,440 00 | 15.00 | 1 | 1 | 1500 |
| 460.00 | 1 | 1 | ${ }^{460} 00$ | 10.00 5.62 |  | 1 | 13500 |
| 400.00 350 | 9 | 1 | $\begin{array}{r}3,600 \\ 350 \\ \hline 00\end{array}$ | 5.62 | 24 |  |  |
| ${ }_{348.00}^{350}$ | $\stackrel{1}{2}$ | 1 | ${ }_{696} 00$ | Total | 188 | 47 | 70,395 00 |
| 300.00 | 3 | 1 | 90000 | Average .. |  |  | \$374 00 |
| 200.00 | 1 | 1 | 20000 |  |  |  |  |

The above statement deals with the firemen, or the persons who are employed in the fire-department service in the various places in the state. The table shows that 2 persons employed in two places received over $\$ 1,000$ per annum; that 5 persons employed in five places received from $\$ 700$ to $\$ 900$ inclusive; that 98 persons employed in fifteen places were paid from $\$ 500$ to $\$ 600$ inclusive; that 19 persons in eight places were paid from $\$ 300$ to $\$ 480$; that 15 persons in five places had a yearly salary of from $\$ 100$ to $\$ 200$ and that 49 persons in twelve places were paid less than $\$ 100$ each. It is perhaps fair to say that only those who received over $\$ 300$ per year could have been said to devote all their time to the duties.

The total salary for 188 persons was $\$ 70,395$, which is equal to an average of $\$ 374$ to each person.

WATER DEPARTMENTS.

| Yearly salary. | No.employed. | No. of places. | Total. | Yearly salary, | No. employed. | No. of places. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$840.00 | 3 | 1 | \$2,520 00 | \$450.00 .. | 2 | 1 | $\$ 90000$ |
| 752.00 | 3 | 1 | 2,256 00 | 420.00 . . | 2 | 2 | 84000 |
| 740.00 | 6 | 1 | 4,440 00 | 400.00 . | 1 | 1 | 40000 |
| 730.00 | 1 | 1 | 73000 | 360.00 | 1. | 1 | 36000 |
| 720.00 | 2 | 2 | 1,440 00 | 340.00 . | 1 | 1. | 34000 |
| 700.00 | 2 | 1 | 1,400 00 | 320.00 . | 3 | 1 | 96000 |
| 690.00 | 3 | 2 | 2,070 00 | 300.00 . | 1 | 1 | 30000 |
| 678.00 | 2 | 1 | 1,356 00 | 250.00 | 1 | 1 | 25000 |
| 660.00 | 2 | 1 | 1,320 00 | 180.00 | 1 | 1 | 18000 |
| 600.00 | 4 | 4 | 2,400 00 | 120.00 . | 1 | 1 | 12000 |
| 570.00 | 2 | 1 | 1,140 00 | 90.00 . | 1 | 1 | 9000 |
| 560.00 | 1 | 1 | 56000 | 70.00 .. | 1 | 1 | 7000 |
| 540.00 | 1 | 1 | 54000 | 35.00 | 1 | 1 | 3500 |
| 526.66 | 3 | 1 | $\begin{array}{r}1,580 \\ 9800 \\ \hline\end{array}$ |  |  |  |  |
| 490.00 | 2 | 1 | 98000 | Total Average | 54 | 34 | $\$ 29.57700$ $\$ 547$ |

The preceding table gives the yearly salaries of 54 superintendents and engineers connected with the water department in 34 cities.

From this table it can be said that 17 persons employed in seven cities were paid at a rate varying from $\$ 700$ to $\$ 840$ per year; that 18 persons received an amount annuallyvarying from about $\$ 525$ to $\$ 690$; that 13 persons in nine places received from $\$ 300$, to $\$ 490$; and that 6 persons in six places were paid less that \$300 yearly.

The total wages were $\$ 29,577$ and the average to each person was $\$ 547.70$.

LAMPLIGHTERS AND JANITORS.

| Yearly salary. | No. employed. | No. of places. | Total. | Yearly salary. | No. employed. | No. of places. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$650.00 | 1 | 1 | \$650 00 | \$120.00 | ${ }_{2}^{2}$ | ${ }_{2}^{2}$ | \$240 00 |
| 504.00 |  | 2 | 504001,92000 | 108.00 |  |  | 2160010500 |
| 480.00 | 4 |  |  | 105.00100.00 | 2 | 1 |  |
| 420.00 | 33 | 3 | 1,260 00 |  | 1 | 1 | 1000080 |
| 400.00 |  | 311 | 1,200 00 | 100.00 80.00 | 1 | 11 |  |
| 370.00 | 3 |  | $\begin{array}{r}370 \\ 1,440 \\ \hline 1,00\end{array}$ | 75.0060.00 |  |  | 80 7500 00 |
| 360.00 | 4 | 1 3 |  |  | 4 | 1 4 | 24000 |
| 350.00 | 1 | 1 | 1,350 00 | 60.00 50.00 |  | 4 4 | 20000 |
| 300.00 |  | 3111 | $\begin{array}{r}1,200 \\ 240 \\ \hline 20 \\ \hline\end{array}$ | 36.0030.00 | 411 | 1111 | 3630300 |
| 240.00 | 1 |  |  |  |  |  |  |
| 200.00 |  |  | 40000 | 18.00 | $\begin{aligned} & 1 \\ & 1 \\ & 1 \\ & 1 \end{aligned}$ |  | 1200 |
| 198.00 | $\begin{aligned} & 1 \\ & 1 \\ & 1 \end{aligned}$ | 111 | $\begin{aligned} & 19800 \\ & 14500 \\ & 14400 \end{aligned}$ | 12.00 |  |  |  |
| 145.00 744.00 |  |  |  |  | 48 | 44 |  |
|  |  |  |  | Average |  | 44 | $\begin{aligned} & 1,353 \\ & \$ 236500 \end{aligned}$ |

MISCELLANEOUS.

| Yearly salary. | No. employed. | No. of places. | Total. | Yearly salary. | No. employed. | No. of places. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$500.00 | 1 | 1 | \$500 00 | \$75.00 | 1 | 1 | \$7500 |
| 480.00 | 4 | 3 | 1,920 00 | 60.00 | 1 | 1 | 6000 |
| 400.00 | 3 | 1 | 1,200 00 | 51.50 | 2 | 1 | 10300 |
| 365.00 | 1 | 1 | 36500 | 24.00 | 1 | 1 | 2400 |
| 360.00 | 2 | 2 | 72000 | 15.00 | 1 | 1 | 1500 |
| 290.00 | 6 | 1 | 1,740 00 | 10.00 | 1 | 1 | 1000 |
| 250.00 200.00 | 1 | 1 | 25000 20000 | 6.00 5.00 | 7 | 1 | 4200 |
| 140.00 | 1 | 1 | 14000 | 5.00 | 1 | 1 | 500 |
| 100.00 | 1 | 1 | 10000 | Total ${ }_{\text {Average }}$ | 36 | 21 | $\begin{array}{r} \$ 7,46900 \\ \$ 20750 \end{array}$ |

The foregoing two tables are concerned with lamplighters, etc., and miscellaneous employes. Of lamplighters and janitors, 48 persons employed in 44 places are included. Of miscellaneous 36 persons employed in 21 places are included.

The highest earnings received by the lamplighter and janitor was $\$ 650$, and the lowest $\$ 12$, while 22 persons employed in 18 places were paid over $\$ 300$, and 24 persons employed in that number of places drew less than $\$ 300$ per year.

For miscellaneous workers the story varies but little. Here we find that 10 persons in 8 places received over $\$ 300$, and 26 persons in 13 places were paid less than $\$ 300$ per year.

The average yearly earnings for lamplighters and janitors was $\$ 236.50$, while for miscellaneous it was $\$ 207.50$.

SHOWING THE NUMBER OF DAYS OF COMMON LABOR, THE RATE OF WAGES PER DAY, AND TOTAL AMOUNT PAID AS WAGES IN 122 CITIES AND VILLAGES IN 1900.

| Number of cities and villages reporting. | No. of days of commo labor. | $\begin{gathered} \text { Rate of } \\ \text { wages per } \\ \text { day. } \end{gathered}$ | Total amount paid as wages. |
| :---: | :---: | :---: | :---: |
| 113 | 122,145 | \$150 | \$183,217 50 |
| 1 | 1,387 | 180 | 1,914 06 |
| 1 | 1437 4,748 | 135 125 | $\begin{array}{r}589 \\ 3,435 \\ \hline 00\end{array}$ |
| 122 | 128,499 | \$1 49 | \$191,651 31 |

The above presentation shows for the number of cities and villages included, the number of days of common labor during the year, the rate of wages per day and the total amount paid as wages during the year.

The cities or places included are classified according to the rate of wages paid. Thus we find 113 places where rate of wages for common labor was $\$ 1.50$ per day and where the number of days of common labor footed up to 122,145 and the total wages to $\$ 183,217.50$. The next class in order includes one city. In this place the number of days of labor was 1,782 , the rate of wages $\$ 1.40$ and the total wages $\$ 2,494.80$. The third class in order also includes one city, and in this case the days of labor numbered 1,387 , the rate per day $\$ 1.38$, and the total wages $\$ 1,914.06$. In the fourth class the days numbered 437 ,
the rate $\$ 1.35$ and the total wages $\$ 589.95$. The fifth or last class includes six places with 2,748 days of labor, the rate of wages at $\$ 1.25$, and the total wages $\$ 3,435$.

In summarizing these figures it is found that 122 places are included; that the days of labor numbered 128,499; that the average rate of wages was $\$ 1.49$ per day; and that the total amount paid as wages footed up $\$ 191,651.31$.

The returns were so incomplete that it was absolutely impossible to ascertain definitely just how many persons were employed in these places. It appeared, however, that the average working time to each person was about 200 days during the year. Computed on this basis the following figures will represent the average number of persons employed 200 days in the year and the average yearly earnings.

> AVERAGE YEARLY EARNINGS AND AVERAGE N'UMBER OF PERSONS EMPLOYED.

| Classification of cities, etc. | Number persons. | Average yearly earnings. |
| :---: | :---: | :---: |
| 113 with rate of wages at $\$ 1.50$ |  |  |
| 1 with rate of wages at 1.40 | 9 | $\$ 29987$ 277 |
| 1. with rate of wages at 1.38 | 7 | 27347 |
| 1 with rate of wages at 1.35 | 2 | 26996 |
| 6 with rate of wages at 1.25 | 13 | 25070 |
| Average of 122 with rate of wages at $\$ 1.49$ | 642 | \$29852 |

As said above, the indications were that about 200 days was the average time of employment during the year for the common laborers in the cities included. With this as a basis, the number of persons who were employed at the different rates and their average yearly earnings was computed and the results given in the above table.

In this table is seen, that on this basis 611 persons were employed at $\$ 1.50$ per day and that their average earnings was $\$ 299.87$. Those in the other four classes while employed the same length of time received a lower rate per day and hence show a lower yearly earning. The average rate was $\$ 1.49$, the total number employed was 642 persons, the average days at work 200 , and the average yearly earnings $\$ 298.52$.

CLASSIFICATION OF DAYS OF LABOR AND THE NUMBER OF CITIES IN EACH CLASS.

| Classification of days of common labor. |
| :---: |

Here is found a classification of the days of labor in the places included. The table shows that 33 places had 200 days or less of labor done ; that 37 had from 201 to 600 days of labor ; that 25 had from 601 to 1,500 days; that 23 had from 1,501 to 7,200 days and 3 places had over 7,200 days of labor each performed during the year. While this is not very definite it still conveys a great deal of information concerning the amount of labor that the various places find it necessary to provide for.

SUMMARY OF THE NUMBER EMPLOYED AND THE AVERAGE YEARLY
EARNINGS.

| Classification. |
| :--- |

In the preceding presentation is given the classification with reference to profession or occupation of the persons employed by the cities and villages included, the number of persons in each class, and the average yearly earning of each person in the different classes.

Of the classes included common labor shows the greatest number of persons. Next in order is the firemen, city clerks, chiefs of police and town marshals, etc. The smallest number is that for poor commissioners.

With reference to the yearly earnings it is found that the city engineers received the largest amount. Next in order are the policemen with $\$ 661.85$. It will be notice that according to this table the policemen earned more than the chiefs of police and town marshals. The reason for this apparent discrepancy is that town marshals were included with the chiefs. While the chiefs usually received a higher salary than policemen, the town marshals received less; and, outnumbering the chiefs in the above class caused a low average for both. The third in order in point of earnings were those employed in the water departments. The Poor Commissioner and Treasurer received the smallest sum.

In considering the above table as well as all the other tables in this connection it will be noticed that, in some classes at least, the number of persons included is proportionately small, and that the yearly earnings are comparatively low. The reason for this is that with few exceptions the reports were received from the smaller cities and villages. It is well known that the smaller places employ comparatively few persons and that, as the duties are light and the cost of living often low, they pay much lower salaries than larger cities. The facts as they stand, however, constitute a fair representation of the salaries paid in the medium sized and smaller cities and villages in this state.

## LABOR ORGANIZATIONS.

One of the most striking revelations of history is what Spencer calls the process of "integration and disintegration." Plants germinate, grow and perform their function in nature and decay. Animals come upon the stage of action, perform their part and disappear. States rise up and complete their work and fall, leaving a mass of rubbish upon which to build a new state whose internal structure must be so arranged and put together that it will take hold of and meet the new conditions for which it was formed. When this is accomplished the state again disintegrates and the process is again repeated.

The same is true in the industrial world. A certain kind of machinery is put forth to perform a certain kind of work, but when competition begins to make itself felt, and the demands made upon the machine are greater than its capacity, it is discarded and a new one placed in its stead that will meet the new conditions. The same is true of farming and transportation. The farmer, who year after year plows the ground, sows and reaps, discover's as population increases and the demand for his products is greater than his ability to produce, that he must reduce his methods to a more scientific basis. He makes a study of his soil, its needs and adaptation for certain crops, and directs his energy accordingly. The greater the demand for the products of the farm and factory the greater must be the facilities for producing various products and the facilities for transporting them from place to place. Out of this necessity has gradually developed our modern railroads, steamships, telegraphs, telephones, etc.

Out of all these conditions, and through a similar course of development came the modern corporations, the great manufacturing and transportation companies which employ, in one way or another, nearly all the laborers of civilized countries, known collectively as the "laboring classes," and it is about this class, their integration into labor unions, that we are now
concerned. With the rise of our present competitive system comes also a resistance to competition by all the great producers. It is resisted on the one hand by more improved machinery and methods of production, and on the other by longor hours of labor and lower wages for the laborer. It is at this point that labor comes in contact, I may say, collision, with the competitive forces of the modern industrial world. On the one hand, the manufacturer, seeking to avoid or eliminate the competitive forces, follows "along the lines of least resistance," and in this process the laborer is pushed aside or trampled under foot; on the other hand the laborer in his struggle for existence follows the lines of least resistance to him, and as a result his wife and children are brought into the workshop to earn their own living. The evils of this have been discussed elsewhere.

In early times monarchial governments were very severe in their dealings with any form of organization among the laboring classes, and in order to escape the punishments meted out to them, they often clothed their organizations with secrecy resulting in what we know as "secret societies."

The first labor organizations of which we have any history, more nearly resembled a modern strike or boycott than a labor organization as it exists today. It was not until the rudiments of our industrial system began to form, and the prospects of a laborer becoming a journeyman or a master were reduced to a minimum, that labor organizations in the modern sense of the term began to take shape.

These organizations were not based on the same fundamental principles as those of our times. They were organizations of laborers doing a particular kind of work in a particular trade. The piecers of the cotton mills would form one organization, and the spinners another. As a natural outcome of this arrangement the members of the piecer's organization were always looking forward to the time when they would become spinners, and, naturally enough, they became more interested in the wages and general welfare of the spinners than of their own, and as a result the piecer's association fell to pieces.

In other lines of occupation we frequently find the workmen
doing a particular line of work requiring the most skill, and therefore receiving the highest wages, organized into one fraternal bodies, and the laborers doing other but less skilled work organized into subordinate societies, and so on down through the list. While the organization at the top of this series possessed a degree of permanence, those subordinate to it tended more or less to center their interest in the one at the top and the inevitable resulti was a falling to pieces of the whole series.

The most stable organizations of labor found at that time were among those occupations where the economic position of the workmen in passing from apprenticeship to the position of master remained the same. A mason was a mason all his life. A labor union formed of men working at this trade was comparatively stable. The influences which worked the disintegration of those organizations mentioned above were eliminated in this instance. Unions among tilers was another illustration of this class. What was true of labor organizations, in this respect, in earlier times, is true to a large extent todáy.

The character of the earliest labor organizations is best illustrated in the following words from Adam Smith's Wealth of Nations. Smith says, "People of the same trade seldom met together, even for merriment and diversion, but the conversation ended in a conspiracy against the public, or in some contrivance to raise prices," and history indicates that the oldest labor union in existence, "the Book Binders," has its roots in a gathering of journeymen "to take a social pint of porter together."

It is such organizations as these that Howell claims were the direct successors of the guilds; but Mr. Webb claims that they were guilds and that trade unions did not descend from the guilds and did not bear any relation to them. The latter opinion appears to be the more logical both from an historical point of view and from the motive forces which called the two into existence. The guilds came into existence as an institution by which the community itself controlled its various industries. They were in themselves masters of industry while trade unions, on the other hand, did not pretend to control industry, but were rather inclined to be antagonistic to those who
did. They were organizations whose object was to make themselves felt in the race for life, to be able to assert their rights and maintain their ground against employers of labor and unjust laws. The guilds, on the other hand, controlledd their local government; in fact the guild was the local government, while trade unions in their early stages must bow their heads to local government.

Turning from hypothetical grounds to recorded facts, we do not find anything which resembles trade unions as we know them previous to the year 1700 . The members of the crafts guilds prior to that time were independent producers, while members of trade unions were dependent producers. Each laborer was a unit within himself and any attempt on his part to secure from his master his just portion of the world's economic goods was met with scorn and ridicule. He was practically owned by his master who exerted the same arbitrary authority over his employee and his family, as the master over his slave. Every attempt on the part of the laborer to throw off this "yoke of oppression" resulted in a further reduction to serfdom.

Out of such an industrial condition grew labor unions. After the individual had from time to time made the attempt to better his own condition and had as many times met worse than defeat, he discovered that "in union there is strength." Until industrial conditions made labor unions necessary in this way, all such organizations and societies were short lived: There was nothing to compel their continuation, but as soon as the time came when, in order to establish a certain line of business, it required more capital than the journeyman himself could furnish, from that moment the business took the nature of a corporation instead of an industry of a domestic nature. This made skilled labor useless except for hire at the hands of the capitalists. Here began the differentiation of the functions of capital and labor, or as Dr. Ingram put it in his address to the Labor Union Congress at Dublin in 1880, "the whole modern organization of labor in its advanced form rests on the fundamental fact which has spontaneously and increasingly developed itself-namely, the definite separation
between the direction of industrial operations and their execution in detail."

In 1720 the Journeymen tailors of London combined to secure better wages and shorter hours. The masters immediately laid in a complaint to Parliament stating that the action of the journeymen tailors was a conspiracy dangerous to the State and to trade; that it was unjust, presumptuous, etc. Parliament took up the matter at once and a law was enacted against such combinations. The journeymen tailors were just as prompt in refusing to obey the law as Parliament had been in enacting it. The Privy council took the matter in hand and directed its energies against this society but with little success.

Other labor unions were organized. The Stockingers, Cutters, Clothiers, Spinners, etc., were all of a similar character and had a similar end in view. All complained more or less of "the oppression of the poor by the rich," "low wages," and poor economic conditions in general, and all were proceeded against for violating the combination laws. The Wool Workers were proceeded against by a proclamation of the king. The result of all this was not a suppression of these organizations, but a change in their character, especially their outward appearance. Instead of organizing with the avowed purpose of retaining control of the products of their own labor, they organized "for benevolent and charitable purposes," or they met and organized in secret. The Wool Combers were perhaps the first to organize under the garb of a benevolent society. They resembled somewhat the German free employment agencies described elsewhere in this report. But with the introduction of mechanical power all these labor societies fell to pieces.

Everywhere the wage earner saw the degradation into which he was being driven, and in every instance mistook the cause. They petitioned Parliament for laws that would neutralize these supposed causes and as many times the employer would use his influence in the opposite direction. Parliament was asked to pass more rigid apprentice laws in behalf of labor. After passing them Parliament would be forced to repeal them
either by their failure to bring about the desired relief, or by the pressure brought to bear by employers. The introduction of machinery was also attributed to be the cause of low wages and idleness, and Parliament was asked to prohibit employers from using machinery, and on investigation as to the effects of such a prohilition the employers would produce overwhelming and conclusive evidence that such a policy would be unwise. In other instances the wage earner would attribute his low "standard of living" to the importation of foreign goods of the same kind he produced, and in many instances this occasioned riots which spread to such an extent that Parliament passed laws prohibiting importation. This experiment failed and rioting continued. As a last resort Parliament passed laws giving Justices of the Peace the power of fixing wages. This proved satisfactory for a time, but sooner or later it was found that in many instances the justices themselves were directly interested in low wages and in others they were prevailed upon by employers of labor to fix low rates, and so the trouble continued. This aroused a feeling of distrust and hostility to such an extent that Parliament was at a loss to know what to do. The competence of magistrates to fix wages was disputed by the cotton weavers, as a body, in 1812, and they carried their case to the courts. The courts decided that the wages as fixed by the magistrates were reasonable and just. The case was appealed and the employers were forced into a long and tedious litigation in which one hundred and thirty witnesses were examined as to each of the many rates proposed. The court decided in favor of the employers but made no provision for enforcing the wages fixed and a strike ensued. Many of the leaders were arrested and placed in prison, and. otherwise prosecuted to such an extent that for a time they b lost all hope of securing better wages or a higher "Standard of Living." But other laborers rallied to their support and Parliament was prevailed unon to repeal both the law authorizing justices of the peace to fix wages, and the statute of apprentices and the combination laws. So goes the history of labor struggles up to 1825 .

Previous to 1824 the history of trade unions was one of perse-
cution and repression. Mr. Webb says in his history of trade unions, "Every union that can claim an existence of more than half a century possesses a romantic legend of its earlier days. The midnight meeting of patriots in the corner of fields, the buried box of records, the secret oaths, the long terms of imprisonment of officials-all these are in the sagas of the older unions, and form material out of which, untroubled by historical criticism, a semi-mythical origin might easily have been created."

The Combination laws of 1799 and 1800 , and the twenty years of persecution of members of trade unions as rebels and ravolutionists, checked the growth of labor unions until after 1824. The first quarter of the century just closed may be justly called the dark ages of the history of trade unions. During this period while the Combination laws were in force, combinations of employers were allowed "for the purpose of fixing the wages of the laborers," while combinations among laborers "for the purpose of regulating wages" were denounced and prosecuted to the bitter end. It was said by Lord Jeffrey that. "a single master was at liberty at any time to turn off the whole of his workmen at once- 100 or 1,000 in number-if they would not accept the wages he chose to offer. But it was made an offence for the whole of the workmen to leave that master at once if he refused to give the wages they chose to require."

The Combination laws applied to employers as well as employes, but it was very seldom magistrates would enforce them against masters. Of course they were not always enforced against laborers, but where they were not it was generally due to an ineffective police system, or the leniency or cowardice of employers. An illustration of this is found in the case of the Calico Printers union in which the master did not proceed further than to issue to the members of this union a pamphlet called "Considerations addrssed to the Journe'ymen Calico-printers by one of its Masters." In this address the workmen are appealed to as follows: "We have by turns conceded what we ought all manfully to have resisted, and you, elated with success, have been led on from one extravagant demand to another, till the burden has become too intolerable to be borne. You fix the
number of our apprentices, and oftentimes even the number of our journeymen. You dismiss certain portions of our hands, and will not allow others to come in their stead. You stop all surface machines, and go the length even to destroy the rollers before our face. You restrict the cylinder machine, and even dictate the kind of pattern it is to print. You refuse on urgent occasions, to work by candle-light, and even compel our apprentices to do the same. You dismiss our overlookers when they don't suit you, and force obnoxious servants into our employ. Lastly, you set all subordination and good order at defiance and instead of showing deference and respeet to your employers, treat them with personal insult and contempt." In other cases masters even went the bail of members of labor unions in their employ, who had been arrested for illegal combination; but these instances are very rare. These illustrations are important in that they show a tendency on the part of employers to weaken in their persistent efforts to stamp out concerted action on the part of employees.

In 1843 the Coach-makers union of London was broken up by the arrest and conviction of its leading members. The calico engravers of Manchester met the same fate after refusing to work on account of the rapid increase in the number of apprentices.

But the oppressive weight and injustice of the Combination laws were felt most in the textile industries. The Act of 1800 is described in "A Few Remarks, \&c.," p. 86, as " a tremendous millstone around the necks of the local artisan, which has depressed and debased him to the earth; every act which he has attempted, every measure which he has devised to keep up or raise his wages, he has been told was illegal; the whole force of the civil power and influence of his district has been exerted against him because he was acting illegally; the magistrates acting, as they believed, in unison with the views of the legislature, to check and keep down wages and combination, regarded, in almost every instance, every attempt on the part of the artisan to ameliorate his situation or support his station in society as a species of sedition and resistance to the government: every committee or active man among them was regarded as a
turbulent, dangerous instigator, whom it was necessary to watch and crush if possible."

To show the truth of the above statement, we cite the case of a president and secretary of a union who were imprisoned for calling their members together to consider the justness of asking for an increase in wages; even though it developed in the trial that the meeting was called at the invitation of the employers themselves, the result was both were fined and imprisoned for long terms. The next year fifteen cotton spinners, who had met together for the purpose of raising funds to bury a dead coworker, were seized by the police for conspiracy and imprisoned for four months to await trial. On being brought to trial it was held by the court that even though a body-claimed to meet for a benevolent purpose, it was simply a cloak for conspiring against the state; and the prisoners were committed to prison for various terms. Another instance is the Scotch weavers who struck for higher wages about the year 1812. The employers were about to accede to their demands and negotiations were progressing very smoothly in that direction, when the government arrested and imprisoned the committee who were conducting the negotiations.

These are illustrations of the hundreds of cases brought before the courts of England during the first half of the nineteenth contury. For a time the effect was to suppress labor organizations, but soon a reaction sot in and a more formidable and aggressive form of organization began to grow. Secret societies were formed whose leaders were kept in the background, but whose demands were obeyed to the letter. Grievances were not only communicated to members of the same local lodge, but were heralded far and wide. Matters came to such a pass that employers could not get men to take the place of those who had quit their employ for some grievance against the employer. Employers even sent to the remotest parts of England for laborers but without avail. Laborers came to understand one another perfectly and they respected one another's rights equally well. When a laborer quit the employ of a master on account of unjust treatment, no one could be found to take his place. The place must remain vacant until the trouble between master and servant had been amicably settled.

But the economic condition of England in 1820 which marks the close of a long war period, the political and industrial depression of the time,-contributed to effect an agreement among masters not to pay over certain wages. In the wild scramble for the sale of manufactured goods which followed this industrial depression, in the attempt of one master to undersell another, wages in general were driven to the borderline of starvation. All this tended to create a general discontent which continued to grow until the repeal of the obnoxious Combination laws in 1824.

The repeal of these laws was due in a large measure to the labors of Place and Hume. These men were employed by Parliament to conduct a series of investigations relative to the true economic conditions of the poor. The report of their investigations shows that they found the workingmen filled with false ideas as to the real cause of their distress. Taxes, Combination laws, the arbitrary rule of masters, labor saving machinery, unjust magistrates, and immigration laws,-all these they claimed, were the direct and principal causes of what Webb calls the low "Standard of Living" of the laboring classes.

Unionism which for more than a quarter of a century had been smouldering under the ashes of oppression now burst forth into unquenchable flame. Trade societies sprang up everywhere and in all manner of forms. Business increased rapidly and prices rose to such an extent as to warrant a rise in wages, but the employers resisted every inch of the ground over which they were being slowly but surely pushed. The result was strikes and lockouts on every hand during the next six months.

This led to the agitation of a reenactment of the Combination laws and laws expressly prohibiting organized or concerted action on the part of labor. The fight in Parliament over this latter question was long and bitter, but in the end the victory was really in favor of labor. For the first time in history the right of labor to combine for the purpose of bettering their condition was recognized by law, and this recognition by the statute of England has never been changed.

By the enaction of such a law it was prophesied by the masters that anarchy would reign supreme; the nation would be
depopulated or be reduced to pauperism ; commerce would cease ; capital would be driven from the country, and the ultimate authority of the master would be transposed to the laborer. In a certain sense the last may be true but it is so slight we may safely say that history does not bear up the statement.

The financial crisis of 1825 and the four years hard times which followed led to a breaking up of a majority of the trade unions. This period marks the point at which socialistic agitation begins to take definite shape.

As was said before, the laws of 1825 legalized labor organizations but it prohibited members present at the meetings of such organizations from acting for those members absent, or for laborers who did not belong to the society. Any violation of these provisions was severely dealt with, and in some instances laborers were accused and convicted of crime they were innocent of, when the real motive behind it all was to punish laborers for combination. In one instance in 1834 six laborers in Dorchester were tried, "convicted and sentenced to seven years' transportation, ostensibly for administering unlawful oaths, but really for the crime of combination."

This raised a storm of criticism throughout the country and it is said a procession consisting of 400,000 persons marched to the residence of Lord Melbourne and presented him a petition signed by over 250,000 laborers. At length the convicts were pardoned, many of them never learning of it until years afterward, and then only by mere accident. Such instances as this gave unionism a new impetus. New unions were formed on all sides. National organizations, which will be mentioned later, began to take shape. In 1834 a great many protests were made against the way the law of 1825 was administered, but nothing definite was done toward amending or repealing the law until nearly a quarter of a century later.

Still false and unjust prosecutions (characterized persecutions by workmen) similar to the case at Dorchester mentioned above continued, and trade unions continued to grow in proportion. They increased both in number and members. The unions increased in wealth until grave fears began to be entertained as to the safety of their funds. The attitude of the gor-
ernment officials was such that they feared confiscations, and Parliament was induced to enact a law purporting to protect their funds, but in reality it afforded no protection whatever. It closed one loop-hole and opened another. It afforded the unscrupulous a chance to get hold of the funds to appropriate them to himself and escape punishment through a technicality of the law. This was a most serious blow to labor unions. Funds which had been collected during a series of years with which to maintain themselves against the burdens imposed upon them by employers were stolen by the official into whose hands they were placed for safe keeping. This was discouraging in the extreme. Hundreds of members left the labor unions never to return; others refused to fill the broken ranks. But the persistent kept up the fight, and met with the most stubborn resistance all along the line. In 1866, a committee appointed to look into alleged outrages said to be perpetrated by labor unions brought the attention of Parliament once more to the subject in such a way as to lead that body to appoint a Royal commission to make an extensive inquiry in the subject of labor conditions. After a long and laborious investigation, this commission embodied the results of their investigation in a sixteen volume report. This report was anything but satisfactory to the manufacturer. It was shown here that males and females of all ages between six and eighty years were at work in places where the most primary elements of sanitation were unknown; that the hours of labor par day had reached a point which the physical strength of the laborer was not able to endure; that the wages paid were such that whole families were forced into the $\varepsilon^{\prime}$ ps in order to obtain sufficient food and clothing to eke out their miserable existence; that it was against these conditions that organized labor was fighting. Using this report as a basis Parliament passed a law, not prohibiting labor unions as was almost universally hoped by manufacturers, but one that is known as the Labor Union Actof 1871. By this act labor unions were legalized in a broader sense than ever before. Organized labor had passed a most trying ordeal but had come out successful without a blot upon its record as far as this particular fight was concerned.

From this time on a new method of securing labor legislation was adopted by labor unions. Public sentiment was moulded along the lines of proposed legislation before Parliament was approached in the matter at all. Public meetings and banquets were held in various places and labor questions were discussed and debated in their various aspects. Handbills and pamphlets were published and scatered boarlcast. Conventions were held, where the various doctrines and conclusions reached by laborers and labor leaders in the different localities, were brought together, discussed and arranged in proper form, and published for distribution. Labor newspapers and magazines were also published and made instruments through which the public were reached, and when the time was ripe, Parliament would be petitioned. In 1875 that body passed a law which practically guaranteed all the rights demanded by the workmen at that time. This act provided that any act performed by organized labor should not be liable for punishment when the same act performed by an individual was not punishable by law. The old common law of conspiracy which prohibited any concerted effort on the part of labor to bring about better economic conditions was swept away. From this time on organizations of any kind had the same rights and privileges before the bar of justice as an individual. Labor organizations were left to pursue the work they had begun without further restraint by the state.

This was indeed a great victory. Mr. Howell in his book called "Conflicts of Capital and Labor" says, "The history of the struggles to secure this great victory is not so well known as it should be; it conveys lessons which are replete with interest to workmen, employers, legislatures, and the general public; alove all it ought to teach lawnakers that repressive laws are ineffectual, as well as dangerous and oppressive; their effect is demoralizing on the mind; men's ideas of right and wrong become confounded, until a sense of injustice brings about the worst evils of violence, even to ferocity. Men who know that thev are criminals by the mere objects which they have in view, care little for the additional criminality involved in the means they adopt. The value of these lessons to the workmen is not a whit less important than to others; if they study them aright,
they will perceive and understand the wisdom of moderation in all their demands, and that it is a duty which they owe to the State, of which they are component members to pursue their objects peaceably and in a constitutional manner ; and furthermore, that sooner or later, if the claims put forward are reasonable and just, they will be granted by legislatures. With their present political power, if it be wisely used and directed, no demand, if based on justice, will be refused; but those who denounce the injustice of others must be careful not to incur a like condemnation by reason of their own departure from the principles of equality."

Turning from a more historical treatment to one centered chicfly on objects and aims, we find, as above refered to, the purpose of labor organizations are to secure better conditions, by way of better wages, shorter hours, etc. In other words they hope, by organization, to be able to maintain themselves against the power of the corporation, their wealth and social. influence. In their struggles the principle has been developed that legislation must be brought to their aid in order that the end in view might be realized. The old doctrine preached by Adam Smith and contemporaneous economists that the best way to solve the labor problem is to leave laborers alone to work out their own salvation; that each individual should be left free in order to attain the highest development of the whole-it was found that this doctrine of liberty was impractical and should give way to a new and more practical one. This doctrine carried out meant that the strong would subsist at the expense of the weak; the rich having labor to purchase would say to the one having it to sell, "These are the conditions; accept them or not as you choose; I have a sufficiency of economic goods, I can wait, if you do not choose to accept my offer, until you change your mind or until someone else will accept. There is no competition of labor, and you must sell yours in order to obtain a living," and so thet story went, Economists saw they were on the wrong trail. They saw that in order for each individual to attain the highest development, they must not be left to prey upon one another as they pleased, but that each must be restarined from preying
upon the rights of others; modern constitutions call these rights "inherent rights." This is called the new doctrine of liberty. Legislatures were tardy in recognizing this "new liberty," as well as the organized effort to secure it. But after this right was conceded, the means of securing it was denied and condemned as unlawful. After a legal recognition of both the end and the means of obtaining them, statutory laws, one after another, came in rapid succession until now organized labor has the same perfect freedom of action that individuals have. They are limited in their acts only by those around them.

One of the greatest essentials to the existence of labor unions is that men should be left free to join them or not as they see fit. A member is perfectly free to induce others to join, but any attempt at coercion is illegal. The right of personal freedom is a sacred right and should not be violated. It is a right for which our forefathers fought and which they won by many sacrifices and hardships and should be defended by every honorable means.

Among the rights belonging to every laborer, and one that should never be taken from him, is the right to fix his own price at which he will sell his labor, and the purchaser of labor has also the right to accept or refuse this price as he sees fit; but he should not be allowed to use the power afforded him by his wealth to prey upon the weak individual laborer; it is held by some that the only way to prohibit the unscrupulous employer from improperly using this power is to fix wages and hours of labor by law. However this may be the State must step in on the side of the weak in some way or other in order to balance up the weight of the strong.

Combinations of employees and employers are equally legal so long as the ends and the means of securing them are within lawful bounds. The Duke of Argyle, in his book entitled, "Reign of Laws," says, "It is often said that the conduct and condition of men are governed by invariable laws, and the conclusion is that the evils which arise by way of natural consequences out of the action of those laws are evils against which the struggles of the will are hopeless. But the facts on which
this conclusion is founded are as usual, inaccurately stated.' 'The conduct of men depends on the balance of motives which are brought to bear upon them. In supplying these motives external conditions and mental character act and react upon each other.' 'The external conditions which tell on the individual will are themselves very often nothing but conditions depending upon the aggregate will of those around us; and if upon them, by any means, new motives can be brought to bear, then the whole of those external conditions may be changed.' 'New motives can be evoked and put in action by the adapting of appropriate means.' 'The mere founding, for example, of a voluntary society for any given purpose evolves out of the primary elements of human character a latent force of the most powerful kind-namely, the motive, the sentiment, the 'feeling, the passion, as it often is, of the spirit of association.' 'It is a force rooted in the nature of man, implanted there as a part of his constitution, and like all others of this character, given him for a purpose, and having its own legitimate field of operation.' 'Nor is this field a narrow one.' 'The spirit of association is the fountain of much that is noblest in human character, and of much that is most heroic in human conduct.' 'And so it is that when the aim of any given association is a high aim, directed to ends really good, and seeking to attainment of them by just methods of procedure, the spirit of evokes becomes itself a new law, a special force operating powerfully for good on the mind of every individual subject to its influence.' 'Some preexisting motives, it modifies, some it neutralizes, some it suppresses altogether, some it compells to look in new directions.' 'But in all cases the spirit of association is in itself a power, a force, a law in the realm of mind.' 'What it can do, and what it cannot do in affecting the conditions of society is a problem not to be solved so easily and so summarily as some dogmatists in political philosophy would have us believe. It is a question which, like so many others, is not likely to be solved by abstract reasoning without the help of actual experiment, and this experiment is being tried. The instincts of men, truer often than the conclusions of philosophy, have rebelled against the doctrine that they are
the sport of circumstances; yet finding by hard experience that this is often true of the individual will when standing by itself, they have resolved to try whether it is equally true of the collective will, guided by the spirit and strengthened by the discipline of association. Hence the phenomena of combination as the means of affecting the condition of labor-phenomena so alarming to many minds, and certainly so well deserving attention." This is an excellent exposition of the value of association. The weak surely but inconsciously absorb the good qualities of the strong; men, whose character is of a low cbb resulting possibly from either evil associations or heredity, when brought into contact with those men of nobler and more refined characteristics, gradually loose the characteristics brought upon them by their former environment and unconsciously adapt themselves to their new surroundings. This is an unimpeachable law of nature. A man, through his associates may have been led to frequent the saloon; his earnings are spent for drink and his wife and children are at home in actual need-poorly dressed and little to eat-; his wife, perhaps, takes in washing in order to buy bread or pay the rent, etc.; when this man is brought into the company of his fellow workmen through the instrumentality of some labor union or other local organization, it unconsciously dawns upon him that his neighbors, perhaps, are better dressed; some of their wives move in more respectable society, and their children are at school. Looking further, he discovers that some have their little homes on respectable streets and have them paid for, and his mind involutarily reverts to his own wretched hovel, his family without food and clothing, his children .out of school, and the rent not paid. He unconsciously inquires the cause, and the result of all these reflections is he begins to apply his earnings, meager though they are, to the needs of his family. His children are soon on the road to school. His wife begins to move in social circles. He buys a lot and lays the foundation of a future home. New worlds are onened to him. He grows out of the world of misery and want into one of happiness and respectability. He becomes a political and economic unit among his associates, for whom there is developed within
him a spirit of fraternity and feelings of good fellowship. This is a result of the power of association, the foundation upon which all our modern civilization rests, the basis of all our social and political institutions; the very foundation of all labor organizations.

As before stated, the principal object of labor unions is to bring about by combination the things which can not be done by each individual working in his own way. One of the factors necessary for this is what is known as a benefit fund. Each member is taxed a certain yearly or monthly amount which is allowed to accumulate as a benefit fund. This fund is used for various purposes. It may be used to support the family of a sick fellow workman or a workman who has been thrown out of employment. In either case the workman must be free from all charges of delinquency or immorality. A workman discharged for improper conduct is not entitled to benefits. In most cases this is a powerful incentive to morality, to strict attention to work, to the proper discharge of all duties imposed upon him. This is a factor productive of much good. The conditions of all who receive benefits are thereby improved, and the method of procedure to attain these benefits is a great improvement over the old way. It reaches out beyond the confines of the organization, and benefits the State at large by keeping many worthy families out of the clutches of pauperism. In the years 1875 and 1876, four associations of labor in England paid for relief of members $\$ 740,000$, an amount nearly equal to the total sum paid for poor relief including furniture, fixtures and salaries for the year 1898 and 1899 for the state of Wisconsin. These societies were the Engineers, Ironmoulders, Boilermakers, and the Carpenters and Joiners. What is true of these organizations is true of hundreds of others. Every dollar they expend in this way is a dollar saved to the State.

Another channel into which this benefit fund is directed is to sustain laborers during a strike. To remain out of work for even a short time would prove a real hardship to many, especially to those having large families. In order to bridge over this difficulty the benefit fund is directed to the support
of those who need it until the question in dispute is settled. This fund is sometimes used in abridging the necessity of laborers accepting low wages, or to prevent long and unreasonable hours being forced upon them, although unnecessary holding out or making too great demands on the part of the laborer is not countenanced by labor organizations.

The recognition of the economic benefit labor organizations has been to the State along the lines just indicated one of the factors leading to the withdrawal of many of the former restrictions imposed by the State. Of all the hardships to which England has subjected her laborers and their organizations, of the fines and imprisonment of members of labor unions, transportations and political as well as social ostracism both by lawful and unlawful means, England is today the exponent of liberal labor laws. She recognizes the legal right of laborers to organize for all the purposes set forth by their present labor constitution and even goes so far as to give them rights which she withholds from employers. All the old prejudices existing in the minds of the public against such combinations have been gradually swept away. She has given labor unions the same rights and the same protection which she guarantees to each individual.

At one time it was a prevailing custom among labor unions to appropriate part of their funds for what was known as a traveling fund, by means of which a laborer out of work could defray his expenses while traveling from place tó place looking for work. But the practice came to be abused by a certain class of men found in every society of laborers who would rather tramp than work. This practice was then changed to one of paying railroad fare from place to place while in search of work, and under this system one society was not allowed to subject its members upon the charity of another without the society to which the receiver of such relief belonged refunding the amount received by him. This form of benefit is now being abandoned, and loans are frequently made to laborers worthy of aid, looking for work.

It is curious to note that the "strike bencfit" at one time brought labor unions in collision with the State. Tho courts
proceeded against them as "combinations in restraint of trade" simply because this fund enabled laborers to maintain themselves against employers. It was not the combination but the means adopted by the combination to secure the end desired, that elicited the stamp of disapproval from the courts. But this restriction has been set aside by statute.

Strike pay is never granted to members unless called out by the proper officer, in resistance to some condition imposed by the employer upon the laborer, not granted or implied at the time the laborer began work. All such impositions are taken up and discussed in the meetings of the local organization, and then the grievance is embodied in due form and laid before the executive of the union. This officer in turn satisfies himself as to whether the complaint is a justifiable one and if so found, steps are at once taken to settle the difference by arbitration. If this can be accomplished, all well and good; if not, and the matter is deemed of sufficient importance, a strike is ordered.

The most common causes of strikes are a reduction of wages or a refusal to pay higher wages when demanded, or upon the question of hours of labor. In such instances the usual method of procedure is somewhat different although the underlying principle is the same. When a body of men in any particular shop, doing a particular kind of work, makes up its mind that the wages are too low, or the working hours too long, the subject is brought up in a local lodge and discussed pro and con, after which a vote is taken as to whether the case is deserving of any further attention. If it is so decided, the matter is laid before the executive of the union, and he in turn refers it to a committee whose duty it is to investigate the whole subject from top to bottom from a purely disinterested point of view. Their findings are laid before the superior organization, and if it is found that a just cause for a strike exists it is so reported back to the local lodge where a vote is taken as to whether a strike be ordered. If it is thus voted, a strike is ordered, and the responsibility of the strike will rest on the entire organization. Yet, a local lodge or union may strike without the sanction of the head of the
union, in which case the whole responsibility will rest on such local union. But where the entire union is made responsible, the strike may or may not extend over the entire union, depending wholly upon the obstinacy of the employer. If his power of endurance is great, various branches of the union may from time to time be brought into the strike in order to bring as much pressure as possible to bear upon the employer against whom the strike was originally instituted. The way the balance will swing greatly depends upon the relative strength of the two opposing forces. The stronger either party may be the greater the chances are of winning.

The more effectually a union is organized the less danger there is of a strike. There are two reasons for this; first when a local union agitates a strike which has little or no foundation, it is "called off" by the executive of the union; second, a highly organized body of men can, and do maintain their ground without striking. This is especially true where the power of organized labor on the one hand is about equal to that of the employer on the other. In such cases questions in dispute are very often settled by laborers and employers mecting and talking over their differences, or if a satisfactory solution is not arrived at in this way, the subject is often referred to arbitrators where the matter is often settled without further trouble. But where the local union strikes and the responsibility rests upon it alone the chances for success are exceedingly small. This fact together with the method of thoroughly looking into matters in dispute by a superior union mentioned in the last paragraph, serves as a check upon strikes based upon rash or unreasonable demands. Therefore, in a majority of cases it is fair to suppose that strikes are based upon just demands, although some times the methods of securing these demands are unlawful.

In determining whether a strike is advisable, the executive committee always takes into consideration the effect their decision will have upon the union in general, the kind of work done by those agitating the strike, the ability of the employer to accede to their demands, and all other circumstances which may have any bearing upon the case either directly or in-
directly. If the conclusion is reached that those agitating the strike are receiving the same consideration and fair treatment at the hands of their employers as others of their class, a strike is not determined upon. On the other hand if the committee finds that the conditions of the laborers on the points in question are below those in the same class in general, a strike may be ordered; but in no case will a committee recommend a strike because a low skilled or inefficient workman does not receive the same financial consideration as a skilled or efficient one.

Years ago the workmen did not have the patience to compel a peaceable recognition of their right in a long drawnout controversy, and many times they sought their ends arbitrarily and by force. This is no longer true unless it be in the new unions where members have not experienced the disciplinary influence of union socicty, and have not learned to adapt themselves to the new conditions into which they have been brought.

While labor organizations in some form or other had existed in England for over six hundred years, such institutions were unknown in the United States one hundred and twentyfive years ago. The closing years of the eighteenth century and the dawning ones of the nineteenth was a transition period between the old and the new forms of such unions. New conditions subjected new functions upon trade unions, and the passing away of old conditions rendered former functions useless. A movement of capital began to run parallel to, and take the place of, a movement in labor. It began to be a common occurrence for employers to order strikes and encourage violence in order to injure the business of a competitor. Capital began to be withdrawn from old establishments and invested in new ones.

Owing to the fact that there were no large industrial centers in this country during colonial times and for several years following the Revolution, there was no need of labor unions during that period. At that time we had no great cities nor did we have a large and distinct laboring class to form them as we had later. Previous to 1790 we had but one city of over 40,000 people, and not until fifty years later did we have
a single city of over one half million. Most of the laborers were farmers who owned and tilled their own soil, and whenever they had any hired help it would be perhaps some neighboring farmer's son who would hire out for the season and return home for the winter. This was true in the north, while nothing but slave labor existed in the south where labor unions were scarcely thought of. Manufacturing of clothing was mostly done in the homes. The only artisans were the blacksmiths, carpenters, and shoemakers. All these worked in their own shops independent of employed labor. Everybody worked in his own way and independent of anyone else. The political upheavals of the time directed the attention of the people along the lines of politics, and for that reason the first organizations outside the church were political in their nature and were chiefly designed to promote some man or set of men to positions of public trust. The first occurrence of any importance which would remind one in any way of organized labor was a strike among month. This occurred in 1802. The leader was arrested and committed to jail under the conspiracy law then in force and this ended the strike.

The first unions formed in the United States were simply bands of laborers who performed a particular kind of work, and each organization was wholly independent of every other. In 1803 the "New York Society of Journeymen Shipwrights" was incorporated. This appears to be the first of its kind in this country. Three years later "The House Carpenters" of the city of New York organized. Some time early in the century the "New York Typographical Society" was formed. Mr. Thurlow Weed was a member of this organization, and during his residence in Albany, this institution took advantage of this fact and induced Mr. Weed to prevail upon the legislature in session at the time to grant articles of incorporation to their society. Mr. Weed says that when he presented the subject to that body they were surprised at the idea, and expressed the sentiment that such a thing was without a precedent in the listory of the world. Nevertheless he succeeded, and articles of incorporation were duly granted.

A society of the same nature was organized soon afterward in the city of Albany and soon grew to such proportions that in 1821 they considered themselves strong enough to successfully maintain a strike. Accordingly when their employer engaged a man not of their union, a strike was ordered. This is significant as showing that a feeling of unionism pervaded the atmosphere of New York and that the society was an old one and well organized. It was not until 1822 that we have any record of any unions existing outside of New York. In that year the "Columbian Charitable Society of Shipwrights and Caulkers of Boston and Charleston" was organized and soon after was granted a charter by the Massachusetts legislature allowing them to use a seal, to have a benefit fund, to improve machinery in the art of manufacture, etc.

In Mr. Ely's "Labor Movement in America," he says, "Though the first quarter of this century may perhaps be considered a germinal period, preceding the modern labor movement, and preparing the way for it, that movement itself, so far as it is represented by organizations of labor designed to improve their conditions as laborers, may be regarded as beginning with the year 1825, not that any important event divided the history of labor before that period from its subsequent history, but that, a new spirit and a new purpose began to animate the laboring classes. They became more conscious of their existence as a distinct part of the community, and with interests to a certain extent not identical with those of other social classes, and very naturally the idea of class action on a larger scale than heretofore became more familiar to workmen; and from that time forward this idea has been cherished among them. It is easy then to characterize the movement of labor organizations during this first period of their history, in the United States, which may be said to terminate with the beginning of the civil war between the north and south."

Once fairly under way, labor unions sprang up on all sides; and when skilled labor began to form a class distinct from the unskilled laborers, a spirit of national unionism began to unfold itself. This movement was accelerated by the more improved methods of transportation and communication, render-
ing competition more of a national than a local character. Local unions of various places between which communication was comparatively easy, were brought together in a national organization. This led to various national organizations which were sometimes joined together at the top by some federation or other.

Somewhere about the year 1828 labor organizations began the agitation of such questions as "equal distribution of wealth," "down with monopolies," "the oppression of the poor," "the greed of the rich," "opposition to aristocracy," "destruction of class distinction" and many others. The discussion of such questions shows a difference between the old and the new. It also shows a tendency of laborers studying into the questions which affect them with a view to get at the roots of the evil. It is strictly a tendency toward studying their own conditions from an economic point of view.

In their literature, such as phamphlets, newspapers and magazines, they made the following demands: 1. A Homestead law. 2. Women's rights. 3. 1 bankrupt law. 4. Mechanics lien law. 5. Sunday mails. 6. No imprisonment for debt. 7. The abolition of slavery. 8. Freedom of public lands. 9. Eight hour law. And strange to say, every one of these demands have been acceded to by the national government except that of "women's rights." It is true, some of them have not been granted in the fullest sense of the term, nevertheless they are conceded by statute in one way or another.

Whether the labor organizations are to be credited as the sole factor in bringing about this excellent class of legislation, they surely lent all the support at their command, using all honorable means to sccure this end. In order to accomplish all this congress must be reached. This necessitated political agitation which led organized labor to ally itself with the democratic party, and as a result they claimed to have elected Jackson president of the United States. But when they discovered their demands were not being enacted into laws, a labor party was organized and a full ticket was placed in the field. But this did not prove' a popular move and the idea began to wane. Nevertheless it had the effect of forcing legislators to study the
questions agitated by laborers, and to accede to their demands as fast as publice sentiment could be moulded in their favor.

Before entering upon this new field, Congress instituted a series of investigations into the real conditions of labor. John Quincy Adams in a report to Congress on what he found in the manufacturing districts said, "They are the principalities of the destitute" and "the palaces of the poor." This expression led a mechanic by the name of Seth Luther to conduct a series of investigations along the same lines. In his report he tells of the long hours of labor, low wages, distressed condition of women and children, cruel treatment of employees by unscrupulous masters and so on for several pages. He found working days varying from twelve to sixteen hours. He found in many factories men, women, and children beginning work at four o'clock in the morning and continuing until eight and nine o'clock in the evening throughout the year. As an additional burden many employees were taxed to support the church, and were fined or dismissed for habitual absence. He reports that one boy committed suicide to escape the cruelties to which he was subjected at the hands of his employer. Another deaf and dumb boy came home from work and dropped down apparently dead as the result of a flogging given him by his master. A little girl eleven years old had her leg broken while being flogged. Mr. Luther pictures a most deplorable condition of women and children. Ventilation and sanitation were unknown. He suggested that the repeal of the oppressive combination laws would enable the workmen to work out their own salvation, hinting that the hostility of the general press will be neutralized by the press of labor organizations. This was Adam Smith's idea.

Other influences brought to bear in the solicitation of legis̀lative recognition were the writings and lectures of such men as W. E. Channing. This man, together with others, was in deep sympathy with the laboring men, and always succeeded in securing the ears of lawmakers in their behalf. While being active in sccuring legal recognition on the one side, he as industriously strove to enable laboring classes to better their own conditions through self exertion on the other. He urged them
to educate themselves as to the cause of their low economic conditions, and better methods of procedure to attain results. He argued that an education was the best safeguard against arbitrary action of employers and urged laborers to accept this remedy for themselves and their posterity. He maintained that the real enemies of society were not to be found among poor workmen, although they were sometimes made tools in the hands of the real enemies. Mr. Channing exerted a powerful influence upon the laboring class. His influence was like a snowball rolling down hill, it increased the farther it proceeded in its course.

These influences led to one of the first steps taken in behalf of labor. This was during the administration of Martin Van Buren. He signed a bill providing that ten hours should constitute a day's work in the United States navy yards and on all government works, and gave directions that the order be enforced. In the same year the city of Baltimore enacted a ten hour law to be applied on all municipal works. In 1852 the factory laborers of Massachusetts secured a reduction of two hours per week. In this way things progressed. The old prejudices began to disappear, and the time soon come when the hostility of employers gave way to a feeling of friendliness. Many even gave their support to labor unions, contributing money, donating halls for their meetings, and, in some instances, refusing to employ non-union men. As an illustration one of the foremost employers of labor in the United States presented a check for $\$ 10,000$ to the National Typographical union then in session in the city of Philadelphia.

Public sentiment being thus moulded in their favor, gave labor unions a new impetus to grow. They multiplied in number, as well as membership. New laws continued to be placed upon the statute books in their behalf until the close of the period marked by the civil war. Then a new element enters into the chain of events. Four million slaves were set free and thrust upon the labor market of the world. Strife between white and black labor at once began. New economic problems arose. The currency question again come into prominence. The contrast between riches and poverty were discussed by news-
papers and upon the platform. The dishonest means to gain wealth were criticised far and wide. The importation of "pauper labor" was denounced. The spirit of the time seems to have been one of unrest. During this period of unrest an unprocedented number of labor unions were organized, some of which were the most powerful and influential in out history.

In 1864 the "Brotherhood of the Foot-board," a union of railway engineers, was organized at Indianapolis. In the same year the Cigarmakers National union was instituted; in 1865 the Bricklayers and Masons; in 1868 the Railway Conductor's Brotherhood, at Mendota, Ill. ; the United States Wool and Hat Finisher's association, in 1869 ; the Brotherhood of Locomotive Firemen in 1875; in 1876 the Amalgamated Association of Iron and Steel Workers; the Granite Cutters National union in 1877; the Journeymen Bakers union in 1886; and so the story goes to the end. We have attempted to enumerate only a few typical cases of national unions in which hundreds of local unions were brought together at a vertex. There was scarcely a trade of any importance but what formed a union of some kind or other. While this growth was in progress, there was also a decay. The first, and, at one time one of the strongest organizations to pass out of existence was the Knights of St. Crispan which had at one time about 100,000 members. This organization had an auxiliary known as the Daughters of St. Crispan whose membership fairly rivaled the knights. This order was organized in the interests of the boot and shoe workers and was instrumental in securing the passage of the shorter hour law in Massachusetts in 1874. But with the higher development of the division of labor in the boot and shoe industry, began the decline of the order, and it declined in an inverse ratio with this development. The division of labor made too many interests at stake for one organization to take care of. What was true of the Knights of St. Crispan was also true of the National Labor Union, which at one time had 640,000 members. Yet the decline of this organization was much more rapid than the Knights of St. Crispan, due to "the fatal malady of politics." Nevertheless the eight hour system on all government works and in the navy yards
owes its existence to this once powerful body. Besides this the foundation of the National Bureau of Labor was laid by this body. During Grant's administration an eight hour law was passed and signed by the president. But through the intrigues of politicians, laborers were given to understand that their wages would be decreased in proportion to the number of hours, but that all who worked ten hours would receive full pay. This brought forth such a storm of opposition that the "order was reversed" by President Grant. Nevertheless the law. was a dead letter for lack of enforcement. This being the case, in 1872 and 1873 laborers made an unsuccessful attempt to enforce the law by a strike. Again in 1886 the Knights of Labor, then the most powerful labor organization in the world, against the advices of Mr. Powderly made another such attempt to accomplish the same end. While they did not reach the point expected, their action tended to bring about a reduction of hours in many places. This started the ball rolling and it appears as -if the eight hour system will ultimately succeed. While this organization appears to be on the decline, it has left its footprints behind. It was one of the first labor unions in America to take up the cause of women. When the factory girls in Massachusetts struck against the harsh and cruel treatment of their employers, the Knights of Labor reached forth a helping hand. They even went so far as to expel from the order men who were known to misuse their wives, and followed them up wherever they went with a statement of the facts and advised employers to have nothing to do with them. While thus directing their attention to the immediate wants of laborers, they were establishing libraries in various places where the organization was represented to prepare workmen to more effectually and peaceably meet future wants. They also established an insurance department whereby laborers' families could receive from $\$ 500$ to $\$ 1,000$ upon the death of the head of the family. They have instituted one hundred or more establishments of production on the co-operative plan. They have been criticised for having strong socialistic tendencies, but a strict examination of their principles seems to indicate if they have any such tendencies it is kept in the back-ground. It is true some of the leading
members advocate socialism, but a great majority take and advocate the opposite view, or say little or rothing about the subject at all.

Two of the most recent acts which have begun to affect labor before the courts, but which was originally intended to prevent combinations of employers in restraint of trade, are certain clauses in the Interstate Commerce Act and the Anti-Trust Act. Courts are inclined to hold that these laws apply equally to combination of labor, both under certain circumstances being combinations in restraint of trade. To illustrate, in the Northern Pacific strike and the strike against the Pullman Car company, injunctions were issued by the courts to restrain the men in the employ of the railway companies from quitting work; the Northern Pacific railroad was in the hands of the receiver and in the case of the Pullman strike it was claimed the strike was not legal because it interfered with interstate commerce and the carrying of U. S. mails. A bill is now before Congress to exclude labor combinations from the clutches of these two laws but it is doubtful whether the bill will become a law, or if it does, it will probably be ridden with so many amendments that its purpose will be defeated.

But in the Northern Pacific case the injunction part of the proceeding was reversed and in general the American courts have been inclined to destroy combinations among employers on the one hand, and equally inclined to uphold combinations of labor on the other. Courts also, as a rule, have been disposed to enforce labor contracts on the part of employers and not on the part of employees.

Besides the federal laws relating to labor mentioned above, many states have further extended the rights of laborers by statutory law. Massachusetts was the first to take up the subject and others rapidly followed. Maryland has a law copied from the English Act of 1875 mentioned above. While matters are thus rapidly progressing in both England and America, the American laborer in the progress he has made has had no landed class with which to combine as did the English laborer at the beginning ofhis progress. But the American laborerhas had the advantage of the ballot over the English laborer. He
could make his demands and vote for the candidate who would ence in the course which labor unions of England have taken best serve him. To this fact alone may be attributed the diffiergradually toward socialism, and where they have succeeded in securing a representative in Parliament, failure has been recorded. On the other hand, trade unions in the United States have adhered strictly to economic conditions, turning to the wall all questions of socialism, politics, or religion. They seek to educate themselves upon the economic problems of the day and especially along the lines of their work. Their literature is of a strictly high type and their lecture work is far above the average. One of the latest moves which is a step in advance of anything yet taken, is the proposition to establish a trade union college. The purpose of such a college is to train members of the union for the better performance of their duties as laborers, to educate writers and speakers on the subject of labor problems, etc. Every step taken in this direction leads up to a greater degree of intelligence, and a better understanding as to how to meet new conditions in an amicable way, so that the elements of force practiced by the earlier labor organizations will be supplemented by those of peace.

Besides securing shorter hours, better wages, better sánitary conditions, etc., labor unions have materially aided, both directly and indirectly, in transporting a large number of children from the workshop to the schools. The child labor problem is one of the worst with which a community has to deal. It is said that the Amalgamated Wood Workers of New York, Edinburgh and Glasgow struck against the low wages resulting from child labor in a certain place in the United States in 1898.

It is true only a small per cent. of the laborers take part in these organized efforts. Nevertheless every victory they achieve affects the entire body of laborers in the same class in which the victory is won. When they secure a higher wage scale for themselves, they secure it for all in the same class. When they secure shorter hours of labor they secured them for all alike. When, through their efforts, the evil of child labor is reduced, no distinction is made between the children of the members
of labor unions and those of non-unionists. This has been the story from the beginning to the present time and will be continued for some time to come.

This may appear to be a contradiction to what tables III and IV below show. Comparing the wages of the members of labor unions with those of the same class in the "manufacturers" and "skilled laborers," the labor unionist appears to receive the highest wage rate. The reason for this primarily is that in the case of the manufacturers a great amount of child labor is taken into account and tends very materially to lower the average rate of wages, while in the labor union column, child labor is wholly eliminated. Again, while many of the manufacturers and those laborers belonging to the "skilled trades" are members of labor unions, a larger percentage of the work followed by the persons under the labor union class requires a greater degree of intelligence and skill than that followed by the other two classes. Many of the unionists are conductors, engineers, iron moulders, ctc., who hold positions of responsibility or places requiring great skill, and as a class, of course, are paid a higher rate of wages, in many instances double and even triple the wages paid to the ordinary laborer.

On the other hand that class of work being done by children needs practically no skill, and a high degree of intelligence is not essential for the work they do. Children working in factories usually come from large families which have no other means of subsistence except daily labor. In such cases where the wage scale of the parent hovers around the point of "minimum of subsistence," the children will be taken out of the school and placed in the shop, where, in many instances, each will do the work of a man at wages which a man cannot afford toaccept. This not only tends to throw men out of employment but tends to reduce the sum total of wages paid for labor. Besides this, it tends to deform children both mentally and physically. It deprives them of the much needed early training offered by our public schools so necessary for gaining a livelihood in after life. The arduous labor imposed upon them brings on premature old age and the history of the second generation will be a repetition of the first unless some force is brought to bear to counteract
such a repetition. Such a force is rapidly crystalizing into child labor laws, compulsory education laws, etc.

All questions leading to such results, results attained along the lines of hours of labor per day, wages, child labor, sanitary conditions of workshops, etc., have generally been brought to the attention of legislators by labor unions, and in order to act intelligently upon these subjects, in order to base their actions upon accurate and scientific knowledge of the real condition of labor along these lines, labor bureaus were established. The character of the work done by these bureaus may be best seen by an examination of the various reports.

The response to inquiries sent to labor unions from this bureau has been very liberal. Many labor unions, in answering our inquiries, express their appreciation of the work the labor bureau is trying to accomplish, and voluntarily offer any assistance they are able to render us in our work. Our work is the collection of data relative to the labor status of Wisconsin, under the direction of the state legislature, and the laboring classes as a whole have aided us very materially in this direction.

Nearly all our laws affecting labor directly have either originated among the laborers themselves, or have had their endorsement. The fiee employment law of Ohio originated in the Cincinnati Federation of labor. Child labor laws have everywhere been accelerated by labor endorsement. The evils of convict labor are beginning to disappear under labor agitation. In fact, labor unions are effectively attacking all the problems surrounding their station in life, and many are the victories which they have won.

The contests which they have lost are, in a majority of instances, due to forces working within the organization. What was once a most powerful union of labor, the Knights of Labor, is scarcely heard of any more. The breaking up and dying out of this institution is primarily due to the many interests which the organization represented, and secondarily, to the influx of politicians.

Laborers soon discovered that the best interests of each individual trade could not be best served by a single organization,
so the usefulness of the Knights of Labor as an educational and economic factor has been displaced by other labor organizations which better represent the interests of each class of trade, and which are being brought together at the vertex by what is known as the American Federation of Labor. These organizations are a legitimate outgrowth of modern, social and industrial conditions. They were organized for the protection of the laboring classes against encroachment upon their rights as sharers in the distribution of wealth which they help to create; and; as said before, "to fit the laboring classes for grappling with social and economic problems as they arise and to arrive at a solution satisfactory to all concerned."

Among the most important of these problems which have arisen in this state among the 74 unions reporting during the period from Feb. 1, to Aug. 1, 1901, over which our investigation extended, were questions of hours per day, daily wages, and questions which are subordinate to these two. During this period there were four strikes for higher wages and one for a reduction in the number of hours for a day's labor. The former were successful, while the latter were unsuccessful. There were also five other disputes between mployers and laborers, three of which related to wages and two related to trainmen having regular, instead of irregular hours. All were settled peaceably. Previous to the existence of labor unions, twelve, sixteen and even eighteen hours' work per day were not uncommon; but of the seventy-six unions reporting, the members of sixteen work eight hours per day, ten work nine hours per day, thirty work ten hours per day, and the hours per day of the remaining twenty-six unions vary from five to thirteen according to the nature of the work engaged in.

The table below discloses the fact that all the members of forty of the seventy-six unions reporting have had steady employment for the last six months and those of fifty unions have been employed for the last two months. Between 90 and 99 per cent. of the members of seventeen of the remaining unions work all the time. From twenty-five to seventy-nine per cont. of the members of the remaining unions have work all the time, and they constitute only a small fraction of the whole number.

The period over which this investigation extended was from Feb. 10, to Aug. 10, 1901.

The Cigar Makers' union of Fond du Lac, No. 329, reported business rather dull attributing the cause to the competition of non-union made cigars.

At the time reported the members of the Cigar Makers' union, No. 25, of Milwaukee, were all at work but not for full time.

The Flour Makers' union of Franklin comprises two crews, one working daytime, the other nights.

The Hat Workers' union of Milwaukee reported a strike in which the union was successful. Cause of strike not given.

Iron Moulders' union, No. 166, reported business on the decline. No cause attributed.

The Machinists' union of Kenosha struck for 9 hours per day and were successful for 9 weeks, after which the members returned to the regular ten hours per day.

The Amalgamated Wood Workers, No. 2009, of Racine, have had an increase of about 15 per cent. in wages, brought about by mutual agreement.

The Boot and Shoe Workers, No. 170, of Milwaukee have a few skilled machine operators who receive $\$ 3$ per day. Wages have been on the decrease, attributed by the one making the report to the introduction of labor saving machinery. Since the reduction in wages began it has amounted to about 40 per cent. of the whole amount of wages of about $162 / 3$ per cent. of the of the whole amount of wages or about $162 / 3$ per cent. of the members.

The Carpenters and Joiners, No. 657, of Sheboygan struck for a minimum of $221 / 2$ cents per hour and 9 hours per day. At the end of three days the demands of the strikers were granted providing the work already contracted for would be completed at the old rate of wages, and the regular time of 10 hours per day. This agreeemnt affected 97 per cent. of the members.

In addition to the 315 members of the Carpenters' and Joiners' belonging to No. 522 of Milwaukee, there are 80 members belonging to a branch of that organization.

Twenty five members of Bell City Lodge, No. 437, were laid off in August, Reason not reported,

The Amalgamated Sheet Metal Workers, No. 24, of Milwaukee, struck for 25 cents per hour and after two days were successful. Sharp competition is the only thing complained of at present.

The Painters' union, No. 222, of Milwaukee reported that there were three other such unions in the city, the combined membership of all being 350 , all of which have plenty of work. The four unions have a central council composed of delegates representing each of the local unions. This council has its regular meetings for the transaction of business pertaining to the unions in general.

The Tailors' union, No. 215, of Madison, reported business good all the year, excepting what is known as "the dull seasons," January and February, and July and August. Business reported to be increasing.

The Locomotive Engineers of No. 536, Langlade division, reported a decrease in the volume of business in the ore district "due to trouble existing between the Amalgamated Association and the Steel Trust."

Ashland division, No. 379, Brotherhood of Locomotive Engineers, reported a dispute between the railroad officials and the members regarding men holding their "regular runs." The question was peaceably settled. A similar question was raised by the Brotherhood of Locomotive Firemen, No. 259, of Ashland, which was settled by conference.

It is a common complaint made by railroad hands that the railroad companies require too many cars to the train, and that, while ten hours are required for a day's work, train men are very often compelled to work as much as 30 hours without stopping.

While the table shows the "highest," "lowest," and "average" wages per day, the figures are not absolute. Many trainmen work by the day, others by the mile, and still others by the month. Therefore, in this particular instance the figures are only relatively correct.

The secretaries of the various Stationary Engineers' unions report that their constitution forbids its members from taking part in any strikes or labor disputes. They are not labor organ-
izations in the strictest sense of the term; their motto is "Learn more-Earn more." Their main object is social and educational advancement.

- The Stereotypers' and Electrotypers' union, No. 12, of Milwaukee, were, at the time reported, having a dispute relative to wages, but hoped for a peaceable solution of the question.

The work of the Vessel Loaders varies greatly. At times they will have from several days to a few weeks steady employment, varying from 10 to 16 hours per day, then there will be a time of greater or less duration when they must seek other employment or lay idle. They are paid usually by the hour at about $162 / 3$ cents. What has been said of the vessel loaders, is practically true of the longshoremen.

The Longshoremen's Association No. 68. of Marinette struck for higher wages and the difficulty was peaceably settled.

In very few cases were wages reported as on the decline but on the whole were being gradually increased, and in most cases the increase was brought about by conference between employers and employes or voluntarily by employers.

The following table shows the name and location of the organizations reporting, the number of members belonging to each, the range of employment which also indicates range of business, the wages per day, and the number of hours for a day's work.

GENERAL TABLE.

| Name and Number of Organization. | Location |  | Per cent. of employ. ment |  | Daily rate of wages. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | $\begin{aligned} & \dot{\Delta} \\ & 0 \\ & 0 \\ & \dot{0} \\ & 0 \\ & 0 \end{aligned}$ |  |  |  |
| Barbers' Union, 139. | West Superior.. | 28 | 100 | 100 | \$2 17 | 1/2ov'r | \$3 33 | 12* |
| Beer Brewers' Union, 9 | Sheboygan | 80 | 75 | 75 |  | \$2 12 | 200 | 9 |
| Boot and Shoe Workers' Union. | Milwankee | 375 | 90 | 90 |  | 300 |  | 10 |
| Box Makers ' Union, $3 \ldots$. | Milwaukee | 45 | 90 | 99 | 150 | 300 | 250 | $8 \dagger$ |
| Brass Moulders' Union, 141.. | Milwaukee | 60 | 75 | 75 | 175 | 225 | 200 | 10 |
| Brewers and Malsters Union, 81 |  | 55 | 90 90 | 90 | 200 | 265 |  | 10 |
| Brewers' Union, io7....... | Green Bay | 55 | 100 | 100 | 180 | 220 | 200 | 10 |
| Brewery Workmen, 90 | Oshkosh | 20 | 100 | 104 | 217 | $23: 3$ | 225 | 10 |
| Butchers' Union, 86 | Oshkosh | 45 | 100 | 100 | 167 | 250 | $2 \mathrm{c}^{\prime} 0$ | 10 |
| Carpenters' Union, 161. | Kenosha | $\varepsilon 5$ | 20 | 95 | 150 | 300 | 230 | 9 |
| Carpenters', Union, 314. | Madison | 40 | 100 | 100 | 150 | 300 | 225 | 10 |
| Carpenters' Union, 657. | Sheboygan | 100 | 25 | 100 | 200 | 200 | 200 | 9 |
| Carpenters' Union, 522. | Milwaukee | 315 | 90 | $8)$ | $\because 00$ | 260 | 240 |  |
| Cigar Makers' Union, 215 | Ashland. | 53 | 100 | 101 | 250 | 450 | 300 | 8 |
| Cigar Makers', Union, 31. | Chippewa Falls. | 26 | 109 | 100 | 100 | 275 | ${ }_{2} 00$ | 8 |
| Cigar Makers', Union, 329 | Fond du Lac. | 40 | 80 | 80 | 100 | 275 | 200 |  |
| Cigar Makers' Union, 169 | Green Bay | 44 | 95 | 100 | 165 | 400 | 225 | 8 |
| Cigar Makers', Union, 290 | Janesville. | 27 | 50 | 100 | 150 | 250 | 200 | 8 |
| Cigar Makers' Union, 61. | La Crosse | 54 | 90 | 90 | 110 | 165 | 140 |  |
| Cigar Makers' Union, 287 | Marinette | 30 | 100 | 100 | Piece | work | 225 | 8 |
| Cigar Makers', Union, 20. | Milwaúkee | 381 | 50 | 75 | Piece | -work | 150 | 8 |
| Cigar Makers' Union. | Neenah | 2.5 | 100 | 100 | 150 | 300 | 215 | 8 |
| Cigar Makers' Union, 168 | Oshkosh | 79 | 100 | 100 | 100 | 200 | 160 | 8 |
| Coopers', Union, 13. | Green Bay | 50 | 100 | 100 | 165 | 165 | 165 |  |
| Coopers', Union, 85 | I a Crosse | 33 | 100 | 100 | 200 | 200 | 200 | 10 |
| Coopers' Union, 3 İ. | Milwaukee | 120 | 100 | 100 | 150 | 300 | 225 | 10 |
| Flour Millers' and Laborers' Union |  | 7 | 100 |  |  |  |  | 12 |
| Hat Workers' Union | Milwauk | 100 | 100 | 100 | Piece | -work | 140 | 10 |
| Iron Moulders', Union, 21 | Neenah | $4:$ | 100 | 100 | 175 | 425 | 375 | 10 |
| Iron Moulders', Union, 166 | Milwaukee | 85 | 80 | 80 | 150 | 350 | 250 | 11 to 12 |
| Lath Handlers' Union, 141 | Marinette. | 60 | 100 | 100 | 175 | 200 | 185 | - 10 |
| Leather Workers' Union. | Milwaukee | 40 | 100 | 100 | 115 | 325 | 175 | 10 |
| Locomotive Engineers, 536 ........................... | Antigo | 41 | 100 | 100 | 275 | 430 | 350 | 10 |
| Locomotive Engineers, |  |  | 90 | 90 | 275 |  |  |  |
| Locomotive Engineers, |  | 51 | 90 | 90 | 27 | 400 |  |  |
|  | Green Bay | 58 | 100 | 100 | 350 | 425 | 370 | 5 to 12 |
| Locomotive Firemen, 259 | Ashland. | 42 | 96 | 100\| | 175 | 250 | 225 | 10 |
| Locomotive Firemen, 26. | Baraboo | 120 | 100 ' | 100 | 220 | 260 | 240 | 10 |
| Locomotive Firemen, 412 | Fond du Lac | 80 | 100 | 100 | 175 | 240 | ${ }_{2}^{2} 15$ | 10 |
| Locomotive Firemen, 131 | Stevens Point. | 30 | 100 | 100 | 220 | 245 | 230 | 10 |
| Long Shoremen's Association............... 131 | West Superior.. | 100 | Work |  |  |  |  |  |
| Machinists' Union ....... | Kenosha ...... | 65 | 90 | 90 | 225 | 300 | 250 | 10 |
| Machinists' Union, 437 | Racine | 55 | 90 | 50 | 200 | 265 | 425 | 9-10 |
| Painters' Union, 177 | Janesville. | 38 | 100 | 100 | 160 | 200 | 1.5 | 10 |
| Painters' Uni mn, 222 | Milwaukee | 50 | 100 | 100 | 220 | 240 | 230 | 8 |
| Painters' Union, 103 | Racine | 63 | 95 | 101 | 225 | 250 | 235 | 8 |
| Painters' Union, 3 | Sheboygan | 60 | 90 | 80 | 180 | 180 | 180 | 9 |
| 'Plumbers' Union..... | Racine .. | 19 | 100 | 100 | 225 | 300 | 283 | 8 |
| Printing Pressmens' Union, 53 ........... | West Superior.. | 13 | 100 | 100 | 200 | 300 | 270 | 9 |
| Railway Conductors; Order, 253. | Ashland | 51 | 100 | 100 | 300 | 300 | 300 | 10 |
| Railway Conductors' Or |  |  |  |  |  | 300 | 3 | 10 |
| Railway Conductors Or- | Baraboo | 61 | 100 | 100 | 300 | 300 | 300 | 11 |
| der.................... | La Crosse | 89 |  | 100 |  |  |  | 10 |
| Railway Trainmen, 303 | Ashland.. | 73 | 100 | 100 | 200 | 300 | 250 | 10 |

GENERAL TABLE - Continued.

| Name and Number of Organization. | Location. |  | Fer cent. of employment. |  | Daily rate of wages. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | $\begin{aligned} & \text { + } \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & \hline 1 \\ & \hline \end{aligned}$ |  | $\dot{8}$ $\stackrel{8}{0}$ $\stackrel{0}{0}$ 8 4 |  |
| Railway Trainmen, 357 | Fond du Lac | 55 | 100 | 100 | \$2 c0 | \$ 300 | \$2 50 | 10 |
| Railway Trainmen, 176 | La Crosse. | 57 | 90 | 95 | 200 | 300 | 250 | 10 |
| Sheet M- tal Workers, 24 | Milwaukee | 105 | 100 | 100 |  |  |  |  |
| Stationary Engineers, 19. | Green Bay | 26 17 | 100 | 100 | 175 1 1 | 300 350 | 2 2 2 | 10-12 |
| Stationary Engineers, 13. | Kenosha | 17 <br> 7 | $\stackrel{100}{95}$ | 100 95 | 1 250 | 350 300 | ${ }_{2} 75$ | 8-12 |
| Stationary Engineers, 1.. | Milwaukee | 107 | 98 | 98 | 150 | 350 | $\bigcirc 25$ | 8-13 |
| Stationary Engineers, $2 .$. | Sheboygan | 25 | 100 | 100 | 200 | 400 | 300 | 10 |
| Stereotypers and Electrotypers, 12 | Milwaukee | 33 | 90 | 90 |  | 500 | 300 | $\xrightarrow{9}$ |
| Tailors' Union, 2 tộ. | Madison | 50 | 95 | 93 | 150 | 250 | 185 | 10-12 |
| Typographical Union, 248 | Sheboygan | 14 | 100 | 100 | 130 | 160 | 140 | 10 |
| Typographical Union, 23. | Milwaukee | 310 | 98 | 95 | 250 | 400 | 3.25 | 8-9 |
| Vessel Loaders' Union... | Washburn | 85 |  |  |  |  | 180 |  |
| Vessel Loaders' Union, | Allouez | 22 | 100 | 100 | 150 | 250 | 200 | 10 |
| Vessel Loaders' Union, |  |  |  |  |  |  |  |  |
|  | West Supe | 100 |  |  |  |  |  |  |
| Vessel Loaders' Union, 68 | Marine | 102 | 100 | 100 | 220 | 220 | 220 | - 10 |
| Vessel Loaders and Ore Trimmers, 54 |  | 44 | 93 | 95 |  | 310 | 225 |  |
| Wood Workers' Union, 82 | Marshfield | 50 | 80 | 90 | 100 | ${ }_{1} 165$ | 125 | 10 |
| Wood Workers' Union, 8. | Milwaukee | 300 | 90 | 100 | 165 | 270 | 200 | 9 |
| Wood Workers' Uninn, 53 | Sheboygan. | 1. | 82 | 100 | 70 | 130 | 100 | 13-101/2 |
| Wood Workers' Union (carvers) | Milwaukee | 35 | 85 | 85 | 160 | 250 | 215 | 9 |
| Wood Workers' Union, 115 | Milwaukee. | 21 | 190 | 10 | 165 | 200 | 180 |  |
| Wcod Workers' Union, | Racin | 30 | 100 | 100 | 50 | 225 | 150 | 10 |
| Total number men.. |  | $\overline{5,330}$ |  |  |  |  |  |  |

The following table exhibits the number of men, the number of hours each man works, together with average wages each person receives per hour.

TABLE 1.

| Number of men. | Per cent. of whole number men. | Hour work per day. | Average wages for each person per hour. |
| :---: | :---: | :---: | :---: |
| 1,406 | 26.38 | 8 | \$.251 |
| 727 | 13.64 | 9 | $23 \frac{1}{3}$ |
| 2,052 | 38.50 | 10 | . $222^{2}$ |
| 61 | 1.14 | 11 | . 27.3 |
| 52 | . 98 | 12 | . $18{ }^{3}$ |
| ${ }^{1} 58$ | 109 | 5-12 | . $35^{\circ}$ |
| ${ }^{2} 645$ | 12.10 | 8-13 | . 27 |
| 329 | 6.17 | Not given |  |

[^76]The above exhibit will be easily understood by reference to the first table in this series.

About one-fourth the members work eight hours, and twofifths work ten hours per day. This practically includes all the members whose work is regular day work. A little over one eighth of the whole number work nine hours, and about two per cent. work from eleven to twelve hours per day. The remainder, about one-sixth of the whole number, belong to that class of workers whose occupations are irregular. They work from five to thirteen hours per day. The most of them are engineers, boat-loaders, etc.

Table II is a classification of weekly earnings, and is as follows:

CLASSIFICATION OF WEEKLY EARNINGS, BASED UPON THE AVERAGE
RATE OF DAILY WAGES.
TABLE II.

| Classification. | $\begin{aligned} & \text { Number of } \\ & \text { men. } \end{aligned}$ | Percentage, |
| :---: | :---: | :---: |
|  |  |  |
| 20.00 but under $\$ 25.00$ | 192 | 3.99 |
| 18.00 but under ${ }^{20.00}$ 15.00 but under 18.00 | 622 | 12.92 |
| 13.00 but under ${ }^{15.00}$ | ${ }^{686}$ | 14.25 |
| 12.00 but under 13.00 | 1,263 1,303 | 26.28 |
| 11.00 but under 12.00 | 1,303 | 27.06 |
| 10.00 but under 11.00 | 124 | 5.28 |
| 9.00 but under 10.00 | 169 | 3.06 3.30 |
| $\begin{array}{ll}8.00 & \text { but under } \\ 7.00 & 9.00 \\ \text { but under }\end{array}$ | 168 | 3.48 |
| 7.00 6.00 but under | 50 17 | 1.03 , |
| Under $\$ 6.00$........... | 17 |  |
| Total | 4,814 | 100.00 |

Not counted on account of averages, wages not being given, 516 men.
The above table tells the wage story of the organizations included in the report, giving the number of persons in the various classes and the percentage each number bears to the whole. No one appears to have received " $\$ 25.00$ per week and over, while 192 or 3.99 per cent. receive " $\$ 20.00$ but under $\$ 25.00$." From this on to class " $\$ 12.00$ but under $\$ 13.00$," the number increases to 1,303 or 27.06 per cent. Then in the next class the number drops to 110 or 2.28 per cent., and
again to 244 or 5.06 per cent. ; then again there is a decrease to 159 or 3.3 per cent. in the following class and another increase to 168 receiving $\$ 8.00$ but under $\$ 9.00$, and from here to the end the number decreases to 0 in the class "under $\$ 6$."

The following table is a comparison of the Weekly earnings and number of men of the Labor Unions with fourteen Skilled Triades and Manufacturers.

TABLE III.

| Classification of weekly earnings. | 72 labor unions for 1401. | 14 skilled trades for 1899. | Manufacturers for 1900. |
| :---: | :---: | :---: | :---: |
| Under $\$ 5.00$ per week |  | - 838 | 7,202 |
| \$5.00 but under $\$ 6.00$ |  | 490 | $\stackrel{2}{5}, 489$ |
| 6.00 but under 7.00 | 17 | 806 | 9,995 |
| 7.00 but under 8.00 | 160 | 1,444 | 12,053 |
| 8.00 but under 9.00 | 1.9 | 4,044 | 1b,983 |
| 10.00 but under 12.00 | 354 | 3,296 | 12,079 |
| 12.00 but under 15.00 | 2,566 | 3,516 | 10,021 |
| 15.00 but under 20.00 | 1,308 192 | 1,7\%7 | $\stackrel{5}{2,010}$ |
| 20.00 and over | 192 | 362 | 2,030 |
| 'Totals' | 4,814 | 17,739 | 83,737 |

The preceding table is made up of the fourteen skilled trades as exhibited in the Bureau of Labor Statistics' report for Wisconsin 1899-1901, and the Labor Union's returns and Manufacturers' returns for 1900.

The first class in order is that of "under $\$ 5.00$ per week." In this class there are 7,202 manufacturers, 838 skilled laborers, and no union men. In the next class there are 2,489 manufacturers, 490 skilled laborers, and no union men receiving " $\$ 5.00$ but under $\$ 6.00$ " per week. From this on to the class " $\$ 9.00$ but under $\$ 10.00$ " the manufacturers increased steadily to 15,983 , and the skilled laborers to 4.044 . From this on to the class " $\$ 20.00$ and over" the manufacturers decrease to 2,030 , while the skilled laborers decrease to 3,296 in " $\$ 10.00$ but under $\$ 12.00$, then increase to 3,516 in class " $\$ 12.00$ but under $\$ 15.00$," then decrease to 362 in class "\$20.00 and over." The labor unions begin with 17 in class " $\$ 6.00$ but under $\$ 7.00$ " and increase to 168 in class " $\$ 8.00$
but under $\$ 9.00$," then decrease to 159 in the next class, increasing again to 2,566 in class " $\$ 12.00$ but under $\$ 15.00$," then decreasing to 192 in the last class. As a whole the exhibit makes plain the earnings of the three classes.

What the above table shows in actual numbers, the following shows in percentages based upon the total in each class.

TABLE IV́.

| Classification of weekly earnings. | 72 labor unions for $1: 01$. Percentage. | 14 skilled trades for Percentage. | Manufactủrer for $19 t 0$. Percentage. |
| :---: | :---: | :---: | :---: |
| Under $\$ 5.00$ per week |  | - 4.73 | 8.60 |
|  |  | ${ }_{4}^{2.77}$ | 2.97 |
| 7.00 but under 8.00 | 1.03 | 6.80 | 11.91 |
| 8.00 but under 9.00 | 3.48 | 8.15 | 14.39 |
| 9.00 but under 10.00 | 3.30 | 22.80 | 19.09 |
| 10.00 but under 12.00 | 7.34 | 18.53 | 14.43 |
| 12.00 but under 15.00 | 53.34 | 19.83 | 11.97 |
| ${ }_{20}^{15.00}$ but under over 20.00 | 27.17 3.99 | 9.80 2.04 | 7.06 2.42 |
| Totals | 100.00 | 100.00 | 100.00 |

This table, as hinted above shows the per cent. of persons in each class. 4.73 per cent. of the skilled laborers, 8.60 per cent. of the manufacturers, and no union laborers, receive less than $\$ 5.00$ per week. In class " $\$ 5.00$ but under $\$ 6.00$ " there are 2.77 per cent. of the skilled laborers and 2.97 per cent. of the manufacturers, and no union men. From this point on to class " $\$ 9.00$ but under $\$ 10.00$ " the skilled laborers increase to 22.80 per cent. and the manufacturers to 19.09 per cent. From this point on to the last class the manufacturers decrease to 2.42 per cent. and the skilled laborers decrease to 18.53 per cent. in class " $\$ 10.00$ but under $\$ 12.00$," then increase to 19.83 per ${ }^{*}$ cent. in the next class, then gradually decrease to 2.04 per cent. in the last class.

The labor unions begin with .35 per cent. in class three and increase to 3.48 per cent. in the fifth class, after which it decreases to 3.30 per cent. in the sixth class and again increases rapidly to 53.34 per cent. in class " $\$ 12.00$ but under $\$ 15.00$." From this point the per cent. decreases to 3.99 in class " $\$ 20.00$ and over."

Everything considered the above table tells the complete story as nearly as figures can be made to do so. Over onehalf of the union men receive from $\$ 12$ to $\$ 15$ per week while less than one-fifth of the skilled laborers and less than oneeighth of the manufacturers belong to this class. The greatest number of manufacturing laborers and skilled laborers receive less than $\$ 10.00$ per week.

## PART IX.

## Manufacturers' Returns for 1900 and 1901.

In this part is presented in compiled form the financial reports for 1900 and 1901 of 1,135 identical manufacturing establishments in this state. These reports have been classified into 42 industries and so compiled that the facts for each of these industries are presented in a separate table. The basic presentations thus consist of 42 tables, or one for each industry. These tables in turn have been combined in one summary table, which thus includes the facts for all industries. Each table is divided in three main parts, the first of which shows the "Classified Weekly Earnings;" the second the "Number of Persons Employed by Months;" and the third showing "Other Presentations."

## CLASSIFIED WEEKLY EARNINGS.

Under this head is shown, for each industry separately and for all industries when combined, the number of persons in the employ of the establishments reporting who received classified weekly earnings. As this statement implies, the persons included were classified according to the amount of their earnings; and the classifications into which they were thus divided are 10 in number. The first classification in order, when reading down in the table, includes all persons whose weekly wages when employed full time amounted to less than $\$ 5$ per week. The sec-
ond class included all who received $\$ 5$ per week but under $\$ 6$. From this point on there is one class for each one dollar increase in the earnings up to the point where the earnings just fall below $\$ 10$ per week, making in all six classes below this amount. The seventh class in order includes all who received $\$ 10$, but under $\$ 12$; the eighth those of $\$ 12$, but under $\$ 15$; the ninth class those of $\$ 15$, but under $\$ 20$; and the tenth all those who received $\$ 20$ per week and over. The male and female persons in each class are also shown separately, and the per cent. of the number of both of the total persons employed have been computed and given. On the whole this part of the tables can perhaps be said to present a fairly good picture of the conditions as to earnings in the various industries.

## NUMBER OF PERSONS EMPLOYED BY MONTHS.

In this part of the tables is shown by industries, the average number of persons employed each month in 1900 and 1901. In this part is also shown the range of employment or unemployment from month to month throughout each year. The range of employment or unemployment has been computed from the number employed, and the way in which it was done is quite simple. The number for the month during which the greatest number were employed was regarded as full employment, or 100 , and the number of persons for the other months were regarded in their portion to the greatest number. By full employment is not meant that all persons wanting work were then employed, but simply this, that all persons who could find something to do in a given line were then at work. While the figures are thus not an absolute measure of the course of employment they certainly shed a great deal of light upon it.

## OTHER PRESENTATIONS.

Under this head in the tables are found a variety of facts. In the first place it shows the smallest, greatest, and average number of persons employed together with increase or decrease as the case may be in the latter year when compared with the former. Then again it gives the average yearly carnings to each person
employed, and the average number of days in operation by each establishment with comparisons as between the two years. The respective number of private firms and corporations together with the number of partners and stockholders are also given in this part for both years. . It further shows the amount of capital invested, the value of the goods made or the work done, the total amount paid as wages, the average amount of capital and the average product to each person employed together with comparisons.

The establishments included in this part cover about 60 per cent. of the productive capacity of all the manufacturing establishments in the state. The figures were carefully edited and compiled and it is believed that they truthfully set forth the condition in our manufacturing industries during the period covered.

AGRICULTURAL IMPLEMENTS-29 ESTABLISHMENTS.

1. Classified Wieekly Earnings.

| Classified WeeklyEarnings. | 1900 |  |  |  | 1901 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\begin{gathered} \mathrm{Fe}- \\ \text { male. } \end{gathered}$ | Total. |  | Male. | $\begin{gathered} \text { Fe- } \\ \text { male. } \end{gathered}$ | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr ct. |
| Under \$5.00 | 157 |  | 157 | 4.24 | 150 |  | 150 | 4.02 |
| $\$ 5.00$ but under $\$ 6.00$ | 67 |  | 67 | 1.81 | 59 |  | 59 | 1.58 |
| 6.00 but under 7.00 | 322 |  | 322 | 8.69 | 318 |  | 318 596 | 8.51 15.96 |
| 7.00 but under 8.00 | 603 |  | 603 | 16.28 | 596 |  | 596 329 | 15.96 8.80 |
| 8.00 but under 9.00 | 601 |  | 601 | 16.22 | 329 |  | 329 698 | 18.80 |
| 9.00 but under 10.00 | 585 387 |  | 586 <br> 387 | 15.82 10.44 | 698 |  | 698 478 | 18.6 |
| 10.00 but under 12.00 | 387 550 |  | 387 550 | 10.44 14.84 | 478 |  | 478 | 12.60 |
| 12.00 but under ${ }^{15.00}$ but under 20.00 | 550 <br> 340 |  | 550 <br> 340 | 14.84 9.18 | 583 |  | 583 373 | 15.68 9.98 |
| 20.00 and over ...... | 92 |  | 92 | 2.48 | 152 |  | 152 | 4.07 |
| Total | 3,705 |  | 3,705 | 100.00 | 3,736 |  | 3,736 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons EmpLOYED. |  | Percentage of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1900. | 1901 | 1903. | 1901. | 1900. | 1901. |
| January | 3,341 | 3,153 | 95.92 | 88.74 | 4.08 | 11.26 |
| February | 3,483 | 3,516 | 100.00 | 98.96 | - | 1.04 |
| March ... | 3,473 | 3,553 | 99.71 | 100.00 | . 29 | $\cdots$ |
| April | 3,107 | 3,210 | 89.20 | 90.35 | 10.80 | 9.65 |
| May | 2,856 | 2,820 | 81.99 | 79.37 | 18.01 | 20.63 |
| $J$ June | 2,783 | 2,517 | 78.47 | 70.84 | 21.53 | 29.16 |
| July | 2,098 | 2,090 | 60.23 | 58.82 | 29.77 | 41.18 |
| August | 1,633 | 1,799 | 46.88 | 50.63 | 53.12 | 49.37 |
| September | 1,355 | 1.463 | 36.03 | 41.18 | 63.97 | 58.82 |
| October . . | 1,522 | 2,096 | 43.70 | 58.99 | 56.30 | 41.01 |
| November | 1,704 | 2,552 | 48.92 | 71.87 | 51.08 | 28.13 |
| December | 2,433 | 2,899 | 69.85 | 81.59 | 30.15 | 18.41 |

3. Other Presentations.


## ARTISANS' TOOLS-15 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classified Weekly | 1900 |  |  |  | 1901 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | $\begin{aligned} & \mathrm{Fe}- \\ & \text { male. } \end{aligned}$ | Total. |  | Male. | $\begin{aligned} & \text { Fe- } \\ & \text { male. } \end{aligned}$ | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr. ct. |
| Under $\$ 5.00$ | 93 |  | 93 | 16.52 | 76 |  | 76 | 12.28 |
| \$5.00 but under \$6.00 | 35 |  | 35 | 6.22 | 30 |  | 31 | 5.01 |
| 6.00 but under 7.00 | 48 | 1 | 49 | 8.70 | 31 |  | 31 | 5.01 |
| 7.00 but under 8.00 | 37 |  | 37 | 6.57 | 39 |  | 39 | 6.30 |
| 8.00 but under 9.00 | 76 |  | 76 | 13.50 | 87 |  | 87 | 14.05 |
| 9.00 but under 10.00 | 73 |  | 73 | 12.97 | 74 |  | 74 | 11.95 |
| 10.00 but $^{1}$ | 48 |  | 48 | 8.52 | 63 |  | 63 | 10.18 |
| 12.00 but under 15.00 | 70 |  | 70 | 12.43 | 105 |  | 105 | 16.96 |
| 15.00 but under 20.00 | 72 |  | 72 | 12.79 | 108 |  | 108 | 17.45 |
| 20.00 and over ...... | 10 |  | 10 | 1.78 | 5 |  | 5 | . 81 |
| Total .... ..... | 562 | 1 | 563 | 100.00 | 618 | 1 | 619 | 100.00 |

2. Number of Persons Employed, Rạnge of Employment-By Months.

| Montas. | Total No of Persons Employed. |  | Percentage of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1900. | 1901. | 1900. | 1901. | 1900. | 1901. |
| January $\quad$................. | 527576568534566505514493479513511522 | 531553559592569564556574583569602538 | $\begin{array}{r} 91.49 \\ 100.00 \\ 98.61 \\ 92.71 \\ 98.26 \\ 87.67 \\ 89.24 \\ 85.59 \\ 83.16 \\ 89.06 \\ 88.72 \\ 90.63 \\ \hline \end{array}$ | 88.21 | 8.51 | 11.79 |
| March ... |  |  |  | 91.86 |  | 8.14 |
| April . |  |  |  | ${ }_{98}^{98.17}$ | 1.39 | 1.83 |
| May |  |  |  | ${ }_{94} 98.54$ | 7.74 | 1.66 5.48 |
| June |  |  |  | 93.69 | 12.33 | 5.48 6.31 |
| July |  |  |  | ${ }_{92} .36$ | 10.76 | ${ }_{7.84}$ |
| August |  |  |  | 95.35 | 14.41 | 4.65 |
| September |  |  |  | 96.84 | 16.84 | 3.16 |
| October ${ }^{\text {November }}$ |  |  |  | 94.52 | 10.94 | 5.48 |
| November |  |  |  | 100.00 | 11.28 |  |
| December |  |  |  | 89.37 | 9.37 | 10.63 |

3. Other Presentations:

| Classification. | 1900. | 1901. | Increase or DeCreaste in 1901. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | Pret. |
| Smallest No. of persons employed | 479 | $531 \mid+$ | 52 |  |
| Greatest No. of persons employed Average No. of persons employed | ${ }_{5}^{576}$ | $602+$ | 26 | 10.86 4.51 |
| Average No. of persons employed | 526 | $569+$ | 43 | 8.17 |
| Average yearly earnings ... | \$426 03 | \$434 15 + | \$8.12 | 1.91 |
| Average time in operatoin | 280.93 | $300.47+$ | ${ }_{19} 8.54$ | ${ }_{6}^{1.96}$ |
| No. of private firms | 10 | 9 - |  |  |
| No. of male partners No. | 18 | 17- | 1 | 10.00 5.56 |
| No. of female partners | 18 |  |  |  |
| No. of corporations. | 18 5 | $17{ }^{1}+$ | 1 | 5.56 |
| No. of male stockholders. | 14 | $19+$ | 5 | 20.00 35.71 |
| Total No. of stockholders |  |  |  |  |
| Total No. of partners and stock-1 | 4 | 191+ | 5 | 35.71 |
| holders ... | 32 | $361+$ | 4 | 12.50 |
| Amount of capital invested | \$545.6.99 88 |  |  |  |
| Value of gonds made or work donel | 654.68988 | \$ $752.200261+$ | $\begin{array}{r}\$ 134.470 \\ 98.510 \\ \hline 8\end{array}$ | 24.64 |
| Amount naid as waces .............. | 224.09372 | 247.029 571+ | 98.510 <br> 22,988 <br> 85 | 15.05 |
| Av. canital to each person emnloved | 1,037 45 | 1,195 381+ |  |  |
| $\underline{\text { Av. product to each person employed, }}$ | 1,244 66] | 1,323 $731+$ | 7907 | 15.32 |

## BEEF AND PORK PACKING-9 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classified Weekly Earnings. | 1900 |  |  |  | 1901 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\underset{\text { male. }}{\mathrm{Fe} .}$ | Total. |  | Male. | $\begin{gathered} \text { Fe- } \\ \text { male. } \end{gathered}$ | Total. |  |
|  |  |  | No. | Pr. ct. |  |  | No. | Pr.ct. |
| Under $\$ 5.00 \ldots \ldots . . .$. | 76 |  | 78 |  |  |  |  | 3.35 2.57 |
| $\$ 5.00$ but under $\$ 6.00$ | 22 | $\stackrel{2}{2}$ | 24 | 1.35 10 | 42 | $1-$ | 43 78 | ${ }_{4}^{2.57}$ |
| 6.00 but under 7.00 | 193 | 2 | 195 494 | 10.89 27.60 | 277 |  | 277 | 16.56 |
| $\begin{array}{lll}7.00 & \text { but under } \\ 8.06 \\ \text { but under } & 8.000\end{array}$ | 494 |  | 494 385 | 27.60 | 486 | 1. | 487 | ${ }_{29.13}^{16.1}$ |
| 9.00 but under 10.00 | 198 |  | 198 | 11.06 | 274 |  | 274 | 16.69 |
| 10.00 but under 12.00 | 211 |  | 211 | 11.79 | 314 |  | 314 | 18.78 |
| 12.00 but under 15.00 | 102 |  | 102 | 5.70 | 97 |  | 97 | 5.80 |
| 15.00 but under 20.00 | 98 |  | 98 | 5.47 | 39 |  | 39 | 2.33 |
| 20.00 and over ....... | 5 |  | 5 | 28 | 7 |  | 7 | . 43 |
| Total ...... .... | 1,784 | 6 | 1,790 | 100.00 | 1,669 | 3 | 1,672 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons Employed. |  | Percentaget of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1900. | 1901. | 1900. | 1901. | 1900. | 1901. |
| January | 1,745 | 1,630 | 100.00 | 99.51 |  | ${ }^{.} 49$ |
| February | 1,433 | 1,456 | 82.12 | 88.89 | 17.88 | 11.11 |
| March | 1,252 | 1,279 | 71.75 | 78.08 | 28.25 | 21.92 |
| April | 1,141 | 1,117 | 65.39 | 68.19 | 34.61 | 31.81 |
| May | 1,192 | 1,176 | 68.31 | 71.79 | 31.69 | 28.21 |
| June | 1,399 1,381 | 1,303 1,205 | 80.17 79.14 | 7954 73.57 | 19.83 20.86 | ${ }_{26}^{20.43}$ |
| July ${ }^{\text {August }}$ | 1,381 1,256 | 1,205 1,203 | 79.14 71.98 | 73.57 73.44 | 20.86 28.02 | 26.43 |
| September | 1,225 | 1,226 | 70.20 | 75.46 | 29.80 | 24.54 |
| October | 1,428 | 1,331 | 81.83 | 81.26 | 18.17 | 18.74 |
| November | 1,597 | 1,607 | 91.52 | 98.11 | 8.48 | 1.89 |
| December | 1,731 | 1,638 | 99.20 | 100.00 | . 80 |  |

3. Other Presentations:

| Classification. | 1900. | 1901. | Increase or DeCREASE IN 1910. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | Pret. |
| Smallest No. of persons employed | 1,141 | 1.117 | 24 | 2.10 |
| Greatest No. of persons employed | 1,745 | 1,638 | 107 | 6.13 |
| Average No. of persons employed | 1,398 | 1,348 | 50 | 3.58 |
| Average yearly earnings | \$424. 44 | \$435 32 | \$10.88 | 2.56 |
| Average time in operation, days | 288 |  |  | 1.39 |
| No. of private firms' | 4 | 4 |  |  |
| No. of male partners | 13 | 13 |  |  |
| No. of female partners | 1. |  |  |  |
| Total No. of partners | 14 | 14 |  |  |
| No. of corporations | 5 |  |  |  |
| No. of male stockholders . | 36 3 | 37 3 | 1 | 2.78 |
| No. of female stockholders Total | 3 39 | 3 40 |  |  |
| Total No. of stockholders .... <br> Total No. of partners and | 39 |  | 1 | 2.56 |
| holders | 53 |  | 1 | 1.89 |
| Amount of canital invested | \$2.741.940 671 | \$2.849.380 49! + | \$107.439 83 | 3:91 |
| Value of goods made or work donel | 13,247.159 651 | 16,789.283 $551+$ | 2,942.123 40 | 22.28 |
| Amount naid as wages .......... | 593.360591 | $586.889 .291-$ | 6,551.30 | 1.10 |
| Av. capital to each person employed | 1.961331 | 2.11378 | 15245 | 7.77 |
| Av. product to each person employed\| | 10,906 41\| | 12,009 851+ | 1,103 44 | 10.12 |

## BOOTS AND SHOES-28 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classified Weekly Earnings. | 1900 |  |  |  | 1901 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | $\underset{\text { male. }}{\text { Fe- }}$ | Total. |  | Male. | $\begin{aligned} & \mathrm{Fe}- \\ & \text { male. } \end{aligned}$ | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr. ct. |
| Under \$5.00 ......... | 374 | 571 | 945 | 35.03 | 458 | 450 | 908 | 32.28 |
| $\$ 5.00$ but under $\$ 6.00$ | 79 | 131 | 210 | 7.78 | 92 | 128 | 220 | 7.82 |
| -6.00 but under 7.00 | 99 | 109 | 208 | 7.71 | 120 | 103 | 223 | 7.93 |
| 7.00 but under 8.00 | 120 | 52 | 172 | 6.67 | 126 | 72 | 198 | 7.04 |
| 8.00 but under 9.00 | 137 | 48 | 185 | 6.86 | 112 | 63 | 175 | 6.22 |
| 9.00 but under 10.00 | 332 | 27 | $3 E 9$ | 13.31 | 347 | 43 | 390 | 13.86 |
| 10.00 but under 12.00 | 205 | 69 | 244 | 9.04 | 199 | 50 | 249 | 8.85 |
| 12.00 but under 15.000 | 170 | 18 | 188 | 6.97 | 227 | 22 | 249 | 8.85 |
| 15.00 but under 20.00 | 134 | 6 | 140 | 5.19 | 159 | 4 | 163 | 5.80 |
| 20.00 and over | 46 | 1 | 47 | 1.74 | 37 | 1 | 38 | 1.35 |
| Totals | 1,696 | 1,002 | 2,698 | 100.00 | 1,877 | 936 | 2,813 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons Employed. |  | Percentage of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1900. | 1901. | 1900. | 1201. | 1900. | 1801. |
| January | 2,545 | 2,556 | 100.00 | 94.21 |  | 5.79 |
| February | 2,494 | 2,562 | 98.00 | 94.43 | 2.00 | 5.57 |
| March | ${ }_{2}^{2,523}$ | 2,559 | 99.13 | 94.32 | 5.87 | 5.68 |
| April | $\stackrel{2}{2} 406$ | 2,410 | 94.54 | 88.83 | 5.46 | 11.17 |
| June | 2.395 | 2,565 | 94.11 | 94.54 | 5.89 | 5.46 |
| July | 2,433 | 2,633 | 95.60 | 97.05 | 4.40 | 2.95 |
| August | 2.480 | 2,713 | 97.45 | 100.00 | 2.55 |  |
| September | 2.557 | 2,637 | 99.69 | 97.20 | . 31 | 2.80 |
| October | 2.445 | 2,682 | 96.07 | 98.86 | 3.93 | 1.14 |
| November | 2,402 | 2,605 | 94.38 | 96.02 | 5.62 | 3.98 |
| December | 2,435 | 2,544 | 95.68 | 93.77 | 4.32 | 4.23 |

3. Other Presentations.

| Classification. | 1900. | 1901. | Increase ${ }^{*}$ or DeCREASE IN 1901. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | Pret. |
| Smallest No. of persons èmployed | 2,224 | 2,410 | 186 | 8.36 |
| Greatest No. of persons employed | 2,545 | 2,713 | 163 | 6.60 |
| Average No. of persons employed. | 2,443 | 2,584 | 141 | 5.77 |
| Average yearly earnings | \$34206 | \$334 46 | \$7 60 | 2.22 |
| Average time in operation, days | 281 |  |  | . 36 |
| No. of private firms | 10 | 10 |  |  |
| No. of male partners | 25 | 26 | 1 | 4.00 |
| No. of female partners |  |  |  |  |
| Total N'o. of partners | 25 | 26 | 1 | 4.00 |
| No. of corporations $\mathrm{No}$. of male stockholders | 18 147 |  |  |  |
| No. of female stockholders | 18 |  |  | 11.11 |
| Total No. of stockholders | 165 | 169 | 4 | 2.43 |
| Total No. of partners and stockholders | 190 | 195 | - 5 | 2.63 |
| Amount of canital invested | \$2.301. 37952 | \$2.437.245 33 | \$135.865 81 | 5.90 |
| Value of goods made or work done | 4,302.105 481 | 4,629.859 961+ | - 327.754 481 | 8.08 |
| Amount paid as wages | 835,653 76\| | 864,240 $231+$ | - 28,586 47\| | 3.42 |
| Av. capital to each person employed | 942 n 31 | 94321 + | - 118 | 13 |
| Av. product to each person employed | 1,760 99\| | 1,791 74\|+ | + 30.75 | 1.75 |

## PACKING BOXES-20 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| $\underset{\text { Classified Weekly }}{\text { Earnings. }}$ | 1900 |  |  |  | 1901 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\begin{gathered} \mathrm{Fe}- \\ \text { male. } \end{gathered}$ | Total. |  | Male. | $\begin{gathered} \text { Fe- } \\ \text { male. } \end{gathered}$ | Total. |  |
|  |  |  | No. | Pr.ct |  |  | No. | Pr.ct. |
| Under $\$ 5.00 \ldots \ldots . .$. | 302 | 35 | 337 | 26.94 | 272 | 37 | 309 | 26.57 |
| $\$ 5.00$ but under $\$ 6.00$ | 71 | 5 | 76 | 6.07 | 46 | 5 | 51 | 4.38 |
| 6.00 but under 7.00 | 116 |  | 116 | 9.27 | 91 | 7 | 98 | 8.43 |
| 7.00 but under 8.00 | 194 |  | 194 | 15.51 | 158 |  | 158 | 13.59 |
| 8.00 but under 9.00 | 122 |  | 122 | 9.75 | 147 |  | 147 | 12.64 |
| 9.00 but under 10.00 | 222 |  | 222 | 17.75 | 172 |  | 172 | 14.79 |
| 10.00 but under 12.00 | 93 |  | 93 | 7.43 | 125 |  | 125 | 10.75 |
| 12.00 but under 15.00 | 54 |  | 54 | 4.32 | 69 |  | 69 | 5.93 |
| 15.00 but under 20.00 | 26 |  | 26 | 2.08 | 27 |  | 27 | 2.32 |
| 20.00 and over ...... | 11 |  | 11 | . 88 | 7 |  | 7 | . 60 |
| Total .... ...... | 1,211 | 40 | 1,251 | 100.00 | 1,114 | 49 | 1,163 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons Employed. |  | Percentage of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1900. | 1901. | 1900. | 1901. | 1900. | 1901. |
| January | 973 | 941 | 90.60 | 83.27 | 9.40 | 16.73 |
| February | 993 | 944 | 84.08 | 83.54 | 15.92 | 16.46 |
| March | 987 | 981 | 91.89 | 86.81 | 8.11 | 13.19 |
| April . | 1,027 | 1,031 | 95.62 | 91.24 | 4.38 | 8.76 |
| May | 1,053 | 1,057 | 98.04 | ${ }_{97}^{93.54}$ | 1.96 | ${ }^{6} .46$ |
| July | 1,052 | 1,130 | 97.95 | 100.00 | 2.05 | 2.14 |
| August | 1,030 | 1,103 | 95.90 | 97.61 | 4.10 | 2.39 |
| September | 995 | 1,078 | 92.64 | 95.40 | 7.36 | 4.60 |
| October | 963 | 1,028 | 89.66 | 90.97 | 10.34 | 9.03 |
| November | 966 | '1,011 | 89.94 | 89.49 | 10.06 | 10.51 |
| December | 1,012 | 987 | 94.23 | 87.35 | 5.77 | 12.65 |

3. Other Presentations.

| Classification. | 1900. | 1901. | Increase or Decrease in 1901. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | Pret. |
| Smallest No. of persons employed | 903 | 941 | 38 | 4.21 |
| Largest No. of persons employed | 1,074 | 1,130 | 56 | 5.21 |
| Average No. of persons employed | 1,003 | 1,033 |  | 2.99 |
| Average yearly earnings | \$352 31 | \$349 75 | . \$2 56 | . 73 |
| Average time in operation, days .... | 262 |  | 17 | 6.49 |
| No. of private firms ................. | 10 |  |  | 10.00 |
| No. of male partners | 22 |  |  | 22.73 |
| No. of female partners |  |  |  |  |
| Total No. of partners | ${ }_{10}^{22}$ |  |  | 18.18 10.00 |
| No. of male stockholders | 45 |  |  | 8.89 |
| No. of female stockholders | 8 |  |  |  |
| Total No. of stockholders ..... | 53 | 49 | 4 | 7. |
| Total No. of partners and stock- holders ....... ...................... | 75 |  | 8 | 10.67 |
| Amount of capital invested | \$1,152,520 60 | \$1,158,403 39+ | \$5,882 79 | 51 |
| Value of goods made or work done | 1,521,277 76 | 1,744,780 571+ | 223,502 81 | 14.69 |
| Amount paid as wages ......... | 353,363 88 | $361,28932+$ | 7,925 44 | 2.24 |
| Av. capital to each person employed | 1,149 1.531 | 1,121 39 - | - 2768 | 2.41 |
| Av. product to each person employed | 1,516 73\| | 1,689 04\|+ | - 17231 | 11.36 |

## BREWERIES-72 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classified Weekly Earnings. | 1900 |  |  |  | 1901 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Fe- | Total. |  | Male. | $\underset{\text { male. }}{\mathrm{Fe}}$ | Total. |  |
|  |  |  | 'No. | Pr.ct. |  |  | No. | Pr, ct. |
| Under $\$ 5.00$......... | 256 | 528 | 784 | 20.18 | 258 | 511 | 769 | 17.17 |
| 5.00 but under 6.00 | 52 | 202 | 254 | 654 | 44 | 216 | 260 | 5.80 |
| 6.00 but under 7.00 but under 8.00 8.00 | 182 | 1 | 183 | 4.71 | 157 | 1 | 158 | 3.53 |
| 8.00 but under 9.00 | 121 | 1 | 107 | ${ }_{3}^{2.75}$ | 146 | 1 | 147 | 3.28 |
| 9.00 but under 10.00 | 245 |  | 245 | 6.31 | 243 |  | 243 | 5.42 |
| 10.00 but under 12.00 | 330 | 1 | 331 | 8.52 | 674 |  | 674 | 15.04 |
| 12.00 but under 15.00 | 1,198 | 50 | 1,248 | 32.11 | 1,499 | 50 | 1,549 | 34.58 |
| 15.00 but under 20.00 | 574 |  | - 574 | 14.78 | 487 |  | , 487 | 10.87 |
| 20.00 and over ....... | 38 |  | 38 | . 98 | 46 |  | 46 | 1.03 |
| Total .... | 3,102 | 783 | 3,885 | 100.00 | 3,701 | 779 | 4,480 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons EmPLOYED. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1900. | 1501. | 1900. | 1901. | 1900. | 1901. |
| January - | 3,516 | 3,638 | 90.04 | 71.31 | 9.96 | 28.69 |
| February | 3,478 | 3,650 3,885 | 89.07 | 71.54 | 10.93 | ${ }_{28}^{28.46}$ |
| April .. | 3,663 3,699 | 3,885 4,013 | 93.80 94.72 | 76.15 78.66 | 6.20 | ${ }_{21}^{23.85}$ |
| May | 3,748 | 3,921 | 95.98 | 76.85 | 4.02 | 23.15 |
| June | 3,905 | 4,221 | 100.00 | 82.73 |  | 17.27 |
| July . | 3,882 | 4,636 | 99.41 | 90.87 | . 59 | 9.13 |
| August ${ }_{\text {September }}$ | 3,883 | 5,102 | 99.44 9. | 100.00 | . 56 |  |
| October .. | 3,902 3,651 | 4,773 4,122 | ${ }_{93.50}^{99.92}$ | 89.63 80.79 | 6.08 | 10.37 |
| November | 3,528 | 3,932 | 90.35 | 77.07 | $\stackrel{6.65}{9.65}$ | 122.93 |
| December | 3,462 | 3,868 | 88.66 | 75.81 | 11.34 | 24.19 |


| Classification. | 1500. | [1301. | Increase or DeCREASE IN 1901. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | Pret. |
| Smallest No. of persons employed | 3,462 | 3,638 | 176 | 5.08 |
| Greatest No. of persons employed | 3,905 | 5,102 | 1,197 | 30.65 |
| Average No. of persons employed | 3,693 | 4,130 |  | 11.83 |
| Average yearly earnings | \$508 30 | \$494 13 |  | 2.79 |
| Average time in operation, days | 312 | 315 | + $\quad 3$ | ${ }^{2.76}$ |
| No. of private firms | 33 | 33 |  |  |
| No. of male partners. | 48 | 50 | + | 4.17 |
| No. of female partners | $\stackrel{2}{5}$ |  | - 2 | 100.00 |
| No. of corporations .. | 50 39 | ${ }_{39}^{50}$ |  |  |
| No. of male stockhoiders | 425 | 369 | $\cdots \cdots \cdots \cdots$ | 13.18 |
| No. of female stockholders | 84 |  | ${ }_{6} 6$ | 13.09 |
| Total No. of stockholders ........ | 509 |  |  | 9.82 |
| Total No. of partners and stockholders | 559 | 509 | 50 | 8.94 |
| Amount of capital invested ........ | \$40,345,373 93 | \$41,870,505 46 | \$1,525,131 53 |  |
| Value of goods made or work done | 23,096.905 21 | 23,447.987 24 | + $\quad 351,08203$ | 1.52 |
| Amount paid as wages ............. | 1,877,164 35 | 2,040,750 85 | + 163,58650 | 8.71 |
| Av. capital to each person employed | 10.924821 | 10,138 14 | 78668 | 7.20 |
| Av. product to each person employed | 6,254 24 | 5,677 48 | 57676 | 9.22 |

## BRICK-32 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| $\underset{\text { Classified Weekly }}{\text { Earnings. }}$ | 1900 |  |  |  | 1901 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\begin{gathered} \text { Fe- } \\ \text { male. } \end{gathered}$ | Total. |  | Male | $\begin{gathered} \mathrm{Fe}- \\ \text { male. } \end{gathered}$ | Total. |  |
|  |  |  | No. | Pr. ct, |  |  | No. | Pr. ct. |
| Under $\$ 5.00 \ldots \ldots .$. | 54 |  | 54 | ${ }^{6} .34$ | 41 |  | 41 | 4.69 |
| \$5.00 but under $\$ 6.00$ | 16 | 1 | 17 | 2.00 | 16 |  | 16 | 1.83 |
| 6.00 but under 7.00 | 48 |  | 48 | 5.64 | 49 |  | 49 | 5.61 |
| 7.00 but minder 8.00 | 57 |  | 57 | 6.73 | 51 |  | 51 | $\begin{array}{r}5.8 \\ \hline 19\end{array}$ |
| 8.00 but under 9.00 | 142 |  | 142 | 13.68 | 174 |  | 174 | 19.91 |
| 9.00 but. mader 10.00 | 427 |  | 427 | 50.18 | 379 |  | 379 | 43.36 |
| 10.00 but under 12.00 | 77 |  | 77 | 9.05 | 112 |  | 112 | 12.81 4 |
| 12.00 but under 15.00 | $\stackrel{23}{5}$ |  | 23 5 | 2.73 .59 | 41 |  | 41 | 1.69 |
| 15.00 but under 20.00 20.00 and over $\ldots . .$. | 1 |  | 5 1 | . 59 | 9 <br> 2 |  | 9 2 | 1.03 .23 |
| Totals .... ..... | 850 | 1 | 851 | 100.00 | 874 |  | 874 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons EmPLOYED. |  | Percentage of - |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 190). | 1901. | 1900 | 1901. | 1900. | 1901. |
| January ................ | 118 | 121 | 14.56 |  | 85.50 | 85.56 |
| February | 129 | 121 | 15.85 | $14.44$ $16.35$ | 84.15 81.70 | 85.5683.65 |
| March | 302 | 284 | ${ }_{37.10}^{18.80}$ |  | ${ }^{62.90}$ |  |
| April May |  |  | 86.86100.00 | 33.89 82.34 |  | 66.11 |
| June | 814 | 796 |  | ${ }_{94} 82.00$ | …..... 61 | 5.01 |
| July | 869793 | 8:8 | - 99.89 | 100.00 |  | .........i |
| August |  | 817733 | 97.4284.77 | 97.4987.47 | 2.5815.23 |  |
| September | 690461 |  |  |  |  | 2.51 12.53 |
| October |  | 509 | $\begin{aligned} & 32.92 \\ & 18.92 \end{aligned}$ |  | 67.08 | 63.96 |
| November | 268154 | 302162 |  | 36.6419.33 |  |  |
| December |  |  |  |  | 81.08 | 80.67 |

3. Other Presentations.

| Classification. | 1900. | 1601. | Increase or DeCREASE IN 1901. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | Prct. |
| Smallest No. of persons employed | 118 | 121 | 3 | 2.54 |
| Greatest No. of persons employed | 814 |  | 24 | 2.95 |
| Average No. of persons employed | 450 |  | 9 | 2.00 |
| Average yearly earnings | $\$ 23895$ | \$359 ? 6 | \$20 41 | 6.02 |
| Average time in operation, days .. | . 151.31 | 147.44 | 3.87 | 2.56 |
| No. of private firms | 23 | 23 |  |  |
| No. of male partners | 34 |  | 4 | 11.76 |
| No. of female partners | ${ }_{36}^{2}$ |  | 2 | 10.67 |
| Total No. of partners | 36 9 |  |  |  |
| No. of male stockholders | 47 |  | 5 | 10.64 |
| No. of female stockholders | 13 |  | - $3_{8}$ | 23.08 |
| Total No. of stockholders | 60 |  | $+\quad 8$ | 13.33 |
|  | 96 |  | 2 | 2.08 |
| Amount of capital invested | \$521,795 54 | \$576.017 17 | \$44.221 53 | 8.32 |
| Value of goods made or work done | 444.690501 | 496.49614 | - 18.19436 | 4.09 |
| Amount paid as wages ............. | 152.52781 | 164.94674 | + 12,41893 | 8.15 |
| Av. capital to each person employed | 1,181 77 | 1,254 94 | $+\quad 7317$ | 6.19 |
| Av. product to each person employed | 98820 | 92919 | 5901 | 5.97 |

## BROOMS AND BRUSHES-17 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| $\underset{\text { Clarstfied Weekly }}{\text { Earnings. }}$ | 1900 |  |  |  | 1901 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\underset{\text { male- }}{\text { Fe- }}$ | Total. |  | Male. | Fe male. | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr. ct. |
| Under $\$ 5.00$ | 71 | 5 | 76 | 26.57 | 56 |  | 56 | 19.38 |
| $\$ 5.00$ but under $\$ 6.00$ | 20 |  | 20 | 6.99 | 25 |  | 25 | 8.66 |
| 6.00 but under 7.00 | 19 |  | 19 | 6.64 | 23 |  | 23 | 7.96 |
| 7.00 but under 8.00 | 30 |  | 30 | 10.49 | 39 |  | 39 | 13.49 |
| 8.00 but under 9.00 | 40 |  | 40 | 13.99 | 87 |  | 37 | 12.80 |
| 9.00 but under 10.00 | 56 |  | 56 | 19.58 | 61 |  | 61 | 21.11 |
| 10.00 but under 12.00 | 29 |  | 29 | 10.15 | 24 |  | 24 | 8.30 |
| 12.00 but under 15.00 | 12 |  | 12 | 4.19 | 19 |  | 19 | 6.57 |
| 15.00 but under 20.00 | 3 |  | 3 | 1.05 | 3 |  | 3 | 1.04 |
| 20.00 and over ...... | 1 |  | 1 | . 35 | 2 |  | 2 | . 69 |
| Total .... ...... | 281 | 5 | 286 | 100.00 | 289 |  | 289 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons EmPLOYED. |  | Percentage of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1900. | 1901. | 1900. | 1901. | 1903. | 1901. |
| January | 183 | 210 | 76.57 | 82.03 | 23.43 | 17.97 |
| February | 186 | 206 | 77.82 | 80.47 | 22.18 | 19.53 |
| March | 205 | 230 | 85.77 | 89.84 | 14.23 | 10.16 |
| April | 204 | 232 | 85.36 | 90.63 | 14.64 | 9.37 |
| May | 223 | 256 | 93.31 | 100.00 | 6.69 |  |
| June | 227 | 255 | 94.98 | 99.61 | 5.02 | . 99 |
| July | 287 | 255 | 99.16 | 99.61 | . 84 | . 39 |
| August | 239 | 248 | 100.00 | 96.88 |  | 3.12 |
| September | 226 | 235 | 94.56 | 91.80 | 5.44 | 8.20 |
| October | 193 | ${ }_{218}^{211}$ | 80.75 81.17 | 82.42 85.16 | 19.25 18.83 | 17.58 14.84 |
| November | 186 | 205 | 81.82 | ${ }_{80} 85$ | ${ }_{22.18}^{18.83}$ | 19.92 |

3. Other Presentations.

| Classification. | 1900. | 1901. | Increase or DeCREASE IN 1901. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Amount: | Pret. |
| Smallest No. of persons employed | 183 | 205 | $1+$ | 22 | 12.02 |
| Greatest No. of persons employed | 259 | 256 | + |  | 7.11 |
| Average No. of persons employed | 209 | 230 | + |  | 10.05 |
| Average yearly earnings | \$270 65 | \$281 77 | + | \$11.12 | 4.10 |
| Average time in operation, days | 260 |  | + |  | 11.15 |
| No. of private firms | 12 | 12 |  |  |  |
| No. of male partners | 18 | 17 | - | 1 | 5.55 |
| No. of female partners |  |  |  |  |  |
| Total No. of partners | 18 | 17 | - | 1 | 5.55 |
| No. of corporations | 5 |  |  |  |  |
| No. of male stockholders | 26 | 28 | + | 2 | 7.69 |
| No. of female stockholders | ${ }^{6}$ |  |  |  | 16.66 |
|  | 32 |  | + | 1 | 3.12 |
| Total No. of partners and stockholders | 50 | 50 |  |  |  |
| Amount of capital invested | \$161.457 86 | \$176.024 70 |  | \$14.576 | 9.03 |
| Value of goods made or work donel | 234.141 .25 | 272.2958 | + | 38.154 | 16.30 |
| Amount paid as wages ............. | 56,566 50\| | 64,807 57 |  | 8,241 | 14.57 |
| Av. capital to each person employed! | 772521 | 765 |  |  | . 93 |
| Av. product to each person employed\| | 1,120 29 | 1,183 90 |  | 63 | 5.68 |

## CEMEN'T-12 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classified Weekiy Earnings. | 1900 |  |  |  | 1901 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\begin{gathered} \text { Fe- } \\ \text { male. } \end{gathered}$ | Total. |  | Male. | $\begin{aligned} & \text { Fe- } \\ & \text { male. } \end{aligned}$ | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr.ct. |
| Under $\$ 5.00 \ldots \ldots \ldots$ | 30 | 34 | 64 | 9.73 | 20 | 41 | 61 | 9.01 |
|  | 888 | 1 | 9 20 | 1.37 | ${ }_{21}$ | 4 | 11 | 1.62 |
| 7.00 but under 8.00 | 162 | 1 | 163 | 24.77 | 33 | 1 | 34 | 5.02 |
| 8.00 but under 9.00 | 46 |  | 46 | 6.99 | 181 |  | 181 | 26.74 |
| 9.00 but under 10.00 | 166 |  | 166 | 25.23 | 265 |  | 265 | 39.14 |
| 10.00 but under 12.00 | 162 |  | 162 | 24.62 | 65 |  | 65 | . 9.60 |
| 12.00 but under 15.00 | 18 |  | 18 | 2.73 | 28 |  | 28 | 4.14 |
| 15.00 but under 20.00 | 8 |  | 8 | 1.22 | 9 |  | 9 | 1.33 |
| 20.00 and over ....... | 2 |  | 2 | . 30 | 2 |  | 2 | . 30 |
| Total .... ...... | 622 | 36 | 658 | 100.00 | 631 | 46 | 677 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons EmPLOYED. |  | Percentage of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | "Employment. |  | Unemployment. |  |
|  | 1900. | 1901. | 1900. | 1901. | 1900. | 1901. |
| January | 288 | 333 | 47.45 | 56.15 | 52.55 | 43.85 |
| February | 299 | 285 | 49.26 | 48.06 | 50.74 | 51.94 |
| March | 354 | 352 | 58.32 | 59.36 | 41.68 | 40.64 |
| April | 507 | 501 | 83.53 | 84.49 | 16.47 | 15.51 |
| May | 526 | 584 | 86.66 | 98.48 | 13.34 | 1.52 |
| June | 607 | 560 | 100.00 | 94.44 |  | 5.56 |
| July . | 577 | 568 | 95.06 | 95.78 | 4.94 | 4.22 |
| August | 548 | 554 | 90.28 | 93.42 | 9.72 | 6.58 |
| September | 537 | 559 | 88:47 | 94.27 | 11.53 | 5.73 |
| October | 544 | 593 | 89.62 | 100.00 | 10.38 |  |
| November | 530 | 554 | 87.31 | 93.42 | 12.69 | 6.58 |
| December | 308 | 413 | 50.74 | 69.65 | 49.26 | 30.35 |

3. Other Presentations.


CIGARS-51 ESTABLISHMEN'IS.

1. Classified Weekly Earnings.

| Classified WeeklyEarnings. | 1900 |  |  |  | 1901 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\begin{gathered} \text { Fe- } \\ \text { Male. } \end{gathered}$ | Total. |  | Male. | $\underset{\text { male }}{\text { Fe- }}$ | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr.ct. |
| Under $\$ 5.00 \ldots \ldots \ldots$. | 94 | 143 | 237 | 26.63 | 84 | 128 | 212 | 25.57 |
| \$5.00 but under $\begin{array}{r}\$ 6.00 \\ 6.00 \\ \text { but under } \\ 7.00\end{array}$ | 27 | 21 | 48 | 5.59 | 14 | 60 | 74 | 8.93 |
| 7.00 but under 88.00 | 37 36 | 11 | 48 | 5.39 | ${ }_{34} 21$ | 16 | 37 | 4.46 |
| 8.00 but under 9.00 | $\stackrel{31}{81}$ | 21 | 102 | 11.46 | 34 66 | 19 | 53 | 6.39 |
| 9.00 but under 10.00 | 75 | 5 | 80 | 11.46 8.99 | 76 | 16 | 8 | 9.89 10.74 |
| 10.00 but under 12.00 | 111 | 6 | 117 | 13.15 | 111 | ${ }_{2}^{16}$ | 113 | 13.63 |
| 12.00 but under 15.00 | 112 | 2 | 114 | 12.81 | 99 | 6 | 105 | 12.67 |
| 15.00 but under 20.00 | 61 | , | 64 | 7.19 | 51 | 10 | 61 | 7.36 |
| 20.00 and over ...... | 30 |  | 30 | 3.87 | 3 |  | 3 | . 36 |
| Total .... ....... | 664 | 226 | 890 | 100.00 | 559 | 270 | 829 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons EmPLOYED. |  | Percentage of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1900. | 1901. | 1900. | 1901. | 1900. | 1901. |
| January . | 779 | 773 | 93.07 | 95.31 | 6.93 | 4.69 |
| February | 756 | 758 | 90.32 | 93.46 | 9.68 | 6.54 |
| Mpril March | 794 | 763 765 | 94.86 95.46 | ${ }_{94}^{94.08}$ | 5.14 | 5.92 |
| May | 822 | 768 | 98.21 | 94.33 94.70 | 4.54 1.79 | 5.67 |
| June | 791 | 790 | 94.50 | 97.41 | 5.50 | 2.59 |
| July | 780 | 808 | 93.19 | 99.63 | 6.81 | 2.59 .37 |
| August | 819 | 791 | 97.85 | 97.53 | $\stackrel{6.81}{2.15}$ | 2.47 |
| September | 815 | 797 | 97.37 | 98.27 | ${ }_{2.63}$ | 1.73 |
| October | 811 | 801 | 96.89 | 98.77 | 3.11 | 1.23 |
| November | 837 | 800 | 100.00 | 98.64 |  | 1.36 |
| December | 786 | 811 | 93.91 | 100.00 | 6.09 |  |

3. Other Presentations.

| Classifijation. | 1900. | 1901. | Increase or DeCREASE in 1901. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Amuont. | Pret. |
| Smallest No. of persons employed | 756 | 758 | + | 2 | 26 |
| Greatest No. of persons employed | 837 | 811 |  |  | 3.11 |
| Average No. of persons employed |  | 785 |  | 14 | 1.75 |
| Average yearly earnings ............. | \$370 77 |  | $+$ | - \$20 35 | 5.49 |
| Average time in operation, days .. | 28580 | 28518 |  |  | . 22 |
| No. of private firms |  | 48 |  |  |  |
| No. of male partners | 58 | 56 |  | $\ldots$ | 3.45 |
| No. of female partners |  |  |  |  |  |
| No. of corporations .. | 58 3 | 56 3 |  | 2 | 3.45 |
| No. of male stockholders | 13 | 11 |  | $\cdots{ }^{\text {...... }}$ | 15.38 |
| No. of female stockholders |  |  |  |  | 15.38 |
| Total No. of stockholders ... | 13 | 13 |  |  |  |
| Total N'o. of partners and stockholders | 71 | 69 |  | 2 | 2.82 |
| Amount of capital invested | \$458,748 78 | \$567,811 18 |  |  |  |
| Value of goods made or work done | 1,071,888 37 | 1,067,085 18 |  | 4,803 19 | ${ }^{23} .45$ |
| Amount paid as wages | 296,242 05 | 307,026 18 |  | 10,784 13 | 3.64 |
| Av. capital to each person employed | 57415 1,34154 | 72333 1359 | $+$ | 14918 | 25.98 |
| $\underline{\text { Av. product to each person employed }}$ | 1,341 54 | 1,359 34 |  | 1780 | 1.33 |

## CLOTHING-29 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classified Weekly Earnings. | 1900 |  |  |  | 1901 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\begin{gathered} \mathrm{Fe}- \\ \text { male. } \end{gathered}$ | Total. |  | Male | $\begin{gathered} \mathrm{Fe}- \\ \text { male. } \end{gathered}$ | Total. |  |
|  |  |  | No. | Pr. ot. |  |  | No. | Pr. ct. |
| Under $\$ 5.00$ | 56 | 1,118 | 1,174 | 57.15 | 46 | 1,183 | 1,229 | 35.07 30 |
| $\$ 5.00$ but under $\$ 6.00$ | 14 | 1,182 | 866 | 27.40 | 18 | 1,647 | 1,065 | 30.09 11.30 |
| 6.00 but under 7.00 | 22 | 331 | 353 | 11.17 | 24 | 372 | ${ }_{213}^{396}$ | 6.68 |
| 7.00 but under 8.00 | 38 | 161 | 199 | 6.30 | 45 | 183 | 118 | 3.37 |
| 8.00 but under 9.00 | 42 | 79 | 121 | 3.83 3.45 | 72 | 62 | 134 | 3.83 |
| 9.00 but under 10.00 | 58 | $\stackrel{51}{27}$ | 109 96 | 3.45 <br> 3.04 | 63 | 29 | 92 | 2,63 |
| 10.00 but under 12.00 | 69 79 | 27 | 96 88 | 3.04 2.78 | 75 | 18 | 93 | 2.65 |
| 12.00 but under 15.00 but under 20.00 | 79 | 9 | 71 | 2.25 | 69 | 1 | 70 | 2.00 |
| 20.00 and over ...... | 81 | 2 | 83 | 2.63 | 93 | 1 | 94 | 2,68 |
| Total | 530 | 2,630 | 3,160 | 100.00 | 531 | 2,973 | 3,504 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons Employed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1900. | 1901. | 1900. | 1901. | 1900. | 1901. |
| January | 2,683 | 2,980 | 90.12 92 | 88.88 91.86 | 9.88 7.26 | 11.12 8.14 |
| February | $\stackrel{2,761}{2,851}$ | 3,080 3,123 | 92.74 | 91.86 93.14 | 4.23 | 6.86 |
| March | 2,873 | 3,123 3,096 | 99.51 | 92.34 | 3.49 | 7.66 |
| May | 2,877 | 3,111 | 96.64 | 92.78 | 3.36 | 7.22 |
| June | 2,865 | 3,154 | 96.24 | 94.07 | 3.76 | 5.93 |
| July | ${ }^{2,720}$ | 3,244 | 91.37 | 96.75 | 8.63 | ${ }_{2} .25$ |
| August | 2,857 | 3,267 | ${ }_{99} 95.97$ | 97.44 | 4.03 | 2.56 |
| September | $\stackrel{2,953}{ }$ | 3,353 | 99.19 100 | 100.00 99 | . 81 | 21 |
| October | $\stackrel{2,977}{2,862}$ | 3,346 3,274 | 96.14 | 97.64 | 3.86 | 2.36 |
| December | 2,779 | 3,083 | 93.35 | 91.95 | 6.65 | 8.05 |

3. Other Presentations.

| Classification. | 1900. | 1901. | Increase or DeCREASE IN 1901. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Amount. | Pret. |
| Smallest No. of persons employed | 2,683 | 2,980 |  | 297 | 11.07 |
| Greatest No. of persons employed | $\stackrel{2,977}{2,838}$ | 3,353 3,176 | $+$ |  | 12.63 11.91 |
| Average No. of persons employed | 2,838 | 3,176 |  |  |  |
| Average yearly earnings ........... | \$352 45 | \$316 43 | - | \$36 02 | 10.22 |
| Average time in operation, days .. | 284.69 | 280.41 |  |  | 1.50 |
| No. of private firms | 10 | 10 |  |  |  |
| No. of male partners | 19 | 19 |  |  | 50.00 |
| No. of female partners | 21 | 20 |  |  | 4.76 |
| Total No. of partners . . . . . . . . . . . . . . ${ }^{\text {N }}$. | 19 | 19 |  |  |  |
| No. of corporations ${ }^{\text {No. of }}$ male stockholders ............. | 133 | 126 |  |  | 5.26 |
| No. of female stockholders | ${ }^{67}$ | 68 194 | $\pm$ |  | 1.49 |
| Total No. of stockholders | 200 |  |  |  | 3.00 |
| Total No. of partners and stockholders | 221 | 214 |  |  | 3.17 |
| Amount of capital invested | \$2.447.870 86 | \$2.467,475 53 | $1+$ | \$19.604 | 7.80 |
| Value of goods made or work done | 5.569 .25474 | 5.814.488 23 | $1+$ | 245.223 | 9.40 |
| Amount paid as wages ............ | 1,000,250 281 | 1,004,986 97 |  | 4,736 | .47 9.93 |
| Av. capital to each person employed | $\begin{array}{r}863 \\ 1,9623 \\ \hline\end{array}$ | $\begin{array}{r}7,830 \\ \hline\end{array}$ | 6\|- |  | 9.71 |
| Av. product to each person employed | 1,962 39 | 1,830 76 | \|- |  | 6.71 |

## COOPERAGE-17 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| $\underset{\text { Clarnings. }}{\text { Clatied }}$ | 1900 |  |  |  | 1901 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | $\xrightarrow{\mathrm{Fe}-}$ | Total. |  | Male. | $\begin{gathered} \text { Fe- } \\ \text { male. } \end{gathered}$ | Total. |  |
|  |  |  | No. | Pr. ct. |  |  | No. | Pr.ct. |
|  | 45 |  | 45 | 8.47 | 38 |  | 38 | 8.02 |
|  | 31 |  | 15 | 2.82 | 22 |  | 22 | 4.64 |
| 7.00 but under 8.00 | 50 |  | 31 50 | 5.84 9.42 | 31 |  | 31 | 6.54 |
| 8.00 but under 9.00 | 50 |  | 50 | ${ }_{9} 9.42$ | 49 | ..... | 49 | 10.34 |
| 9.06 but under 10.00 | 124 |  | 124 | 23.35 | 119 |  | 43 | 9.07 |
| 10.00 but under 12.00 | 40 |  | 40 | $\begin{array}{r} \\ 7.53 \\ \hline 1.35\end{array}$ | 119 |  | 119 | 25.11 |
| 12.00 but under 15.00 | 95 |  | 95 | 17.89 | 61 |  | 44 | ${ }_{1} 9.28$ |
| ${ }_{20}^{15.00}$ but under 20.00 | 80 |  | 80 | 15.07 | 66 |  | 61 66 | 13.92 |
| 20.00 and over ....... | 1 |  | 1 | . 19 | 1 |  | 1 | . 21 |
| Total | 531 |  | 531 | 100.00 | 474 |  | 474 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons EmPLOYED. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1900. | 1901. | 1900. | 1901. | 1900. | 1901. |
| January | 428 | 406 | 91.45 | 94.86 | 8.55 |  |
| February | 422 | 419 | 90.17 | 94.86 97.90 | 8.55 9.83 | 5.14 2.10 |
| March ... | 450 | 417 | 96.15 | 97.43 | 3.85 | 2.57 |
| April | 446 | 418 | 95.30 | 97.66 | 3.85 4.70 | 2.57 2.34 |
| May | 448 | 418 | 95.73 | 97.66 | 4.70 4.27 | 2.34 2.34 |
| June | 445 | 403 | 95.09 | 94.16 | 4.91 | 5.84 |
| July . | 433 ' | 400 | 92.52 | 94.16 93.46 | 4.91 7.48 | b. 6.54 |
| August ... | 414 | 389 | 88.46 | 93.46 90.89 | 11.54 | 6.54 9.11 |
| September | 425 | 386 | 90.81 | 90.19 | 11.54 9.19 | 9.81 |
| October .. | 468 | 421 | 100.00 | 98.36 | ... 19 | 1.64 |
| November | 447 | 428 | 95.51 | 100.00 | $\ddot{4.49}$ | 1.64 |
| December | 393 | 397 | 83.97 | 92.76 | 16.03 | 7.24 |

3. Other Presentations.

| Classification. | 1900. | 1901. | lncrease or DeCREASE IN 1901. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | Pret. |
| Smallest No. of persons employed | 393 | 386 | 7 |  |
| Greatest No. of Persons employed | 468 | 428 |  | 8.75 |
| Average No. of persons employed | 435 | 409 |  | 5.98 |
| Average yearly earnings ........... |  |  |  |  |
| Average time in operation, days ... | 249.24 | ${ }_{237.35}$ | \$11.89 | 1.27 4.77 |
| No. of private firms | 13 |  |  |  |
| No. of male partners .. | 15 | 15 |  |  |
| No. of female partners |  | 15 |  |  |
| Total No. of partners | 15 | 15 |  |  |
| No. of corporations ${ }^{\text {No. of male stockholders }}$ | 4 | 4 |  |  |
| No. of female stockholders | 12 | 13 | 1 | 8.33 |
| Total No. of stockholders ............ | 13 |  | 5 | 500.00 |
| Total No. of partners and stock- | 13 |  | 6 | 46.15 |
| holders | 28 |  | 6 | 21.43 |
| Amount of capital invested ......... | 4286.62980 | \$614.256 75 + |  |  |
| Value of goods made or work done | 718.788431 | 729.431 29! + |  | 26.24 1.48 |
| Amount paid as wages ............ | 186.225081 | 177.307651- | 10,64296 8,917 | 1.488 |
| Av. capital to each person emnloyed | 1.11871 | $1.5020 .91+$ | 383 38 | 34.27 |
| Av. product to each person employed\| | 1,652 39 | 1,783 45\|+ | 13106 | 7.93 |

## COTTON AND LINEN-6 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classified Weekly <br> Earnings. | 1900 |  |  |  | 1901 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\begin{aligned} & \mathrm{Fe}- \\ & \text { male. } \end{aligned}$ | Total. |  | Male. | $\begin{gathered} \text { Fe- } \\ \text { male. } \end{gathered}$ | Total. |  |
|  |  |  | No. | Pr ct. |  |  | No. | Pr.ct. |
| Under \$5.00 ......... | 80 | 170 | 250 | 49.80 | 60 19 | 148 30 | 208 49 | 48.15 11.34 |
| $\$ 5.00^{\prime}$ but under $\$ 6.00$ | 34 | 55 | 89 | 17.73 | 19 | 30 57 | 92 | 21.30 |
| 6.00 but under 7.00 | 24 | 37 | 61 | 12.15 | 35 28 | 57 4 | 32 | 7.41 |
| 7.00 but under 8.00 | 25 | 13 | 38 | 7.57 | 28 | 4 | 32 16 | 3.71 |
| 8.00 but under 9.00 | 22 | 2 | 24 | 4.78 | 16 |  | 17 | 3.93 |
| 9.00 but under 10.00 | 7 | 1 | 888 | 1.59 | 17 |  | 19 | 2.08 |
| 10.00 but under 12.00 | 20 | : $\cdot$ | 20 | 3.98 1.40 | 9 |  | 5 | 1.16 |
| 12.00 but under 15.00 | 7 5 |  | 7 5 | 1.40 1.00 | 4 |  | 4 | . .93 |
| 15.00 but under 20.00 | 5 |  | 5 | 1.00 | 4 |  |  |  |
| 20.00 and over ...... |  |  |  |  |  |  |  |  |
| Total | 224 | 278 | 502 | 100.00 | 193 | 239 | 432 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons EmPLOYED. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1900. | 1901. | 1900. | 1901. | 1900. | 1901. |
| January | 440 449 |  | 94.62 96.56 | 95.79 93.22 | 5.38 3.44 | 4.21 6.78 |
| February | 449 404 | 409 416 | 96.56 86.88 | 93.22 97.20 | 3.44 13.12 | 6.80 |
| March .. <br> April | 404 | 428 | 100.00 | 100.00 |  |  |
| May . | 461 | 427 | 99.14 | 99.77 | . 86 | . 23 |
| June | 443 | 300 | 95.27 | 70.09 | 4.73 | ${ }_{32} 29.90$ |
| July | 464 | 291 | ${ }_{99}^{99.78}$ | 68.00 | 7.53 | 32.00 35.75 |
| August | 430 | ${ }_{1} 275$ | ${ }_{95.05}^{92.47}$ | 64.25 38.55 | 4.95 | 61.45 |
| September | 442 434 | 160 322 | ${ }_{93.33}^{95.05}$ | 38.23 | 6.67 | 24.77 |
| October ${ }^{\text {November }}$ | 443 | 310 | ${ }_{95.27}$ | 72.43 | 4.73 | 27.57 |
| December.... | 440 | 310 | 94.62 | 72.43 | 5.38 | 27.57 |

3. Other Presentations.

| Classification. |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |

## CRACKERS AN'D CONFECTIONERY-16 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classified WeeklyEarnings. | 1900 |  |  |  | 1901 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | $\begin{gathered} \mathrm{Fe}- \\ \text { male. } \end{gathered}$ | Total. |  | Male. | $\begin{gathered} \mathrm{Fe}- \\ \text { male. } \end{gathered}$ | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr.ct. |
| Under $\$ 5.00 \ldots \ldots . . . .0$ | 257 40 | 1,110 | 1,367 | 73.02 | 271 | 1,108 | 1,379 | 69.15 |
|  | 40 | 14 | 86 56 | 4.59 29 | 72 | 66 | 138 | 6.92 |
| 7.00 but under 8.00 | 43 | 3 | 46 | 2.46 | ${ }_{61} 63$ | 10 | 73 | 3.66 |
| 8.00 but under 9.00 | 46 | 4 | 50 | 2.68 | 63 | 1 | 65 | 3.56 |
| 9.00 but under 10.00 | 50 | 1 | 51 | 2.73 | 56 | 1 | 57 | ${ }_{2} .86$ |
| 10.00 but under 12.00 | 88 |  | 88 | 4.71 | 90 |  | 90 | 4.52 |
| 12.00 but under 15.00 | 65 |  | 65 | 3.46 | 66 |  | 66 | 3.31 |
| 15.00 but under 20.00 | 48 |  | 48 | 2.56 | 41 |  | 41 | 2.06 |
| 20.00 and over ...... | 15 |  | 15 | . 80 | 14 |  | 14 | . 70 |
| Total ....... .... | 697 | 1,175 | 1,872 | 100.00 | 787 | 1,207 | 1,994 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No of Persons Employed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1900. | 1901. | 1900. | 1801. | 1900. | 1901. |
| January | 1,353 | 1,544 | 72.92 | 78.51 | 27.08 | 21.49 |
| February | 1,356 | 1,534 | 73.14 | 78.11 | 26.86 | 21.59 |
| March <br> April | 1,331 | 1,612 | 71.79 | 82.08 | 28.21 | 17.92 |
| May. | 1,473 | 1,619 1,710 | 79.44 83 | 82.43 87 | 20.56 | 17.57 |
| June | 1,598 | 1,768 | 83.59 86.19 | 87.07 90.02 | 16.45 | 12.93 9.98 |
| July | 1,621 | 1,747 | 87.43 | 89.05 89.95 | 12.57 | 9.98 10.05 |
| August | 1,645 | 1,781 | 88.73 | ${ }_{90.68}$ | 11.27 | ${ }^{10.05}$ |
| September | 1,652 | 1,847 | 89.10 | 94.04 | 11.90 | 5.96 |
| October | 1,825 | 1,964 | 98.44 | 100.00 | 1.56 | 5.96 |
| November | 1,854 | 1,935 | 100.00 | 98.52 |  | 1.48 |
| December | 1,770 | 1,858 | 95.47 | 94.60 | 4.53 | 5.40 |

3. Other Presentations.

| Classification. | 1900. | 1901. | Increase or DeCrease in 1901. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | Pret |
| Smallest No. of persons employed.. | 1,331 | 1,534 ${ }^{\text {+ }}$ | 203 | 15.25 |
| Greatest No. of persons employed.. | 1,854 | 1,964 + | 110 | 5.9 |
| Average No. of persons employed.. | 1,586 | 1,743 | 157 | ${ }_{9} .90$ |
| Average yearly earnings | \$220 61 |  |  |  |
| Average time in operation, days. | 300.63 | 299.44 | 1.19 | . 40 |
| No. of private firms.. | 4 |  |  |  |
| No. of male partners | 3 | 3 |  |  |
| No. of female partners |  |  |  |  |
| Total No. of partners | 3 | 3 |  |  |
| No. of corporations | 12 | 12 |  |  |
| No. of male stockholders .. | 44 | 46 | $\cdots$ | 4.5 |
| Total No. of stockholders | 50 |  |  |  |
| Total No. of partners and stock-1 | 50 |  | 2 | 4.00 |
| holders | 53 |  | 2 | 3.77 |
| Amount of capital invested......... | \$1,410.485 77 | \$1.496,423 35+ | $\$ 85.93758$ | 6.09 |
| Value of goods made or work done. | 2,914,118 431 | 3,644,025 131+ | 729,906 70 | 25.05 |
| Amount paid as wages .............. ${ }^{\text {a }}$ | 349,896 76\| | $\cdots 395,085851+$ | 45,189 09 | 12.91 |
| Av. capital to each person employed | -88934 | , $858581-$ | 45, 31 | 12.91 |
| Av. product to each person employed | 1,837 40 | 2,090 66\|+ | 25345 | 13.79 |

1. Classified Weekly Earnings.

EIIECTRIC AND GȦS APPARATUS-24 ESTABLISHMENTS.

| Classified Weekly Earnings. | 1900 |  |  |  | 1901 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | $\begin{gathered} \text { Fe- } \\ \text { male. } \end{gathered}$ | Total. |  | Male | $\begin{gathered} \text { Fe- } \\ \text { male. } \end{gathered}$ | Total. |  |
|  |  |  | No. | Pr. ct |  |  | No. | Pr.ct. |
| Under \$5.00 | 261 | 115 | 376 | 21.82 | 253 | 82 | 335 | 18.62 |
| $\$ 5.00$ but under $\$ 6.00$ | 87 | 27 | 114 | 6.62 | 83 | 34 | 117 | 6.50 |
| 6.00 but linder 7.00 | 62 | 14 | 76 | 4.41 | 77 | 13 | 90 | 5.00 |
| 7.00 but under 8.00 | 111 | 1 | 112 | 6.50 | 79 | 2 | 81 | 4.50 |
| 8.00 but under 9.00 | 124 | 1 | 125 | 7.26 | 80 |  | 80 | 4.45 |
| 9.00 but under 10.00 | 231 | 2 | 233 | 13.52 | 372 | 2 | 374 | 20.79 |
| 10.00 but under 12.00 | 201 | 2 | 203 | 11.78 | 214 |  | 214 | 11.99 |
| 12.00 but under 15.00 | 257 | 1 | 258 | 14.97 | 246 |  | 246 | 13.68 |
| 15.00 but under 20.00 | 165 |  | 165 | 9.58 | 208 |  | 208 | 11.56 |
| 20.00 and over ...... | 61 |  | 61 | 3.54 | 54 |  | 54 | 3.00 |
| Total | 1,560 | 163 | 1,723 | 100.00 | 1,666 | 133 | 1,799 | 160.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No of Persons EmPLOYED. |  | Percentages of - |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1903. | 1901. | 1900. | 1901. | 1900. | 1901. |
| January | 1,509 | 1,339 | 98.43 | 77.44 | 1.57 | 22.56 |
| February | 1,516 | 1,502 | ${ }^{98.81}$ | 86.87 | 1.19 | 13.13 7 |
| April . | 1,531 | 1,592 | 100.00 99.87 | ${ }_{94}^{92.02}$ | .13 | 7.98 |
| May | 1,515 | 1,642 | 98.83 | 94.97 | 1.17 | 5.03 |
| June | 1,392 | 1,584 | 90.80 | 91.61 | 9.20 | 8.39 |
| July | 1,326 | 1,628 | 86.43 | 94.16 | 13.57 | 5.84 |
| August | 1,266 | 1,651 | 82.58 | 95.49 | 17.42 | 4.51 |
| September | 1,299 | 1,675 | 84.74 | ${ }_{93}^{96.88}$ | 15.26 | 3.12 |
| October | 1,335 | 1,625 | 87.08 | 93.98 | 12.92 | 6.02 |
| November | 1.365 | 1,7\%9 | 89.04 | 100.00 | 10.96 |  |
| December | 1,378 | 1,571 | 89.89 | 90.86 | 10.11 | 9.14 |
| December | 1,378 | 1,571 | 89.89 | 90.86 | 10.11 | 9.14 |

3. Other Presentations.

| Classification. | 1900. | 1901. | Increase or DeCREASE IN 1901. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | Pret. |
| Smallest No. of persons employed.. | 1,266 | 1,339 | 73 | 5.77 |
| Greatest No. of persons employed.. | 1,533 | 1,729 | 196 | 12.79 |
| Average No. of persons employed.. | 1,414 | 1,597 + | 183 | 12.94 |
| Average yearly earnings | \$447 10 | \$41751 | \$29 59 | 6.62 |
| Average time in operation, days.... | 297.17 | 299.21 | 2.04 | . 69 |
| No. of private firms | 9 | 9 |  |  |
| No. of male partners | 19 | 19 |  |  |
| No. of female partners |  |  |  |  |
| Total No. of partners | 19 | 19 |  |  |
| No. of corporations $\mathrm{No...............}$. | 15 142 | $\begin{array}{r}15 \\ 142 \\ \hline\end{array}$ |  |  |
| No. of male stockholders $\ldots \ldots \ldots \ldots .$. No. of female stockholders | 142 | 142 36 |  |  |
| Total No. of stockholders . | 156 |  |  | 114.10 |
| Total No. of partners and stockholders | 175 | 197 | 22 | 12.57 |
| Amount of capital invested | \$3.705.520 731 | \$3.807.660 $23+$ | \$102.199 50 | 2.76 |
| Value of coods made or work done. 1 | 3,222.283 591 | $3,922.029$ 471+ | 699.745881 | 21.72 |
| Amount paid as wages............... | 632.205561 | $666.76452+$ | 34,558 96 | 5.47 |
| Av. capital to each person emploved | 2.630601 | 2.384 261- | 22634 | 9.02 |
| Av. product to each person employed | 2,278 84\| | 2,455 97\|+ | 177031 | 7.77 |

FLOUR-71 ESTABLISHMENTS.

## 1. Classified Weekly Earnings.

| $\underset{\text { Elarnings. }}{\text { Clasifity }}$ | 1900 |  |  |  | 1901 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | $\begin{gathered} \text { Fe- } \\ \text { male. } \end{gathered}$ | Total. |  | Male | $\begin{gathered} \text { Fe- } \\ \text { male. } \end{gathered}$ | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr.ct. |
| Under \$5.00 .......... | 14 | 1 | 15 | 1.67 | 15 | 1 | 16 | 1.74 |
| $\$ 5.00$ 6.00 but under | 9 49 |  | 9 | 1.00 | 5 |  | 5 | 1.54 |
| 6.00 <br> 7.00 <br> but under <br>  | 119 | 1 | 50 119 | 5.56 | -65 | 2 | 67 | 7.27 |
| 8.00 but under 9.00 | 121 |  | 121 | 13.44 | 120 |  | 120 | 13.0 |
| 9.00 but under 10.00 | 187 |  | 187 | 20.78 | 214 |  | 214 | 13.2 |
| 10.00 but under 12.00 | 218 |  | 218 | 24.22 | 202 |  | 202 | 21.91 |
| 12.00 but under 15.00 | 101 |  | 101 | 11.22 | 106 |  | 106 | 11.4 |
| 15.00 but under 20.00 | 67 |  | 67 | 7.44 | 70 |  | 70 | 7.59 |
| 20.00 and over . | 13 |  | 13 | 1.45 | 16 |  | 16 | 1.74 |
| Total .... | 898 | 2 | 900 | 100.00 | 919 | 3 | 922 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No of Persons Employed. |  | Percentages of - |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1900. | 1901. | 1900. | 1901. | 1900. | 1901. |
| January | 702 | 800 | 81.16 | 94.01 | 18.84 | 5.99 |
| March . | 690 678 | 791 | 79.77 | ${ }_{91}^{92.95}$ | 20.43 | 7.05 |
| April . | 678 676 | 781 | 78.38 78.15 | 91.77 90.36 | 21.62 21.85 | 8.23 9.64 |
| May | 733 | 823 | 84.74 | 96.71 | 13.26 | 3.64 |
| June | 812 | 814 | 93.87 | 95.65 | 6.13 | 4.35 |
| July . | 817 | 802 | 94.46 | 94.24 | 5.54 | 5.76 |
| August | 841 | 813 | 97.23 | 95.53 | 2.77 | 4.47 |
| September | 845 | 824 | 97.69 | 96.83 | 2.31 | 3.17 |
| November | 8865 | 889 | 98.73 100.00 | 98.59 100.00 | 1.27 | 1.41 |
| December | 839 | 827 | 96.99 | 97.18 | 3.01 | 2.82 |

3. Other Presentations.

| Classification. | 1900. | 1901. | Increase or DeCREASE IN 1901. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | Pret. |
| Smallest No. of persons employed.. | 676 | 769 | - 7 | 1.04 |
| Greatest No. of persons employed.. | 865 | 851 | 14 | 1.62 |
| Average No. of persons employed.. | 779 |  | 32 | 4.11 |
| Average yearly earnings ........... | \$502 02 | \$491 74 | \$10 28 | 2.05 |
| Average time in operation, days.... | 260.86 | 260.54 | +10 | . 12 |
| No. of private firms ................. | 4.5 |  | 1 | 2.22 |
| No. of male partners ..............s. | 66 | 70 | 4 | 6.06 |
| No. of female partners $\ldots$............. Total | 3 69 | 4 | 1 | ${ }^{63.33}$ |
| No. of corporations . | 69 26 |  | 5 | 7.25 |
| No. of male stockholders .............. | 151 |  | 1 | 3.85 |
| N'o. of female stockholders | 13 |  | 20 | 1.99 |
| Total No. of stockholders | 164 | 181 | 20 17 | 153.55 |
| Total No. of partners and stock- |  |  | 17 | 10.37 |
| holders | 233 | 255 | 22 | 9.44 |
| Amount of capital invested. | \$6,051.249 79 | \$6.349.277.45+ |  |  |
| Value of goods made or work done. | 13,979.590 75 | $14,235,61338+$ | +256.022 63 | 4.93 1.83 |
| Amount paid as wages :............. | 391.07470 | $398.80436 \mathrm{l}+$ | 7,729 66 | 1.97 |
| Av. canital to each persorp employed | 7.767971 | $7.828 .951+$ | - 6098 | 1.79 |
| Av. product to each person employed | 17,945 56\| | 17,553 16\|- | 39240 | 2.19 |

## FOOD PREPARATIONS-17 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classified Weekly Earnings. | 1900 |  |  |  | 1901 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\underset{\text { male. }}{\text { Fe- }}$ | Total. |  | Male | $\begin{gathered} \mathrm{Fe}- \\ \text { male } \end{gathered}$ | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr.ct. |
| Under $\$ 5.00 \ldots \ldots \ldots$ | 256 | 592 | 848 |  |  | 479 75 | 692 136 | 33.54 6.59 |
| $\$ 5.00$ but under $\$ 6.00$ | 81 | 208 | 289 149 | 12.65 6.52 | 61 90 | 75 <br> 83 | 173 | 6.39 |
| 6.00 but under 7.00 | 104 | 45 | 149 | 6.52 6.13 | 231 | 83 34 | 265 | 12.84 |
| $\begin{array}{lll}7.00 & \text { but under } \\ 8.00 & 8.00 \\ \text { but under }\end{array}$ | 135 | ${ }^{5}$ | 140 | 6.13 9.50 | 87 | 8 | 95 | 4.61 |
| 8.00 but under  <br> 9.00 but under 10.00 <br> 1.00   | 304 | $\stackrel{13}{23}$ | 357 | 15.62 | 401 | 3 | 404 | 19.58 |
| 10.00 but under 12.00 | 196 | 1 | 197 | 8.62 | 189 | 21 | 210 | 10.18 |
| 12.00 but under 15.00 | 41 |  | 41 | 1.79 | 36 | 1 | ${ }_{2} 37$ | 1.79 |
| 15.00 but under 20.00 | 18 |  | 18 | . 79 | 23 |  | ${ }_{28}^{23}$ | 1.12 |
| 20.00 and over ...... | 29 |  | 29 | 1.27 | 28 |  | 28 | 1.36 |
| Total | 1,398 | 887 | 2,285 | 100.00 | 1,359 | 704 | 2,063 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No of Persons EmPLOYED. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1900. | 1901. | 1900. | 1901. | 1900. | 1901. |
| January | 50 | 41 | 2.59 | 2.39 | 97.41 | 97.61 |
| February | 50 | 34 51 | 2.59 | 1.98 | ${ }_{95} 97.17$ | ${ }_{97} 98$ |
| March | $\begin{array}{r}74 \\ 114 \\ \hline\end{array}$ | 81 | 3.83 5.90 | 5.18 | 9.4 .10 | 94.82 |
| April | 1149 | 89 119 | 7.71 | ${ }_{6} .93$ | 92.29 | 93.07 |
| May | 149 | 953 | 48.37 | 55.97 | 5.1.63 | 44.53 |
| June | 1,933 | 1,718 | 100.00 | 100.00 |  |  |
| August | 1,851 | 1,054 | 95.76 | 61.35 | 4.24 | 38.65 |
| September | 1,178 | 1,023 | 60.94 | 59.55 | 39.06 | 40.45 |
| October | 497 | 509 | 25.71 | ${ }_{90}^{29.63}$ | 74.29 87.27 | 70.37 9.37 |
| November | 246 62 | 161 48 | 12.73 3.21 | 90.63 2.79 | 87.79 96.7 | 97.21 |
| December | 62 | 48 | 3.21 | 2.79 | 96.79 | 97.21 |

3. Other Presentations.

4. Classified Weekly Earnings.

FURNITURE--74 ESTABLISHMENTS.

| Classified Weekiy Earnings. | 1900 |  |  |  | 1901 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | $\begin{gathered} \mathrm{Fe}- \\ \text { male. } \end{gathered}$ | Total. |  | Male. | $\begin{gathered} \text { Fe- } \\ \text { male. } \end{gathered}$ | Total. |  |
|  |  |  | No. | Pr.ct |  |  | No | Pr.ct. |
| Under $\$ 5.00 \ldots \ldots .$. | 899 | 261 | 1,160 | 14.18 | 899 | 332 | 1,231 | 14.67 |
| $\$ 5.00$ but under $\$ 6.00$ | 354 | 101 | 455 | 5.56 | 363 | 70 | 433 | 5.16 |
| 6.00 but under 7.00 | 1,721 | 51 | 1,772 | 21.66 | 1,530 | 21 | 1,551 | 18.48 |
| 7.00 but under 8.00 | 1,548 | 2 | 1,550 | 18.95 | 1,594 | 9 | 1,603 | 19.10 |
| 8.00 but under 9.00 | 770 | 1 | -771 | 9.42 | ${ }^{1}$ | 1 | -993 | 11.83 |
| 9.00 but under 10.00 | 951 | 1 | 952 | 11.64 | 842 | 1 | 843 | 10.05 |
| 10.00 but under 12.00 | 736 | 1 | 737 | 9.01 | 758 | 1 | 759 | 9.04 |
| 12.00 but under 15.00 | 549 | 1 | 550 | 6.72 | 697 | 1 | 698 | 8.32 |
| 15.00 but under 20.00 | 198 |  | 198 | 2.42 | 226 |  | 226 | 2.69 |
| 20.00 and over | 36 |  | 36 | 44 | 55 |  | 55 | . 66 |
| Total | 7,762 | 419 | 8,181 | 100.00 | 7,956 | 436 | 8,392 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No of Persons EmPLOEED. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1900. | 1901. | 1900. | 1901. | 1900. | 1901 |
| January | 7,146 | 7,459 | 93.46 | 93.31 | 6.54 | 6.69 |
| February | 7,342 | 7,566 | 96.02 | 94.65 | 3.98 | 5.35 |
| March | 7,576 | 7,741 | 99.08 | 96.84 | . 92 | 3.16 |
| April | 7,621 | 7,708 | 99.67 | ${ }_{96}^{96.42}$ | . 33 | 3.58 |
| June | 7,424 | 7,552 | 97.10 | 94.47 | 99 | 3.93 |
| July | 6,888 | 7.385 | 90.09 | 92.38 | 9.91 | 7.62 |
| August | 7,344 | 7,787 | 96.05 | 97.41 | 3.95 | 2.59 |
| September | 7,495 | 7,905 | 98.03 | 98.89 | 1.97 | 1.11 |
| October | 7,619 | 7.994 | 99.65 | 100.00 | . 35 |  |
| N'ovember | 7,580 | 7,994 | 99.14 | 100.00 | . 86 |  |
| December | 7,209 | 7,676 | 94.28 | 96.02 | 5.72 | 3.98 |

3. Other Presentations.

| Classification. | 190C. | 1901. | Increase or DeCrease in 1901. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | Pret. |
| Smallest No. of persons employed.. | 6,888 | 7,385 | 497 | 7.22 |
| Greatest No. of persons employed.. | 7,646 | 7,994 | 348 | 4.55 |
| Average No. of persons employed.. | 7,408 | 7,704 | 296 | 4.10 |
| Average yearly earnings ........... | \$355 61 | \$370 77 | \$15.16 | 4.26 |
| Average time in operation, days.... | 283.93 | 292.54 | 8.61 | 3.03 |
| No. of private firms | 21 | 21 |  |  |
| No. of male partners | 40 | 36 | 4 | $10 . \mathrm{CO}$ |
| No. of female partners | 6 | 1 | 5 | 83.33 |
| Total No. of partners | 46 | 37 | 9 | 19.57 |
| No. of corporations | 53 | 53 |  |  |
| No. of male stockholders | 600 | 681 | $\ldots$ - ${ }^{1}$ | 13.50 |
| No. of female stockholders | 61 |  | 30 | 49.18 |
| Total No. of stockholders ........... | 661 | 772 | 111 | 16.79 |
| Total No. of partners and stock- holders........................................$~$ | 707 | 809 | 102 | 14.43 |
| Amount of capital invested | \$7.840,244 63 | \$8.335,268 73 | + \$495.024 10 | 6.31 |
| Value of grods made or work done. | 9.009.185 85 | 9.246.101 43 | + 236.91558 | 2.63 |
| Amount paid as wages | 2,634,365 92 | 2,856,404 53 | + 222,038 61 | 8.43 |
| A.v. capital to each person employed | 1.05835 | 1.08194 | + 2359 | 2.23 |
| Av. product to each person employed | 1,216 14] | 1,200 17 | 1597 | 1.31 |

FURS-12 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classified Weekly Earnings. | 1900 |  |  |  | 1901 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | $\underset{\text { male. }}{\text { Fe- }}$ | Total. |  | Male. | $\begin{aligned} & \mathrm{Fe}- \\ & \text { male. } \end{aligned}$ | Total. |  |
|  |  |  | No | Pr.ct. |  |  | No. | Pr.ct. |
| Under $\$ 5.00 \ldots \ldots .$. | 39 | 157 | 196 | 38.43 |  |  | 247 | 40.29 11.09 |
| $\$ 5.00$ but under $\$ 6.00$ | 16 | 45 | 61 | 11.96 9.61 | 14 <br> 34 | 54 60 | 68 94 | 11.09 |
| 6.00 but under 7.00 | ${ }_{27}^{23}$ | ${ }_{30}^{26}$ | 49 | ${ }_{11}^{9.61}$ | 19 <br> 19 <br> 1 | 60 23 | 94 <br> 42 | 15.34 6.85 |
| 7.00 but under 8.00 | 27 16 | $\stackrel{30}{21}$ | $\stackrel{57}{57}$ | 11.18 7.26 | 11 | 18 | 29 | 4.73 |
| 8.00 9.00 but under under 10.00 10.00 | 16 22 | $\stackrel{1}{6}$ | - 28 | 5.49 | 19 | 6 | 25 | 4.08 |
| 10.00 but under 12.00 | 19 | 5 | 24 | 4.71 | 23 | 8 | 31 | 5.06 |
| 12.00 but under 15.00 | 34 | 1 | 35 | 6.86 | 45 | 4 | 49 | 7.99 |
| 15.00 but under 20.00 | 17 |  | 17 | 3.33 | 18 | 1 | 19 | 3.10 |
| 20.00 and over...... | 6 |  | 6 | 1.17 | 9 |  | 9 | 1.47 |
| Total | 219 | 291 | 510 | 100.00 | 227 | 386 | 613 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No of Persons Employed. |  | Percentages of-... |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1900. | 1901. | 1900. | 1901. | 1900. | 1901. |
| January | 298 | 365 | 65.21 | 60.03 | 34.79 | 39.97 |
| February | 317 | 384 | 69.37 | 63.16 | 30.63 |  |
| March | 356 | 427 | 77.90 | 70.23 | 22.10 | 29.78 29.48 |
| April | 372 | 447 | 81.40 | 73.52 | 18.60 15.75 | 26.48 25.37 |
| May | 385 872 | 454 479 | 84.25 81.40 | 74.67 78.78 | 15.75 18.60 | $\stackrel{25.37}{21.22}$ |
| June | 272 396 | 479 504 | 81.40 86.65 | 78.78 82.89 | 18.60 13.35 | 17.11 |
| August | 434 | 562 | 94.97 | 92.43 | 5.03 | 7.57 |
| September | 457 | 598 | 100.00 | 98.36 |  | 1.64 |
| October | 456 | 608 | 99.78 | 100.00 | . 22 |  |
| November | 455 | 496 | 99.56 | 81.58 | 8.44 | 18.48 |
| December | 417 | 461 | 91.25 | 75.82 | 8.75 | 24.18 |

3. Other Presentations.


## IRON-25 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classified Weekly Earnings. | 1900 |  |  |  | 1901 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Ma'e. | $\begin{gathered} \text { Fe- } \\ \text { male. } \end{gathered}$ | Total. |  | Male | $\begin{aligned} & \mathrm{Fe}- \\ & \text { male. } \end{aligned}$ | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr.ct. |
| Under $\$ 5.00 \ldots . . . . . .$. | 240 | 6 | 246 | 5.74 | 190 | 7 | 197 | 4.67 |
| $\$ 5.00$ but under $\$ 6.00$ | 110 |  | 110 | 2.57 | 115 |  | 115 | 2.73 |
| 6.00 but under 7.00 | 213 |  | 213 | 4.97 | 150 |  | 150 | 3.56 |
| 7.00 but under 8.00 | 425 |  | 425 | 9.91 | 245 |  | 245 | 5.81 |
| 8.00 but under 9.00 | 913 |  | 913 | 21.30 | 353 |  | 353 | 8.37 |
| 9.00 butu nder 10.00 | 427 |  | 427 | 9.96 | 1,272 |  | 1,272 | 30.17 |
| 10.00 but under 12.00 | 749 |  | 749 | 17.47 | 616 |  | 616 | 14.61 |
| 12.00 but under 15.00 | 542 |  | 542 | 12.64 | 564 |  | 564 | 13.28 |
| 15.00 but under 20.00 | 337 |  | 337 | 7.86 | 493 |  | 493 | 11.69 |
| 20.00 and over ...... | 325 |  | 325 | 7.58 | 211 |  | 211 | 5.01 |
| Total . . . . . . . . . | 4,281 | 6 | 4,287 | 100.00 | 4,209 | 7 | 4,216 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons Employed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1900. | 1901. | ${ }^{-1} 1500$. | 1401. | - 1900. | 1901. |
| January | 4,044 | 3,552 | 100.00 | 88.96 |  | 11.04 |
| February | 3,886 | 3,625 | 96.10 | 90.79 | 3.90 | 9.21 |
| March . | 3,802 | 3,794 | 94.02 | 90.16 | 5.98 | 9.84 |
| April | 3,629 | 3,909 | 89.73 | 97.65 | 10.27 | 2.35 |
| May | 3,160 | 3,892 | 78.14 | 97.47 | 21.86 | 2.53 |
| June | 3,066 | 3,742 | 75.82 | 93.72 | 24.18 | 6.28 |
| July | 2,180 | 3,640 | 53.91 | 91.16 | 46.09 | 8.84 |
| August | 2,145 | 3,276 | 53.04 | 82.05 | 46.96 | 17.95 |
| September | 3,067 | 3,438 | 75.84 | 86.10 | 24.16 | 13.90 |
| October | 3,378 | 3,867 | 83.53 | 96.85 | 16.47 | 3.15 |
| November | 3,444 | 3,993 | 85.16 | 100.00 | 14.84 |  |
| December | 3,633 | 3,784 | 89.83 | 94.77 | 10.17 | b. 23 |

3. Other Presentations.

| Classification. | 1900. | 1901. | Increase or DeCREASE IN 1901. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | Pret. |
| Smallest No. of persons employed | 2,145 | 3,276 | + 1,131 | 52.73 |
| Greatest No. of persons employed | 4,044 | 3,993 | - 1, 51 | 1.26 |
| Average No. of persons .employed | 3,286 | 3,709 | + 423 | 12.87 |
| Average yearly earnings | \$464 14 | \$494 17 | + $\$ 3003$ | 6.47 |
| Average time in operation .......... | 274.36 | 294.24 | + 19.88 | 7.25 |
| No. of private firms .................. | 6 | 6 |  |  |
| No. of male partners | 9 | 9 | ........... |  |
| No. of female partners |  |  |  |  |
| Total No. of partners | 19 | 9 |  |  |
| No. of corporations ...... | 19 | 19 |  |  |
| No. of male stockholders | 146 | 139 | - 7 | 4.79 |
| No. of female stockholders Total No. of stockholders | ${ }_{161} 15$ |  | + 7 | 46.67 |
| Total No. of partners and stockholders | 170 | 170 |  |  |
| Amount of capital invested | \$4.406,889.73 | \$6.707.241 57 | + \$2.300.351 84 | 54.47 |
| Value of goods made or work done | 8.630,831 48 | 10,283.592 30 | + 1,652.760 82 | 19.15 |
| Amount paid as wages ............ | 1,525,151 981 | 1,832.888 45 | + E07,726 47 | 20.18 |
| Av. capital to each person employed | 1.34111 | 1, ${ }_{1}, 80888$ | + $\quad 4672 \mathrm{hi}$ | 34.84 |
| Av. product to each person employed | 2,626 55 | 2,772 61 | + 146061 | 5.56 |

## KNIT GOODS-18 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classified Weekly Earnings. | 1900 |  |  |  | 1901 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Fe-male. | Total. |  | Male | $\begin{aligned} & \mathrm{Fe}- \\ & \text { male. } \end{aligned}$ | Total. |  |
|  |  |  | No. | Pr. ct. |  |  | No. | Pr.ct. |
| Under $\$ 5.00$ | 173 | 1,752 | 1,925 | 54.58 | 113 | 1,672 | 1,785 | 53.91 |
| $\$ 5.00$ but under $\$ 6.00$ | 38 | 471 | 509 | 14.43 | 57 | 380 | 437 | 13.20 |
| 6.00 but under 7.00 | 51 | 343 | 394 | 11.17 | 70 | 285 | 355 | 10.72 |
| 7.00 but under 8.00 | 71 | 172 | 243 | 6.89 | 54 | 157 | 211 | 6.37 |
| 8.00 but under 9.00 | 74 | 78 | 152 | 4.31 | 35 | 83 | 118 | 3.57 |
| 9.00 but under 10.00 | 64 | 63 | 127 | 3.60 | 76 | 65 | 141 | 4.26 |
| 10.00 but under 12.00 | 46 | 42 | 88 | 2.50 | 52 | 41 | 93 | 2.81 |
| 12.00 but under 15.00 | 39 | 4 | 43 | 1.22 | 65 | 9. | 74 | 2.23 |
| 15.00 but under 20.00 | 26 | 3 | 29 | . 82 | 40 | 3 | 43 | 1.30 |
| 20.00 and over $\ldots$... | 17 |  | 17 | . 48 | 54 |  | 54 | 1.63 |
| Total .......... | 599 | 2,928 | 3,527 | 100.00 | 616 | 2,695 | 3,311 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No of Persons Employed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employmeut. |  | Unemployment. |  |
|  | 1900. | 1901. | 1900. | 1901. | 1900. | 1901. |
| January | 2,932 | 2,968 | 84.30 | 93.39 | 15.70 | 6.61 |
| February | 3,020 | 3,026 | 86.83 | 95.22 | 13.17 | 4.78 |
| March | 3,223 | 3,140 | ${ }_{9}^{92.67}$ | 98.80 | 7.33 | 1.20 |
| April | 3,247 | 3,170 3126 | ${ }_{94}^{93.36}$ | 99.75 98.36 | 6.64 5.49 |  |
| May | 3,287 3,354 | 3,126 3,175 | 94.51 96.44 | 98.36 99.91 | 5.49 3.56 | 1.64 .09 |
| July | 3,419 | 3,165 | 98.30 | 99.59 | 1.70 | . 41 |
| August | 3,478 | 3,157 | 100.00 | 99.34 |  | . 66 |
| September | 3,293 | 3,178 | ${ }_{9}^{97.56}$ | 100.00 | 2.44 |  |
| October | 3,369 | 3,158 | 9687 | 99.37 | 3.13 | . 63 |
| November | 3,127 | 3,128 | ¢9.91 | 98.43 | 10.09 | 1.57 |
| December | 2,990 | 3,094 | 85.97 | 97.36 | 14.03 | 2.64 |

3. Other Presentations.


## LEATHER-18 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classified Weekly <br> . Earnings. | 1900 |  |  |  | 1901 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\underset{\mathrm{Fe}}{\mathrm{Fe}}$. | Total. |  | Male. | $\underset{\text { male. }}{\mathrm{FG}-}$ | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No | Pr.ct. |
| Under \$5.00 ......... | 160 | 7 | 167 | 4.39 | 137 | 182 | 319 | 8.48 |
| \$5.00 but under $\$ 6.00$ | 89 | 2 | 91 | 2.99 | 95 | 85 | 180 | 4.80 |
| 6.00 but under 7.000 | 215 | $\stackrel{2}{1}$ | 218 | 5.73 | 134 | 4 | 138 | 3.63 |
| $\begin{array}{lll}7.00 & \text { but under } \\ 8.00 & \text { but under } & 8.00 \\ 9.00\end{array}$ | 425 1,037 | 1 | 426 1.037 | 11.22 | 371 | 1 | 372 | 9.91 |
| 9.00 but under 10.00 | 1,782 | 4 | 1,037 | ${ }_{20}^{27.24}$ | - 594 | 2 | 596 | 15.88 |
| 10.00 but under 12.00 | 564 |  | 564 | 14.82 | 1,059 |  | 1,059 | 28.21 |
| 12.00 but under 15.00 | 405 |  | 405 | 10.63 | 269 |  | 769 | 18.89 |
| 15.00 but under 20.00 | 106 |  | 106 | 2.78 | 103 |  | 103 | 7.74 |
| 20.00 and over | 6 |  | 6 | . 16 | 9 |  | 9 | $\begin{array}{r}\text { 2.74 } \\ \hline .24\end{array}$ |
| Total | 3,790 | 16 | 3,806 | 100.00 | 3,480 | 274 | 3,754 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons EmPLOYED. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1900. | 1901. | 1400. | 1901. | 1900. | 1901. |
| January | 3,631 | 3,455 | 99.15 | 93.99 | . 85 | 6.01 |
| February | 3,662 | 3,461 | 100.00 | 94.15 |  | 5.85 |
| March | 3,640 | 3,532 | 99.40 | 96.08 | . 60 | 3.92 |
| April | 3,451 3,372 | 3,525 3,607 | 99.24 | 95.87 | 5.76 | 4.13 |
| June | 3,372 3,403 | 3,607 3,577 | 92.08 | ${ }_{97.31}^{98.12}$ | 7.92 | 1.88 |
| July | 3,385 | 3,574 | 92.44 | ${ }_{97.23}$ | 7.56 | 2.69 |
| August | 3,400 | 3,595 | 92.85 | 97.80 | 7.15 | 2.20 |
| September | 3,349 | 3,558 | 91.45 | 96.79 | 8.55 | 3.21 |
| October | 3,407 | 3,618 | 93.04 | 98.42 | 6.96 | 1.58 |
| November | 3,486 | 3,676 | 95.19 | 100.00 | 4.81 | 1.58 |
| December | 3,420 | 3,570 | 93.39 | 97.12 | 6.61 | 2.88 |

3. Other Presentations.

| Classification. | 1900. | 1901. | Increase or DeCREASE IN 1901. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | Pret. |
| Smallest No. of persons employed.. | 3,349 | $\cdot 3,455$ | 106 | 3.17 |
| Greatest No. of persons employed.. Average No. of persons employed.. | 3,662 3,467 | ${ }_{3,567}^{3,56}+$ | $\begin{array}{r}14 \\ \hline 9\end{array}$ | 3. 38 |
|  | 3,467 | 3,562 + | 95 | 2.74 |
| Average yearly earnings | \$403 11 | \$430 $76+$ | \$27 65 | 6.86 |
| Average time in operation | 305.33 | 304.06 - | 1.27 | 6.86 |
| No. of private firms ... | 6 |  |  |  |
| No. of male partners | 10 | 10 |  |  |
| No. of female partners | 1 | 1 |  |  |
| Total No. of partners | 11 | 11 |  |  |
| No. of corporations ..... | 12 | 12 |  |  |
| No. of male stockholders ........... | 5.510 | 6210 | 700 | 12.70 |
| No. of female stockholders ........ | 1,533 | ${ }_{8}^{1.886}$ + | 353 | 23.03 |
| Total No. of partners and stock-1 | 7,043 | 8,096 + | 1,053 | 14.95 |
| holders . ........... | 7,054 | 8,107 | 1,053 | 14.93 |
| mount of capital invested | \$9.389. 69112 | \$9.051.276 351 | \$328.414 77 | $3.6 n$ |
| Valve of gnods made or work donel | 12.155 .097591 | 13.769 9 F6 821+ | ¢14 99994 | 4.67 |
| Amount naid as wages .............. ${ }^{\text {I }}$ | 1,397.593 341 | 1,534.366 181+ | 136,779 84 | 9.78 |
| Av. canital to each nerson emploved | 2.708301 | 2,541 771- | 167221 | 6.18 |
| Av. product to each person employed | 3,794 35\| | 3,865 79\|+ | 7144 | 1.88 |

LUMBER-98 ESTABLISHMENTS.

1. Classified Weekly Earnings.

\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline \multirow{3}{*}{Classified Weekly Earnings.} \& \multicolumn{4}{|c|}{1900} \& \multicolumn{4}{|c|}{1901} <br>
\hline \& \multirow[t]{2}{*}{Male.} \& \multirow[b]{2}{*}{Female.} \& \multicolumn{2}{|r|}{Total.} \& \multirow[t]{2}{*}{Male} \& \multirow[b]{2}{*}{Female.} \& \multicolumn{2}{|l|}{Totai.} <br>
\hline \& \& \& No. \& Pr.ct. \& \& \& No. \& Pr.ct. <br>
\hline Under $\$ 5.00 \ldots \ldots . .$. \& ${ }^{2131}$ \& ${ }_{2}$ \& ${ }_{1}^{219}$ \& 1.34 \& 256
160 \& 1 \& 257
162 \& 1.61
1.02 <br>
\hline $\$ 5.00$ but under $\$ 6.00$ \& 141 \& $\stackrel{2}{2}$ \& 143 \& ${ }^{1.87}$ \& 160 \& $\stackrel{1}{2}$ \& 162 \& 1.02 <br>
\hline 6.00 but under 7.00 \& 634 \& 2 \& 636
960 \& 5.91 \& ${ }_{977}$ \& 2 \& 977 \& <br>
\hline 7.00 but under 8.00 \& $\begin{array}{r}960 \\ \hline\end{array}$ \& \& 960
1,569 \& 5.91
9.65 \& 977
2,100 \& 1 \& 2,1018 \& r 13.17 <br>
\hline 8.00
9.00
but under

9.00
10.00 \& 1,567
5,822 \& 2 \& 1,569
5,822 \& $\begin{array}{r}9.65 \\ 35.81 \\ \hline\end{array}$ \& 2,100
4,963 \& 1 \& 4,963 \& 31.12 <br>
\hline 9.00
10.00
but under
buder
12.00 \& 1,822
3,790 \& \& $\stackrel{5}{3,790}$ \& ${ }_{23.31}$ \& 4,124 \& \& 4,124 \& 25.86 <br>
\hline 12.00 but under 15.00 \& 1,922 \& 1 \& 1,923 \& 11.83 \& 1,749 \& \& 1,749 \& 10.96 <br>
\hline 15.00 but under 20.00 \& 788 \& \& 788 \& 4.85 \& 724 \& \& 724 \& 4.54 <br>
\hline \$20.00 and over ...... \& 409 \& \& 409 \& 2.52 \& 369 \& \& 369 \& 2.31 <br>
\hline Total \& 16,246 \& 13 \& 16,259 \& 100.00 \& 15,943 \& 6 \& 15,949 \& 100.00 <br>
\hline
\end{tabular}

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No of Persons Employed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 190.3 | 1901. | 1900. | 1901. | 1900. | 1901. |
| January | 9,686 | 9,334 | 70.50 | 67.40 | 29.50 | 32.60 |
| February | 10,693 | 9,654 | 73.46 | 69.90 70 | 26.54 | ${ }_{29}^{30.10}$ |
| March | 9,646 | 9,699 12,003 | 70.15 84.78 | 70.02 86.66 | 29.85 15.22 | 29.98 13.34 |
| April | $\begin{array}{r}11,648 \\ 13 \\ \hline 1\end{array}$ | 12,003 13,851 | 84.78 99.07 | 86.66 100.00 | 15.22 | 13.34 |
| May | 13,601 13,739 | 13,851 | 99.07 100.00 | 198.73 | . 93 | 1.27 |
| July | 13,421 | 13,134 | 97.69 | 94.82 | 2.31 | 5.18 |
| August | 13,668 | 12,581 | 99.48 | 90.81 | . 52 | 9.19 |
| September | 13,471 | 11,835 | 98.06 | 85.45 | 1.94 | 14.55 |
| October | 13,166 | 11,821 | 95.83 | 85.34 | 4.17 | 14.66 |
| November | 12,063 | 11,118 | 87.80 64.90 | 80.17 63.00 | ${ }^{12.20}$ | 19.8 37.00 |
| December | 8,916 | 8,726 | 64.90 | 63.00 | 35.10 | 37.00 |

3. Other Presentations.

| Classification. | 1900. | 1901. | Increase or DeCREASE IN 1901. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | Pret. |
| Smallest No. of persons employed.. | 8,916 | 8,726 | 190 | 2.13 82 |
| Greatest No. of persons employed.. | 13,759 11,926 | 13,851 11,453 | 473 | 3.87 |
| Average No. of persons employed.. | 11,926 | 11,43 |  |  |
| Average yearly earnings | \$467 76 | \$464 79 | \$2 97 | . 63 |
| Average time in operation, days . . | 233 | 233 |  |  |
| No. of private firms | 38 | 38 |  |  |
| No. of male partners ................ | 59 |  | $\pm \begin{aligned} & + \\ & +\quad 1\end{aligned}$ | 6.78 33.33 |
| No. of female partners | $\stackrel{3}{6}$ |  | + $+\quad 3$ | 33.33 4.84 |
| Total No. of partners | ${ }_{60}^{62}$ |  |  | 4.84 |
| No. of corporations ${ }^{\text {No. of }}$ male stockholders ............. | 1,521 | 1,514 | 7 | . 46 |
| No. of female stockholders............ | 48 |  | $+\quad 3$ | 6.25 |
| Total No. of stockholders .......... | 1,569 | 1,565 | 4 | . 25 |
| Total No. of partners and stock- holders | 1,631 | 1,630 | 1 | . 06 |
| Amount of capital invested | \$32.909,554 01 | \$28,658,572 44 | - \$4,250,981 57 | 12.92 |
| Value of goods made or work done | 28,145.985 97 | 27,135,703 84 | - 1,010,282 13 | 3.58 |
| Amount paid as wages ............. | 5,578,456 07 | 5,323.282\% 82 | - 255,173 25 | 4.57 |
| Av. capital to each person employed | ${ }_{2} 2.75948$ | 2,50228 | $1+\quad 25720$ | 9.32 |
| Av. product to each person employed | 2,360 00 | $2 \quad 1931$ | - 19.31 | . 80 |

## MACHIN'ERY-107 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| $\underset{\text { Elarnings. }}{\text { Clified Weekly }}$ | 1900 |  |  |  | 1901 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\begin{gathered} \text { Fe- } \\ \text { male. } \end{gathered}$ | Total. |  | Male. | $\underset{\text { male- }}{\mathrm{Fe}-}$ | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr.ct. |
| Under $\$ 5.00$ | 572 | 1 | 573 | 6.27 . | 533 | 1 | 534 | 5.51 |
| $\$ 5.00$ but under $\$ 6.00$ | 128 | 1 | 129 | 1.41 | 147 | 1 | 148 | 1.53 |
| 6.00 but under 7.00 | 412 | 2 | 414 | 4.53 | 370 | 1 | 371 | 3.83 |
| 7.00 but under 8.00 | 694 | 1 | ${ }^{695}$ | 7.61 | 491 | 1 | 492 | 5.08 |
| 8.00 but under 9.00 | 1,186 | 2 | 1,188 | 13.00 | 1,177 | 1 | 1,178 | 12.16 |
| 9.00 but under 10.00 | 1,466 | 3 | 1,469 | 16.07 | 1,777 | 3 | 1,780 | 18.38 |
| 10.00 but under 12.00 | 1,099 | 3 | 1,102 | 12.06 | 1,219 | 3 | 1,222 | 12.61 |
| 12.00 but under 15.00 | 1,613 |  | 1,613 | 17.65 | 1,701 | 2 | 1,703 | 17.58 |
| 15.00 but under 20.00 | 1,613 |  | 1,613 | 17.65 | 1,864 |  | 1,864 | 19.24 |
| 20.00 and over ........ | 343 |  | 343 | 3.75 | 395 |  | 395 | 4.08 |
| Total | 9,126 | 13 | 9,139 | 100.00 | 9,674 | 13 | 9,687 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons Em. PLOYED. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1900. | 1901. | 1900. | 101. | 1900. | 1901. |
| January | 7,951 | 8,003 | 97.30 | 88.62 | 2.70 | 11.38 |
| February | 7,966 | 8,194 | 97.48 | 90.73 | 2.52 | 9.27 |
| March . | 8,057 | 8,333 8,348 | 98.69 98.59 | 92.27 92.44 | 1.41 | 7.73 |
| May | 8,011 | 8,389 | 98.03 | 92.89 | 1.97 | 7.11 |
| June | 8,172 | 8,199 | 100.00 | 90.79 |  | 9.21 |
| July ... | 8,113 | 8,488 | 99.28 | 93.99 | . 72 | 6.01 |
| August | 8,136 | 8,895 | 99.56 | 98.49 | . 44 | 1.51 |
| September | 8,118 | 8,918 | 99.34 | 98.75 | . 66 | 1.25 |
| October | 7,994 | 8,921 | 97.82 | 98.78 | 2.18 | 1.22 |
| November | 8,051 | 9,031 | 98.52 | 100.00 | 1.48 |  |
| December | 8,106 | 8,926 | 99.19 | 98.84 | . 81 | 1.16 |

3. Other Presentations.

| Classificat | 1900. | 1901. | Increase or DeCREASE IN 1901. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | Pret. |
| Smallest No. of persons employed.. | 7,951 | 8,003 | 52 | 65 |
| Greatest No. of persons employed.. | 8,172 | 9,031 |  | 10.51 |
| Average No. of persons employed.. | 8,061 | 8,554 | + 493 | 6.12 |
| Average vearly earnings | \$515 39 | \$560 99 | + $\$ 4560$ | 8.85 |
| Average time in operation, day | 297 | 299 | + 2 | . 67 |
| No. of private firms | 54 | 51 | - 3 | 5.56 |
| No. of male partners | 80 | 75 | $\square \quad 5$ | 6.25 |
| No. of female partners | 5 | 6 | + | 20.00 |
| Total No. of partners | 85 |  | $\cdots$ | 4.71 |
| No. of corporations | 53 | 05 | 3 | 5.66 |
| No. of male stockholders | 416 | 4y9 | 83 | 19.95 |
| No. of female stockholders | 45 | 56 | 11 | ${ }_{2} 24.44$ |
| Total No. of stockholders | 461 | 555 |  | 20.39 |
| Total No. of partners and stockholders | 546 | 636 | 90 | 16.48 |
| Amount of capital invested.. | \$14,376,566 39 | \$15,692,383 97 | + \$1,315,817.58 | 9.15 |
| Value of goods made or work done | 16,508,303 44 | 18,206,285 88 | 1,697,982 44 | 10.29 |
| Amount paid as wages | 4,154,533 26 | 4,798,701 68 | 644,168 42 | 15.51 |
| Av. capital to each person employed | 1,783 47 | 1,834 51 | 51.04 | 2.86 |
| Av. product to each person employed | 2,047 92 | 2,128 39 | 80.47 | 3.93 |

## MALT-7 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classtried Weekly Earnings. | 1900 |  |  |  | 1901 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\underset{\text { male- }}{\text { Fe- }}$ | Total. |  | Male. | $\underset{\text { male. }}{\text { Fe- }}$ | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr. ct- |
| Under $\$ 5.00 \ldots \ldots .$. |  |  | 4 | 1.31 |  |  |  |  |
| $\$ 5.00$ but under $\$ 6.00$ | 4 |  | 4 | 1.31 |  |  | 1 | 1 |
| 6.00 but under 7.00 | 2 |  | 4 | .65 1.30 |  |  |  | 1.25 |
| $\begin{array}{lll}7.00 & \text { but under } & 8.00 \\ 8.00 & \text { but under } \\ 9.00\end{array}$ | ${ }_{10}^{4}$ |  | ${ }_{10}^{4}$ | 1.30 $3: 27$ | 4 | …… | 4 | 1.88 |
| 9.00 but under 10.000 | 54 |  | 54 | 17.65 | 34 |  | 34 | 10.66 |
| 10.00 but under 12.00 | 32 |  | 32 | 10.46 | 86 |  | 86 | 26.96 |
| 12.00 but under 15.00 | 176 |  | 176 | 57.52 | 171 |  | 171 | 53.61 |
| 15.00 but under 20.00 | 12 |  | 12 | 3.92 | 16 |  | 16 | 5.02 |
| 20.00 and over | 8 |  | 8 | 2.61 | 1 |  | 1 | . 31 |
| Total ........... | 306 |  | 306 | 100.00 | 319 |  | 319 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons EmPLOYED. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1900. | 1901. | 1900. | 1901. | 1900. | 1901. |
| January | 304 | 313 | 100.00 | 99.37 |  | . 63 |
| February | ${ }_{289}^{304}$ | 302 | 100.00 95.07 | ${ }_{92}^{95.87}$ | $\stackrel{7}{4} .93$ | 4.13 7.94 |
| March | 192 | 255 | ${ }_{63.16}^{95.07}$ | 92.06 80.95 | 46.83 36.84 | 19.05 |
| May | 191 | 245 | 62.83 | 77.77 | 37.17 | 22.23 |
| June | 183 | 226 | 60.20 | 71.75 | 39.80 | 28.25 |
| July | 156 | 188 | 51.32 | 59.68 | 48.68 | 40.32 |
| A.ngust | 154 | 170 | 50.66 | 53.97 | 49.34 | 46.03 |
| September | 192 | 247 | 63.16 | 78.41 | 36.84 | 21.59 |
| October | 283 | 284 | 93.09 | 90.16 | 6.91 | 9.84 |
| November | 303 | 293 | 99.67 | 93.02 | . 33 | 6.98 |
| December | 303 | 315 | 99.67 | 100.00 | . 33 |  |

3. Other Presentations.

| Classification. | 1900. | 1901. |  | Increase or DeCREASE IN 1901. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Amount. | Pret. |
| Smallest No. of persons employed.. | 154 | 170 |  | 16 | 10.39 |
| Greatest No. of persons employed.. | 304 | 315 |  | 11 | 3.62 |
| Average No. of persons employed.. | 238 | 261 |  | 23 | 9.66 |
| Average yearly earnings | \$557 97 | \$549 18 |  | \$8.79 | 1.68 |
| Average time in operation, days.... | 318.00 | 311.14 |  | 6.86 | 2.15 |
| No. of private firms |  | 2 |  |  |  |
| No. of male partners | 3 | 3 |  |  |  |
| No. of female partners |  |  |  |  |  |
| Total No. of partners No. of corporations . | 3 | 3 |  |  |  |
| No. of male stockholders | 1,224 | 1,024 |  | 200 | 16.34 |
| N'o. of female stockholders | 205 | 205 |  |  |  |
| Total No. of stockholders.. | 1,429 | 1,229 |  | 200 | 14.00 |
| Total No. of partners and stockholders | 1,432 | 1,232 |  | 200 | 13.97 |
| Amount of capital invested | \$2,623,513 35 | \$2,900,850 74 |  | \$277,327 39 | 10.57 |
| Value of goods made or work done | 2,913,696 66 | 3,146,856 33 |  | 233,159 67 | 8.00 |
| Amount paid as wages | 132.79643 | 143,337 11 |  | 10,540 68 | 7.94 |
| Av. capital to each person emploved | 11,023 16 | 11,114 371 |  | 9121 | . 83 |
| Av. product to each person.employed\| | 12,242 42\| | 12,056 92 |  | 18550 | 1.52 |

PAINT-7 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classified WeeklyEarnings. | 1900 |  |  |  | 1901 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Female. | Total. |  | Male. | $\mathrm{Fe}-$ male. | Total. |  |
|  |  |  | No. | Perct. |  |  | No. | Perct. |
| Under $\$ 5.00$ but under $\$ 6.000$ | 4 | 1. | 5 | 5.10 | ${ }_{3}^{2}$ |  | ${ }_{2}^{2}$ | 1.74 |
| 6.00 but under 7.00 | 1 |  | 1 | 5.10 1.02 | 4 |  | 3 4 4 | 2.61 |
| 7.00 but under 8.00 | 23 |  | 23 | 23.47 | 12 |  | 12 | 10.43 |
| 8.00 but under 9.00 | 7 |  | 7 | 7.14 | 13 |  | 13 | 11.30 |
| 9.00 but under 10.00 | 21 |  | 21 | 21.43 | 30 |  | 30 | 26.09 |
| 10.00 but under 12.00 | 19 |  | 19 | 19.59 | 24 |  | 24 | 20.87 |
| 12.00 but under 15.00 | 13 |  | 13 | 13.27 | 19 |  | 19 | 16.52 |
| 15.00 but under 20.00 | 4 |  | 4 | 4.08 | 6 |  | 6 | 5.22 |
| 20.00 and over ...... |  |  |  |  | 2 |  | 2 | 1.74 |
| Total .. | 97 | 1. | 98 | 100.00 | 115 | ... | 115 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No of Persons EmPLOYED. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment |  |
|  | 1900. | 1301. | 1900. | 1901. | 1900. | 1901. |
| January | 80 | 73 | 87.91 |  | 12.09 | 26.26 |
| February | 82 72 | 68 72 | 90.11 79.12 | 68.69 | 9.89 208 | 31.31 |
| April | 74 | ${ }_{91}^{72}$ | 79.12 81.32 | 72.73 91.92 | 20.88 18.68 | 27.27 |
| May | 90 | 93 | 81.90 | ${ }_{93} 9.94$ | 18.68 | 8.08 6.06 |
| June | 76 | 99 | 83.52 | 100.00 | 16.48 | 6.06 |
| July | 68 | 85 | - 74.73 | 85.86 | 25.27 | 14.14 |
| August | 66 | 84 | 72.53 | 84.85 | 27.47 | 15.15 |
| September | 66 | 88 | 72.53 | 88.89 | 27.47 | 11.11 |
| October | 67 91 | 86 | 73.63 | 86.87 | 26.37 | 13.13 |
| November | 91 83 | 88 | 100.00 | 88.89 |  | 11.11 |
| December | 83 | 86 | 91.21 | 86.87 | 8.79 | 13.13 |

3. Other Presentations.


## PAPER AND CIGAR BOXES--11 ESTABLISHMENTS.

1. Classified Weekly Earnings.

\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline \multirow{3}{*}{Classified Weekly
EARNings.} \& \multicolumn{4}{|c|}{1900} \& \multicolumn{4}{|c|}{1901} <br>
\hline \& \multirow{2}{*}{Male.} \& \multirow[b]{2}{*}{Fe male.} \& \multicolumn{2}{|l|}{Total.} \& \multirow[t]{2}{*}{Male.} \& \multirow{2}{*}{$\mathrm{Fe}-$ male.} \& \multicolumn{2}{|l|}{Total.} <br>
\hline \& \& \& No. \& Perct. \& \& \& No. \& Perct. <br>
\hline Under \$5.00 $\ldots 5 . \ldots \ldots .0$ \& \& \& $\begin{array}{r}357 \\ 74 \\ \hline\end{array}$ \& 51.97
10.77 \& 81
24 \& 334
77 \& 415 \& 55.56
13.52 <br>
\hline $\$ 5.00$
600
but under

under \& 23

19 \& \begin{tabular}{l}
51 <br>
74 <br>
\hline

 \& 

74 <br>
93 <br>
\hline
\end{tabular} \& 13.77 \& 20 \& 73 \& 193 \& 12.45 <br>

\hline $\begin{array}{ll}6.00 & \text { but under } \\ 7.00 & 7.00 \\ \text { but under } & 8.00\end{array}$ \& 19 \& ${ }^{74}$ \& 48 \& 13.52
6.99 \& 17 \& 27 \& 44 \& 5.89 <br>
\hline 8.00 but under 9.00 \& 13 \& 2 \& 15 \& 2.19 \& 11 \& ....... \& 11 \& 1.47 <br>
\hline 9.00 but under 10.00 \& 22 \& 4 \& 26 \& 3.79 \& 25 \& \& ${ }_{2}^{25}$ \& 3.34 <br>
\hline 10.00 but under 12.00 \& 21 \& 1 \& ${ }_{36}^{22}$ \& 3.20 \& 22 \& ...... \& $\stackrel{22}{21}$ \& ${ }_{2}^{2.81}$ <br>
\hline 12.00 but under 15.00 \& 36 \& ....... \& 36
13 \& 5.24
1.89 \& 11 \& \& 11 \& 1.47 <br>
\hline 15.00 but under 20.00
20.00 and over $\ldots \ldots$. \& 13
3 \& \& 13
3 \& $\begin{array}{r}5.89 \\ \hline 4\end{array}$ \& 4 \& \& 1 \& 1. 54 <br>
\hline Total ........... \& 235 \& 452 \& 687 \& 100.00 \& 236 \& 511 \& 747 \& 100.00 <br>
\hline
\end{tabular}

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons EmpLOYED. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1900. | 1901. | 1900. | 1901 | 1900. | 1901. |
| January | 616 | 538 | 92.63 | 71.73 82.80 | 7.39 6.47 | 28.27 17.20 |
| February | 622 | 621 | 93.53 93.98 | 82.80 | 6.47 | 17.20 |
| March | 625 | 662 | 93.98 | 66.27 92.93 | 4.36 | 7.07 |
| April | 636 | 697 | 95.64 94.94 | 92.93 | 4.06 | 3.60 |
| May | 638 | 723 | 94.94 94.60 | 96.40 96.93 | 4.06 5.40 | 3.07 |
| June | 629 | 727 | 94.63 | 96.00 | 6.17 | 4.00 |
| July | 624 | 720 | 93.83 93.68 | 96.67 | 6.32 | 3.33 |
| August. | 623 | 725 730 | 93.68 93.08 | 96.67 97.33 | 6.32 | 2.67 |
| September | 619 | 730 | 93.08 | 97.73 | 4.21 | 2.27 |
| October | 637 | 733 | 98.79 | 100.00 | 1.81 |  |
| November | 653 | 700 | 100.00 | 100.00 | 1.81 | 120 |
| December | 665 | 741 | 100.00 | 98.80 | , | 120 |

3. Other Presentations.

| Classification. | 1900. | 1501. |  | Increase or DeCREASE IN 1901. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Amourt. | Pret. |
| Smallest No. of persons employed.. | $\begin{aligned} & 616 \\ & 665 \\ & 632 \end{aligned}$ | 538750697 |  |  | 12.66 12.78 |
| Greatest No. of persons employed.. |  |  |  | ${ }_{65} 6$ |  |
| Average No. of persons employed.. |  |  |  |  |  |
| Average yearly earnings | $\$ 246$288.18 | $\$ 21039$296.82 |  | \$35 88 | 14.98 |
| Average time in operation, days.... |  |  | + |  | 3.00 |
| No. of private firms | 16 | $1{ }_{3}^{9}$ |  |  |  |
| No. of male partners |  |  |  | ${ }_{2}^{3}$ | 200.00 |
| No. of female partners | 17 |  |  | 1 | 5.88 |
| Total No. of partners | 1729 |  |  |  | 5.88 |
| No. of corporations . |  |  |  | 3 | 33.33 |
| No. of male stockholders femat.... | 9 |  |  |  | 50.00 |
| No. of female stockholders............ <br> Total No. of stockholders | 11 |  |  | 2 | 18.18 |
| Total No. of partners and \&' ck holders | 28 |  |  | 3 | 10.71 |
| Amount of capital invested | \$677,518 41 | \$645,679 19 |  | \$31,839 22 | 4.70 |
| Value of goods made or work done | $\begin{array}{r} 935,695 \\ \hline 14 \\ 15,643 \end{array}$ | 826,620 97- |  | 109.074 | ${ }^{11.66}$ |
| Amount paid as wages ............. |  | $\begin{gathered} 146,64075 \\ 926 \\ 37 \end{gathered}$ |  | 9,003 14565 | 5.78 13.59 |
| Av. capital to each person employed | 1,480 53 | 1,185 97- |  | 14565 294 | 13.90 |
| Av. product to each person employed |  |  |  | 2945 | $1{ }^{\text {a }}$ |

## PAPER AND PULP-31 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classified WeeklyEarnings. | 1900 |  |  |  | 1901 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | $\underset{\text { male }}{\text { Fe- }}$ | Total. |  | Male | Fe- | Total. |  |
|  |  |  | No. | Perct. |  |  | No. | Perct. |
| Under $\$ 5.00 \ldots \ldots . .$. | 100 | 662 | 762 | 17.05 | 93 | 709 | 802 | 16.13 |
| $\$ 5.00$ but under $\$ 6.00$ | 115 | 70 | 185 | 4.15 | 83 | 66 | 149 | 3.00 |
| $\begin{array}{lll}6.00 & \text { but under } & 7.00 \\ 7.00 & \text { but under } & 8.00\end{array}$ | 230 | 59 17 | 289 468 | 6.47 10.47 | 311 443 | 90 | 401 | 8.07 |
| 8.00 but under 9.00 | 899 | 17 | 468 899 | 10.47 20.12 | 843 | 19 18 | 462 899 | 9.29 18.07 |
| 9.00 but under 10.00 | 1,116 | 1 | 1,117 | 25.00 | 1,215 | 42 | 1,257 | $\stackrel{1}{20.29}$ |
| 10.00 but under 12.00 | 311 |  | 311 | 6.96 | 391 | 10 | 401 | 8.07 |
| 12.00 but under 15.00 | 168 |  | 168 | 3.76 | 223 |  | 223 | 4.49 |
| 15.00 but under 20.00 | 232 |  | 232 | 5.19 | 333 | 10 | 343 | 6.90 |
| 20.00 and over | 37 |  | 37 | . 83 | 34 |  | 34 | . 69 |
| Total | 3,659 | 809 | 4,468 | 100.00 | 4,007 | 964 | 4,971 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons EmPLOYED. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment |  | Unemployment. |  |
|  | 1900. | 1901 | 1900. | 1901. | 1900. | . 1901. |
| January ................. | 3,604 ${ }^{\text {a }}$ 4,571 |  | 87.11 \| 100.00 |  | 12.89 | ........ |
| February | 3,644 | 4,541 | 88.08 | ${ }^{19 .} 94$ | 11.92 | $\ldots . . .96$ |
| March | 3,836 4,107 | 4,500 4,566 | 99.72 | 98.45 9989 | 7.28 | 1.55 |
| May . | 3,982 | 4, 4,447 | ${ }_{93.81}^{99.27}$ | 99.89 97.07 | .73 6.19 | 2. 11 |
| June | 3,836 | 4,332 | 92.72 | 94.75 | 7.28 | 5.25 |
| July | 3,805 | 4,447 | 91.97 | 97.07 | 8.03 | ${ }_{2}^{2.93}$ |
| August | 3,998 | 4,450 | 96.40 | 97.13 | 3.60 | 2.87 |
| September | 3,900 | 4,396 | 94.27 | 96.17 | 5.73 | 3.83 |
| October | 3,805 |  | 91.97 | 97.68 | 8.03 | 2.32 |
| November | 4,116 4,137 | 4,477 4,408 | 99.49 100.00 | 97.70 | . 51 | 2.30 |
| December | 4,137 | 4,408 | 100.00 | 96.43 |  | 3.57 |

3. Other Presentations.

| Classification. | 1900. | 1901. | Increase or DeCREASE IN 1901. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | Pret. |
| Smallest No. of persons employed.. | 3,604 | 4,332 | 728 | 20.20 |
| Greatest No. of persons employed.. | 4,137 | 4,571 | 434 | 10.49 |
| Average No. of persons employed.. | 3,888 | 4,468 |  | 14.92 |
| Average yearly earnings | $\$ 37942$ | \$431 33 | \$51 91 | 13.68 |
| Average time in operation ........... | 293.32 | 300.42 | 7.10 | 2.42 |
| No. of private firms | 5 | 5 |  |  |
| No. of male partners ................. | 11 | 11 |  |  |
| N'o. of female partners |  |  |  |  |
| Total No. of partners | 11 | 11 |  |  |
| No. of corporations | 26 | 26 |  |  |
| No. of male stockholders | 1,280 | -1,296 |  | 1.25 |
| Total No. of stockholders ........... | ${ }_{1,826}^{546}$ | 1,847 |  | 92 |
| Total No. of partners and stock- |  |  | 21 | 15 |
| holders | 1,837 | 1,858 | 21 | 1.14 |
| Amount of capital invested | \$11,949,831 62 |  |  |  |
| Value of goods made or work done | $10.090,34424$ | 12.699.395 $07 \mid$ | 2,609,050 83 | ${ }_{25}{ }^{12.86}$ |
| Amount paid as wages. | 1,475,193 46 | 1,927,165 49 |  | 30.64 |
| Av. capital to each person employed | 3,073 52 | 3,013 43\| | - 6009 | 1.96 |
| Av. product to each person employed | 2,595 25 | 2,842 30\| | + 24705 | 9.52 |

## SADDLERY-6 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classtfied Weekly Earnings. | 1960 |  |  |  | 1901 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female. | Total. |  | Male. | Fe male. | Total. |  |
|  |  |  | No. | Per ct |  |  | No. | Perct. |
| Under $\$ 5.00$ | 36 | 92 | 128 | 40.13 | 34 | 63 18 | 97 <br> 35 <br> 1 | 30.03 10.84 |
| \$5.00 but under $\$ 6.00$ | 10 | 24 | 34 | 10.66 | 17 | 18 8 8 | 18 | 10.84 5.57 |
| 6.00 but under 7.00 | 9 | $\stackrel{2}{2}$ | 11 | 3.45 5.95 | 10 | 8 <br> 3 | 19 | 5.88 |
| 7.00 but under 8.00 | 17 | $\stackrel{2}{7}$ | 23 | 3.95 7.21 | 19 | $\stackrel{3}{2}$ | 21 | 6.50 |
| 88.00 but under ${ }^{9.00}$ | 16 | 7 | 14 | 4.38 | 22 | 3 | 25 | 7.74 |
| 10.00 but under 12.00 | 35 |  | 35 | 10.97 | 41 |  | 41 | 12.69 |
| 12.00 but under $\$ 15.00$ | 33 |  | 33 | 10.35 | 28 |  | 28 | 8.66 |
| 15.00 but under 20.60 | 17 |  | 17 | 5.33 | 14 |  | 25 14 | 7.74 <br> 4.35 |
| 20.00 and over ...... | 5 |  | 5 | 1.57 | 14 |  | 14 | 4.35 |
| Total | 192 | 127 | 319 | 100.00 | 226 | 97 | 323 | 100.00 |

2. N'umber of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons Employed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1900. | 1901. | 1900. | 1901. | 1900. | 1901. |
| January | ${ }_{211}$ | 220 | 71.05 | 71.17 | 28.95 | $28.83$ |
| March | 246 | 249 | 82.82 | 80.58 | 17.18 | 19.42 |
| April | 254 | 227 | 85.32 | 73.47 | 14.68 | 26.53 |
| May | 267 | 226 | 89.89 | 72.81 | 10.11 | 27.19 |
| June | 252 | 225 | 84.84 | 72.49 | 15.16 | 27.51 |
| July | 233 | 218 | 78.45 | 70.55 | 21.55 | 29.45 |
| August | 220 | 304 | 74.07 | 98.38 | 2.93 | 1.62 |
| September | 192 | 302 | 64.64 | ${ }_{99.73}^{97.73}$ | 35.36 25.93 | 2.27 |
| October | 220 | 306 309 | 74.07 85.32 | 99.03 100.00 | 25.93 14.68 | . 9 |
| November | 297 | 294 | 100.00 | 95.15 |  | 4.85 |

3. Other Presentations.

| Classification. | 1900. | 1901. | Increase or DeCrease in 1901. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | Pret. |
| Simallest No. of persons employed.. | 192 | 218 | 26 | 13.54 |
| Greatest No. of persons employed.. | 297 |  |  | 4.04 |
| Average No. of persons employed.. | $2 ¢ 9$ | 260 | - 21 | 8.79 |
| Average yearly earnings. | \$365 85 | \$333 89 | \$31 96 | 8.74 |
| Average time in operation, days .... | 302 |  |  | 20.53 |
| No. of private firms |  |  |  |  |
| No. of male partners | 6 | 6 |  |  |
| No. of female partners . . . . . . . . . . . | 1 | 1 |  |  |
| 'Total No. of partners No. of corporations | 4 | 4 |  |  |
| No. of corporations <br> No. of male stockholders | 15 |  |  |  |
| No. of female stockholders | 2 |  | 1 | 50.00 |
| Total No. of stockholders | 17 |  | + 1 | 5.88 |
| Total No. of partners and stockholders | 24 |  | 1 | 4.17 |
| Amount of capital invested | \$179.800 361 | \$233.971 37 | + $\quad \$ 54,17101$ | 30.13 |
| Value of goods made or work done. | 466.83859 | 502,775 95 | $+\quad 35,93736$ | 7.70 |
| Amount paid as wages ............... | 87,438 791 | 86,813 65 | - 62514 | 19.71 |
| Av. capital to each person employed | 75230 | 89989 | $+\quad 14759$ | 19.62 |
| Av. product to each person employed | 1.95330 | 1,923 75\| | 1955 | 1.00 |

## SASH, DOORS AND BLINDS-55 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classified Weekly Earnings. | 1900 |  |  |  | 1901 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\begin{gathered} \mathrm{Fe}- \\ \text { male. } \end{gathered}$ | Total. |  | Male. | Female. | Тотal. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr ct. |
| Under $\$ 5.00 \ldots \ldots . . .0$ | 437 | ${ }^{6}$ | 443 | 13.82 | 429 | 7. | 436 | 12.45 |
| 6.00 but under ${ }^{(1000}$ | $\stackrel{113}{263}$ | 1 | 114 | 3.55 8.33 | ${ }_{248}$ |  | 172 | 4.91 |
| 7.00 but under 8.00 | 459 | 1 | 459 | 8.33 14.32 | 445 | 1 | 251 | 12.73 |
| 8.00 but under 9.60 | 500 |  | 500 | 15.59 | 600 |  | 600 | 17.13 |
| 9.00 but under 10.00 | 492 | . | 492 | 15.35 | 537 |  | 537 | 15.34 |
| 10.00 but under 12.00 | 341 |  | 341 | 10.64 | 406 |  | 406 | 11.59 |
| 1200 but under 15.00 | 443 |  | 443 | 13.82 | 499 |  | 499 | 14.25 |
| 15.00 but under 20.00 | 137 |  | 137 | 4.27 | 147 |  | 147 | 4.20 |
| 20.00 and over ....... | 10 |  | 10 | . 31 | 8 |  | 8 | . 23 |
| Total .... ...... | 3,198 | 8 | 3,206 | 100.00 | - 3,491 | 11 | 3,502 | 100.00 |

2. N'umber of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons Employed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1900. | 1901. | 1900. | 1901. | 1900. | 1901. |
| January | 2,089 | 2,633 | 74.82 | 83.85 | 25.18 | 16.15 |
| March | 2,460 | 2,752 | 88.11 | 87.64 | 11.89 | 12.36 |
| March | 2,579 | 2.831 | 92.37 | 90.16 | 7.63 | 9.84 |
| April | 2,711 | 2,978 | 97.10 | 94.84 | 2.90 | 5.16 |
| May | ${ }_{2}^{2,696}$ | 3 ,022 | ${ }^{96.56}$ |  | 3.44 | 3.76 |
| June | 2,652 | 3,056 | 94.99 | 97.32 | 5.01 | 2.68 |
| July . | 2,549 | 3,140 | 91.30 | 100.60 | 8.70 |  |
| August ... | $\stackrel{2,515}{2,58}$ | 3,119 | 90.08 |  |  | . 67 |
| September | $\stackrel{2}{2,658}$ | 3,040 | 95.20 | 96.82 | 4.80 | 3.18 |
| November | 2.792 | 3 3,062 | 900.00 100 | 97.36 97.52 | 4.94 | 2.64 2.48 |
| December | 2,756 | 2,997 | 98.71 | 95.45 | 1.29 | 4.55 |

3. Other Presentations.

| Classification. | 1900. | 1901. | Increase or DeCREASE IN 1901. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | Pret. |
| Smallest No. of persons employed.. | 2,089 | 2,633 | 544 | 26.04 |
| Greatest No. of persons employed.. | 2,792 | 3,140 | 348 | 12.46 |
| Average No. of persons employed.. | 2,593 | 2,974 | 381 | 14.69 |
| Average yearly earnings | \$377 99 | \$387 84 | \$9.85 | 2.61 |
| Average time in operation, days. | 272 | 285 |  | 4.78 |
| No. of private firms | 26 | 27 | 1 | 3.85 |
| No. of male partners | 44 | 45 | 1 | ${ }_{2.27}$ |
| No. of female partners |  |  |  |  |
| No. of corporations . | 44 | 45 | + 1 | 2.27 |
| No. of male stockholders | 152 |  | - $\quad 1$ | 3.45 |
| No. of female stockholders | 13 | 13 |  | 1.32 |
| Total No. of stockholders. | 165 | 163 | . 2 | 1.21 |
| Total No. of partners and stock- |  |  |  |  |
|  |  | 208 | 1 | . 48 |
| Amount of capital invested | \$3,277,059 44 | \$3,941,628 OS | \$664,568 64 |  |
| Value of goods made or work done. | - 5,068,839 02 | 5,875,235 45 | 8 866 39643 |  |
| Amount paid as wages . $\ldots$. $\ldots$. $\ldots$. . | 980,120 94 | 1,153,426 73 | 173,305 79 | 17.68 |
| Av. capital to each person employed | 1,263 81 | 1,325 36 | 61.55 | 4.87 |
| Av. product to each person employed | 1,954 82 | 1,975 54 | 2072 | 1.06 |

## SHEET METAL-21 ESTABLISHMENTS.

1. Classified Weekly Earnings.


2. Number of Persons Employed, Range of Employment-By Months.

| Months. ${ }^{*}$ | Total No. of Persons Employed. |  | Percentages of - |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1900. | 1901. | 1900. | 1901. | 1900. | 1901. |
| January | 1,812 | 2,699 | 87.45 | 79.33 84.69 | 12.55 9.85 | 20.67 15.31 |
| February | 1,868 1,864 | 2,241 2,368 | 90.15 90.00 | 84.69 89.45 | $\begin{array}{r}9.85 \\ 10.00 \\ \hline\end{array}$ | 10.55 |
| March | 1,864 1,798 | 2,404 | 86.77 | 90.85 | 13.23 | 9.15 |
| April . | 1,717 | 2,418 | 82.87 | 91.38 | 17.13 | 8.62 |
| June . | 1,527 | 2,423 | 73.70 | 91.57 | 26.30 | 8.43 |
| July | 1,903 | ${ }_{2}^{2,553}$ | 91.36 | 96.49 | 8.64 | 3.51 |
| August | 1,989 | 2,639 | 96.00 | 99.74 100 | ${ }^{4.00}$ | . 26 |
| September | 2,011 | 2,646 | ${ }^{97.06}$ | 100.00 99 | 2.94 |  |
| October | 2,072 | $\stackrel{2,634}{2}$ | 100.00 84.75 | 99.55 98.60 |  | 1.40 |
| November | 1,756 1,795 | 2,609 2,434 | 84.75 86.63 | 98.69 91.99 | 13.27 | 8.01 |
| December | 1,795 | 2,434 | 86.63 | 91.99 | 13.07 | 8.01 |

3. Other Presentations.

| Classification. | 1900. | 1901. | Increase or Decrease in 1901. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | Prct. |
| Smallest No. of persons employed.. | 1,527 | 2,699 | 574 | . 46 |
| Greatest No. of persons employed.: Average No. of persons employed.. | 1,843 | $\stackrel{2,456}{2,46}$ |  | 33.26 |
| Average yearly earnings | \$305. 17 | \$305 14 | \$0.03 | . 11 |
| Average time in operation, days | 303.33 | 302.81 |  | . 17 |
| No. of private firms | 16 29 | 16 28 |  | 3.45 |
| No. of male partners.. |  |  | 1 | 3.45 |
| No. of female partners | 29 |  |  | 45 |
| No. of corporations. | ${ }_{17}^{5}$ | ${ }_{17}^{5}$ |  |  |
|  | 3 |  |  |  |
| No. of female stockholders | 20 | 20 |  |  |
| Total No. of partners and stock holders | 49 | 48 | 1 | 2.04 |
| Amount of capital invested | 32,710.765 65 |  | 99.81027 | 9.95 |
| Value of goods made or work done. | 3,558.643 665 | 4,081,174 051- | 1. 1823.5309 | 83. |
| Amount paid as wages | 562,429 95 | 749,418 1236 | 186, 258 | 17.49 |
| Av. capital to each person emploved | 1,659 60 | 1,661 72 | 2.12 | . 13 |

## SHIP BUILDING-7 ESTABLISHMENTS.

1. Classified Weekly Earnings.

\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline \multirow{3}{*}{Classtfied Weekly Earnings.} \& \multicolumn{4}{|c|}{1900} \& \multicolumn{4}{|c|}{1901} <br>
\hline \& \multirow[t]{2}{*}{Male.} \& \multirow{2}{*}{Fe-} \& \multicolumn{2}{|r|}{Total.} \& \multirow{2}{*}{Male.} \& \multirow[b]{2}{*}{$\underset{\text { male- }}{\text { Fe- }}$} \& \multicolumn{2}{|r|}{Total.} <br>
\hline \& \& \& No. \& Pr.ct. \& \& \& No. \& Pr.ct. <br>
\hline Under $\$ 5.00 \ldots \ldots . .$. \& 4 \& \& 4 \& . 29 \& 4 \& \& 4 \& . 26 <br>
\hline \$5.00 but under $\$ 6.00$ \& 3 \& 3 \& 6 \& . 43 \& 10 \& \& 11 \& . 71 <br>
\hline 6.00
7.00
but under

7.00 \& 13 \& \& 13 \& . 93 \& 18 \& \& 18 \& 1.17 <br>
\hline $\begin{array}{lll}7.00 & \text { but under } & 8.00 \\ 8.00 & \text { but under } & 9.00\end{array}$ \& 50 \& \& 50 \& 3.58
11.03 \& 119 \& 2 \& 121
44 \& 7. 84 <br>
\hline 9.00 but under 10.00 \& 276 \& \& ${ }_{276}$ \& 19.77 \& 44
366 \& \& - 346 \& 3. ${ }^{\text {a }}$ - 72 <br>
\hline 10.00 but under 12.00 \& 248 \& \& 248 \& 17.77 \& 298 \& \& 298 \& 19.31 <br>
\hline 12.00 but under 15.00 \& 283 \& \& 283 \& 20.27 \& 298 \& $\ddot{2}$ \& 300 \& 19.44 <br>
\hline 15.00 but under 20.00 \& 306 \& \& 306 \& 21.92 \& 326 \& \& 326 \& 21.13 <br>
\hline 20.00 and over ....... \& 56 \& \& 56 \& 4.01 \& 55 \& \& 55 \& 3.57 <br>
\hline Total .... ..... \& 1,393 \& 3 \& 1,396 \& 100.00 \& 1,538 \& 5 \& 1,543 \& 100.00 <br>
\hline
\end{tabular}

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons Employed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1900. | 1901. | 1900. | 1901. | 1900. | 1901. |
| January | 854 | 966 | 67.99 | 68.71 |  | 31.29 |
| February | 899 1,193 | 1,104 | 73.96 | 78.52 | 26.04 | 21.48 |
| April | 1,193 | 1,340 1,406 | 94.98 99.76 | 95.31 100.00 | 5.02 .24 | 4.64 |
| May | 1,256 | 1,289 | 100.00 | 191.68 | . 24 | 8.32 |
| June | 1,048 | 1,205 | 83.44 | 85.70 | 16.56 | 14.30 |
| July | -783 | - 970 | 62.34 | 68.99 | 37.66 | ${ }_{31} 14.01$ |
| August | 591 | 711 | 47.05 | 50.57 | 52.95 | 49.43 |
| September | 710 | 829 | 56.53 | 58.96 | 43.47 | 41.04 |
| October .. | 630 | 757 | 50.16 | 53.84 | 49.84 | 46.16 |
| November | 627 | 711 | 49.92 | 50.57 | 50.08 | 49.43 |
| December | 678 | 692 | 53.98 | 49.22 | 46.02 | 50.78 |

3. Other Presentations.

|  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Classification. |

## SOAP-7 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classified Weekly Earnings. | 1900 |  |  |  | 1901 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | $\begin{gathered} \text { Fe- } \\ \text { male. } \end{gathered}$ | Total. |  | Male | $\begin{gathered} \text { Fe- } \\ \text { male. } \end{gathered}$ | Total. |  |
|  |  |  | No. | Pr.ct |  |  | No. | Pr.ct. |
| Under $\$ 5.00 \ldots \ldots \ldots$ | 4 | 42 | 49 | 30.06 <br> 21.47 | 7 5 | 43 30 | ${ }_{35}^{50}$ | 30.67 21.47 |
|  | 4 |  | $\begin{array}{r}75 \\ \hline\end{array}$ | ${ }_{4.30}$ | 8 |  | 8 | 4.91 |
| $\begin{array}{lll}6.00 \\ 7.00 & \text { but under } \\ \\ \text { buder }\end{array}$ | 11 |  | 11 | 6.75 | 9 |  | 9 | 5.52 |
| 8.00 but under 9.00 | 21 |  | 21 | 12.88 | 22 |  | 22 | 13.50 |
| ${ }_{9.00}$ but under 10.00 | 17 |  | 17 | 10.43 | 14 |  | 14 | 8.59 |
| 10.00 but under 12.00 | 10 |  | 10 | 6.14 | 10 | ........ | 1 | 6.14 7.36 |
| 12.00 but under 15.00 | 9 |  | 9 | 5.52 | 12 |  | 12 | 1.23 |
| 15.00 but under 20.00 | 3 1 |  | 1 | 1.84 .61 | 2 |  | 1 | . 61 |
| 20.00 and over ....... | 1 |  |  |  |  |  |  |  |
| Total | 90 | 73 | 163 | 100.00 | 90 | 73 | 163 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons EmPLOYED. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1900. | 1901. | 1900. | 1901. | 1900. | 1901. |
| January | 161 | 158 | 98.77 | 98.14 100 | 1.23 1.84 | 1.86 |
| February | 160 162 | 161 | 98.16 99.89 | 100.00 98.76 | 1.84 | 1.24 |
| March | 162 | 169 | 99.09 100.00 | 100.00 |  |  |
| April | 163 | 159 | 98.16 | 98.76 | 1.84 | 1.24 |
| June . | 158 | 157 | 96.93 | 97.52 | 3.07 | 2.48 |
| July | 152 | 150 | 93.25 | 93.17 | 6.75 | 6.83 |
| August | 149 | 151 | 91.41 | 93.79 | 8.59 | 6.21 |
| September | 149 | 152 | ${ }_{84} 91.41$ | ${ }_{90}^{94.41}$ | 8.59 15.34 | 9.59 |
| October | 138 | 145 | 84.66 84.66 | 888.20 | 15.34 | 11.80 |
| November | 138 132 | 142 | 84.66 80.98 | 88.47 | 19.02 | 15.53 |
| December | 132 | 136 | 80.98 | 84.47 |  |  |

3. Other Presentations.


STAVES-12 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classtfied WeeklyEarnings. | 1900 |  |  |  | 1901 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\underset{\text { male. }}{\text { Fe- }}$ | Total. |  | Male. | Female. | Total. |  |
|  |  |  | No. | Pr.ct |  |  | No. | Pr.ct. |
| Under $\$ 5.00 \ldots \ldots \ldots$ | 32 |  | 32 | 9.50 | 27 |  | 27 | 7.07 |
| 6.00 but under $\$ 7.00$ | 27 |  | ${ }_{27}$ | 3.56 | 5 |  | 5 | 1.31 |
| 7.00 but under ${ }^{8.00}$ | 66 |  | 66 | ${ }_{19} 19.58$ | 49 |  | 49 | 12.83 |
| 8.00 but under 9.00 | 66 |  | 66 | 19.58 | 61 |  | 61 | 17.97 |
| 9.00 but under 10.00 | 50 |  | 50 | 14.84 | 114 |  | 114 | ${ }_{29} 17.84$ |
| 10.00 but under 12.00 | 36 |  | 36 | 10.68 | 33 |  | 33 | 8.64 |
| 12.00 but under 15.00 | 19 |  | 19 | 5.64 | 10 |  | 10 | 2.61 |
| 15.00 but under 20.00 20.00 and over | 24 |  | 24 | 7.12 | 17 |  | 17 | 4.45 |
| 2.00 and over ....... | 5 |  | 5 | 1.49 |  |  |  |  |
| Total .... ..... | 337 |  | 337 | 100.00 | 382 | . | 382 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons EmPLOYED. |  | Percentages of - |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1900. | 1901. | 1900. | 1901. | 1900. | 1901. |
| January | 224 | 279 | 70.00 | 78.59 | 30.00 | 21.41 |
| February | 240 | 291 | 75.00 | 81.97 | 25.00 | 18.03 |
| April . | 293 | 345 | 90.94 91.56 | ${ }_{97}^{95.77}$ | 9.06 | 4.23 |
| May | 203 | 345 | 94.38 | 107.46 | 8.44 5.62 | 2.54 |
| June | 320 |  | 100.00 | 98.31 | 5.62 |  |
| July . | 295 | ?02 | 92.19 | ${ }_{85}^{98.07}$ | 7.81 | 1.49 14.93 |
| August | 265 | 292 | 82.81 | 82.25 | 17.19 | 14.93 17.75 |
| September | 299 | 266 | 71.56 | 74.93 | 28.44 | 25.07 |
| October ${ }^{\text {November }}$ | 219 | 255 | 64.44 | 71.83 | 35.56 | 28.17 |
| December | 226 236 | 253 | 70.63 | 71.27 | 2.9.27 | 28.73 |
| December | 236 | 243 | 76.75 | 68.45 | 23.25 | 31.55 |

3. Other Presentations.

| Classification. | 1900. | 1901. | Increase or DeCREASE IN 1901. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | Pret. |
| Smallest No. of persons emploved.. | 219 |  | 24 | 10.96 |
| Greatest No. of persons emploved. Average | 320 | $355+$ | 35 | 10.94 |
| Average No. of persons employed.. |  | $296+$ |  | 12.98 |
| Average roarlv earnings | \$221 26 | \$221 $63+$ | \$0.37 | . 11 |
| Average time in operation, da | 221.33 | 225.67 + | 4.34 | 1.96 |
| No. of private firms | 7 | $8+$ |  |  |
| No. of male partners | 13 | $15+$ | $\stackrel{1}{2}$ | 14.29 15.38 |
| No. of female partners | 12 | 15 |  |  |
| $N$ No. of cornorations | 5 | 4 | 1 | 15.38 20.00 |
| No. of male stockholiers ............ | 18 | 15 - | 1 | 16.67 |
| No. of female stockholders ............ | 1. |  |  |  |
| Total No. of stockholders ............ | 19 | 16 | 3 | 15.79 |
| Total No. of partners and stock-1 | 10 | 16 | 3 | 15.79 |
| holders ............ .................. | 32 | 31 | 1 | 3.19 |
| Amount of capital invested ......... | \$183,802 651 | \$201.796 681+ | \$17.994 03 |  |
| Value of goods made or work done. | 300.319531 | $323.92704+$ | \$5.607 51 | 11.86 |
| Amount paid as wages | 86,79n 181 | 98,769 121+ | 11,371 94 | 12.10 |
| A.v. capital to each person emnloyed | $7{ }^{715154}$ | $681751-$ | 119791 | 2.82 |
| Av. product to each person employed | 1,146 26 | 1,134 89\|- | $1137 \mid$ | 2. . |

## STONE-15 ESTABLISHMENTS.

## 1. Classified Weekly Earnings.

| Classified Weekly Earnings. | 1900 |  |  |  | 1901 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | $\underset{\text { male }}{\mathrm{Fe}}$ | Totals. |  | Male | $\begin{aligned} & \text { Fe- } \\ & \text { male. } \end{aligned}$ | Total. |  |
|  |  |  | No. | Pr. ct. |  |  | No. | Pr. ct. |
| Under $\$ 5.00 \ldots \ldots \ldots .0$ |  |  | 4 | 1.89 .84 | 3 |  | 5 3 | 1.01 |
| $\$ 5.00$ but under $\$ 6.00$ | 4 |  | 4 | . 84 | 5 |  | 5 | 1.01 |
| 6.00 but under 7.00 | 49 |  | 59 | 12.37 | 58 |  | 58 | 11.74 |
| 8.00 but under ${ }^{8.00}$ but ${ }^{\text {a }}$ | 43 |  | 43 | 9.01 | 44 |  | 44. | 8.91 |
| 9.00 but under 10.00 | 43 |  | 43 | 9.01 | 36 | ..... | 36 | ${ }_{13} 7.29$ |
| 10.00 but under 12.00 | 51 |  | 51 | 10.69 | 65 |  | 103 | ${ }_{20} 13.85$ |
| 12.00 but under 15.00 | 102 |  | 102 | 21.39 | 103 |  | 103 | 14.37 |
| 15.00 but under 20.00 | 101 |  | 101 | 21.17 12.79 | 104 |  | 104 | 21.05 |
| 20.00 and over ....... | 61 |  | 61 | 12.79 | 104 |  | 104 |  |
| Total .... ..... | 477 |  | 477 | 100.00 | 494 |  | 494 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Montis. | Total N ) of Persons Employed. |  | Percentages of - |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment |  |
|  | 1900. | 1:01. | 1900. | 1901. | 1900. | 1901. |
| January | ${ }_{173}^{212}$ | ${ }_{233}^{256}$ | 48.62 39.68 | 57.14 52.23 | 51.38 60.32 | 42.86 47.77 |
| February | $\stackrel{173}{230}$ | 289 | 52.75 | 64.51 | 47.25 | 35.49 |
| April . | 368 | 405 | 84.40 | 90.40 | 15.60 | 9.60 |
| May | 388 | 420 | 88.99 | 93.75 | 11.01 | 6.25 |
| June | 408 | 432 | 93.58 | 96.43 | 6.42 | 3.91 |
| July . | 426 433 | 426 | 100.00 99.31 | 95.09 100.00 | . 69 | 4.91 |
| August... | 433 | 448 | 99.31 95.87 | 100.00 92.86 | 4.13 | 7.14 |
| September | 418 | 416 | 79.13 | 88.57 | 20.87 | 19.43 |
| October . <br> November | 348 282 | 330 | 64.68 | 73.66 | 35.32 | 26.34 |
| December | 210 | 257 | 58.94 | 57.37 | 41.06 | 42.63 |

3. Other Presentations.


## TOYS-6 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classtfied Weekly Earnings. | 1900 |  |  |  | 1901 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\underset{\text { male. }}{\text { Fe- }}$ | Total. |  | Male | $\begin{gathered} \text { Fe- } \\ \text { male. } \end{gathered}$ | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr. ct. |
|  | 166 | 26 | 192 | 30.29 | 131 | 44 | 175 | 27.34 |
| ${ }_{600} 00$ but under 7.00 | 184 | 1 | 48 184 | ${ }^{7} 7.57$ | 53 | 7 | 60 | 9.38 |
| 7.00 but under 8.00 | 189 |  | 184 69 | 29.02 | $1{ }^{126}$ | ........ | 126 | 21.25 |
| 8.00 but under 900 | 61 |  | 61 | 10.88 9.62 | 93 |  | 93 | 14.53 |
| 9.00 but under 10.00 | 25 |  | 25 | 9.62 3.94 | 60 46 | ........ | 69 | 9.38 |
| 10.00 but under 12.00 | 24 |  | 24 | 3.79 | 23 | ....... | ${ }_{23}^{46}$ | 7.19 |
| 12.00 but under 15.00 | 17 |  | 17 | 2.68 | 29 |  | 29 | 3.59 |
| 15.00 but under 20.00 | 11 |  | 11 | 1.74 | 11 |  | 11 | 1.72 |
| 20.00 and over ....... | 3 |  | 3 | . 47 | 7 |  | 7 | 1.09 |
| Total | 607 | 27. | 634 | 100.00 | 589 | 51 | 640 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons EmPLOYED. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1900. | 1901. | 1900. | 1901. | 190). | 1901. |
| January | 590 595 | 524 | 98.83 | 82.00 | 1.17 | 1860 |
| March . | 595 597 | 515 | 99.66 100.00 | 80.29 | 1.17 | 19.41 |
| April . | 542 | 531 | 100.00 90.79 | 83.10 78.87 |  | 16.90 |
| May | 533 | 522 | 99.78 8 | 78.87 81.69 | ${ }^{9} 1.21$ | 21.13 |
| June | 530 | 526 | 88.73 | 81.69 82.32 | 10.72 11.22 | 17.31 |
| Augy ${ }^{\text {a }}$ | 527 | 575 | 88.27 | 89.98 | 11.73 | 10.02 |
| September | 546 | 593 | 91.46 | 92.80 | 8.54 | 7.20 |
| October ... | 566 | 601 | 94.81 | 94.05 | 5.19 | 5.95 |
| November | 574 | 639 | ${ }_{96}^{94.30}$ | 97.50 | 5.70 | 2.50 |
| December | 544 | 600 | ${ }_{91.12}^{96.15}$ | 100.0 93.90 | 3.85 8.88 | 6.10 |

3. Other Presentations.

| Classtfication. | $1 ¢ 00$. | 1901. | Increase or DeCREASE IN 1901. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | Pret. |
| Smallest No. of persons employed. | 527 |  |  |  |
| Greatest No. of persons employed.. | 597 597 559 | 504 639 | 23 42 | 4.36 7.04 |
| Average N'o. of persons employed.. |  | 563 | 42 $-\quad 4$ | 7.04 .72 |
| Average yearly earnings |  |  |  |  |
| Average time in operation, days | \$279.50 | $\$ 29091$ 278.50 | $\$ 346$ 100 | 1.20 .86 |
| No. of private firms | 3 |  |  |  |
| No. of male partners | 5 |  | $\cdots$ |  |
| No. of female partners |  | ${ }_{2}^{6}+$ |  | 20.00 |
| No. of corporations . | 5 | $8{ }_{3}+$ |  | 60.00 |
| No. of male stockhoiders | 3 7 |  |  |  |
| No. of female stockholders | 7 |  | 1 |  |
| Total No. of stockholders ............ | 10 | ${ }_{9}^{2}$ | 1 | 33.33 |
| Total No. of partners and stockholders $\qquad$ | 15 | 17 - | 1 | 10.00 13.33 |
| Amount of capital invested | \$573,561 78 |  |  |  |
| Value of goods made or werik done. | \$542,824 57 | \$683,242 001+ | \$59,680 22 | 10.41 |
| Amount paid as wages ............... | 160.68645 | 163,782 $461+$ | $17,6 ¢ 7$ 3,096 | 3.25 1.93 |
| Av. capital to each person emploved | 1,006 05 | 1,194 76 | 3,096 98.71 | ${ }_{9.62}^{1.93}$ |
| Av. product to each person employed\| | 97106 | 1,995 541+ | 24481 | $\stackrel{9}{2.52}$ |

TRUNKS-9 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| $\underset{\text { Elarifing Weekly }}{\text { Clas. }}$ | 1900 |  |  |  | 1901 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Fe male. | Total. |  | Male. | $\begin{gathered} \text { Fe- } \\ \text { male. } \end{gathered}$ | Total. |  |
|  |  |  | No. | Pr.ct. |  |  | No. | Pr. ct. |
| Under \$5.00 $\ldots \ldots \ldots \ldots$ | 178 | 150 | 328 94 | 35.61 | 151 53 | 131 36 | 282 89 | 31.30 9.88 |
| $\$ 5.00$ but under $\$ 6.00$ | 54 | 40 16 | 94 72 | 10.21 7.82 | 64 | $\stackrel{31}{21}$ | 85 | 9.43 |
| $\begin{array}{lll}6.00 & \text { but under } \\ 7.00 \\ \text { but under } & 8.00 \\ 8.00\end{array}$ | 56 95 | 16 | 95 | 10.32 | $\stackrel{64}{96}$ | 21 | 96 | 10.65 |
| $\begin{array}{lll}7.00 & \text { but under } \\ 8.00 & 8.00 \\ \text { but under } \\ 9.00\end{array}$ | $\stackrel{95}{97}$ |  | 98 | 10.64 | 81 | i | 82 | 19.10 |
| 9.00 but under 10.00 | 75 | 1 | 76 | 8.25 | 84 | 1 | 85 | 9.43 |
| 10.00 but under 12.00 | 81 |  | 81 | 8.79 | 95 | ....... | 95 | 10.54 |
| 12.00 but under 15.00 | 50 |  | 50 | 5.43 | 60 | $\ldots$ | 60 25 | 6.66 2.78 |
| 15.00 but under 20.00 | 23 4 |  | 23 4 | 2.50 .43 | 25 2 |  | 2 | 2.23 |
| 20.00 and over ....... |  |  |  |  |  |  |  |  |
| Total ...... . | 713 | 208 | 921 | 100.00 | 711 | 190 | 901 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons EmPLOYED. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Emyloyment. |  | Unemployment. |  |
|  | 1900. | 1901. | 1900. | 1901. | 1900. | 1901. |
| January | 802 | 819 834 | 91.55 94.52 | 94.90 96.64 | 8.45 5.48 | 5.10 3.36 |
| February | 889 | 8883 | ${ }_{98} 9.06$ | 100.00 | 1.94 |  |
| March | 859 858 8 | 863 862 8 | ${ }_{97.95}^{98.06}$ | 99.88 | 2.05 | . 12 |
| April | 858 | 862 859 | ${ }_{98.63}$ | 99.54 | 1.37 | . 46 |
| May | 864 869 | 8848 | 99.20 | 98.26 | . 8.80 | 1.74 |
| June . | 869 862 | 8888 | 98.40 | 96.99 | 1.60 | 3.01 |
| July ${ }^{\text {August }}$ | 863 | 845 | 98.52 | 97.91 | 1.48 | 2.09 |
| September | 876 | 827 | 100.00 | 95.83 |  | 4.17 2.32 |
| October | 851 | 843 826 | 97.15 95.21 | ${ }_{95.71}^{97.88}$ | 4.79 | 4.29 |
| N'ovember | 834 813 | 8803 | 99.81 | ${ }_{93.05}^{95.7}$ | 7.19 | 6.95 |

3. Other Presentations.

| Classification. |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |

VENEER-9 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classified WeeklyEarnings. | 1900 |  |  |  | 1901 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\begin{gathered} \text { Fe- } \\ \text { male. } \end{gathered}$ | Total. |  | Male | $\begin{gathered} \mathrm{Fe}- \\ \text { male. } \end{gathered}$ | Total. |  |
|  |  |  | No. | Pr. ct. |  |  | No. | Pr.ct. |
| Under $\$ 5.00 \ldots \ldots .$. | 78 |  | 78 | 11.05 | 71 |  | 71 | 9.18 |
| $\$ 5.00$ but under $\$ 6.00$ | 28 |  | 28 | 3.97 | 32 |  | 32 | 4.13 |
| ${ }_{7}^{6.00}$ but under 7.00 | 77 |  | 77 | 10.91 | 95 |  | 95 | 12.30 |
| 7.00 but under 8.00 | 159 |  | 159 | 22.52 | 104 |  | 104 | 13.46 |
| 8.00 but under 9.00 | 86 |  | 86 | 12.18 | 136 |  | 136 | 17.70 |
| ${ }^{9.00}$ but under 10.00 | 151 |  | 151 | 21.39 | 183 |  | 183 | 23.69 |
| 10.00 but under 12.00 | 69 37 |  | 69 | 9.77 | 90 | , | 90 | 11.66 |
| 15.00 but under 20.00 | 21 |  | $\stackrel{37}{ }$ | 5.24 2.97 | 39 |  | 39 | 5.04 |
| 20.00 and over ...... |  |  | 21 | 2.97 | 22 |  | 22 | 2.84 |
| Total | 706 |  | 706 | 100.00 | 772 |  | 772 | 100.00 |

2. Number of Persons Employed, Range of Employment-By Months.

| Months. | Total No. of Persons Employed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1900. | 1901. | 1903. | 1901. | 1900. | 1901. |
| January | 488 | 556 | 85.16 |  | 14.84 | 14.98 |
| February | 526 | 567 | 91.80 | 80.70 | 8.20 | 19.30 |
| April .. | 516 | 567 654 | 90.05 93.72 | 80.70 100.00 80 | 9.95 6.28 | 19.30 |
| May | 548 | 639 | 9.64 | 107.70 | 6.28 4.36 | 12.30 |
| June | 573 | 652 | 100.00 | 99.69 | ..... | . 31 |
| July . | 527 | 613 | 91.97 | 93.73 | 8.03 | 6.27 |
| August... | 556 | 643 | 97.03 | 98.32 | 2.97 | 1.68 |
| September | 531 | 624 | 92.67 | 95.41 | 7.33 | 4.59 |
| October | 493 | 564 | 86.04 | 86.23 | 13.96 | 13.77 |
| December | 518 | 487 | 76.61 90.40 | 73.09 89.76 | 13.39 9.60 | 26.91 10.24 |

3. Other Presentations.

| Classification. |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |

## WAGONS-55 ESTABLISHMENTS.

1. Classified Weekly Narnings.

| Classtfied Weekly Earnings. | 1900 |  |  |  | 1901 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | $\underset{\text { male. }}{\text { Fe- }}$ | Total. |  | Male. | $\begin{gathered} \text { Fe- } \\ \text { male } \end{gathered}$ | Total. |  |
|  |  |  | No. | Pr. ct. |  |  | No. | Pr.ct. |
| Under $\$ 5.00$ | 142 | 21 | 163 | 5.29 | 128 | 14 | 142 | 4.35 |
| $\$ 5.00$ but under $\$ 6.00$ | 88 | 3 | 91 | 2.95 | 102 | 12 | 114 | 3.45 |
| 6.00 but under 7.00 | 208 | 4 | 212 | 6.88 | 191 | 8 | 198 | 6.60 |
| 7.00 but under 8.60 | 444 | 12 | 456 | 14.80 | 414 | 8 | 422 | 12.79 |
| 8.00 but under 9.00 | 344 |  | 344 | 11.16 | 403 | 4 | 407 598 | 12.34 |
| 9.00 but under 10.00 | 549 | 3 | 552 | 17.92 | 596 | 2 | 598 | 18.13 |
| 10.00 but under 12.00 | 444 |  | 444 | 14.41 | 466 |  | 466 | 14.13 |
| 12.00 but under 15.00 | 519 |  | 519 | 16.85 | 612 |  | 612 | 18.5 8.03 |
| 15.00 but under 20.00 | 245 |  | 245 | 7.96 | 265 |  | 265 |  |
| 20.00 and over ...... | 55 |  | 55 | 1.73 | 74 |  | 74 | 2.24 |
| Total | 3,038 | 43 | 3,081 | 100.00 | 3,251 | 47 | 3,298 | 100.00 |

2. Number of Persons Employed, Range of Employment-by Months.

| Months. | Total No. of Persons Employed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 190). | 1901. | 1900. | $19) 1$. | 1900. | 1901. |
| January | 2,829 | 2,834 | 96.85 | 92.03 | 3.15 | 7.97 |
| February | 2,832 | 2,864 | 96.92 | 93.08 | 3.08 | 6.92 |
| March . . | 2,921 | 2,999 | 100.00 | 97.46 | $\cdots$ | 2.54 |
| April | 2,903 | 3,057 | 99.38 | 99.35 | . 62 | . 65 |
| May | 2,822 | 3,077 | 96.61 | 140.00 | 3.89 | ... |
| June | 2,833 | 3,077 | 98.70 | 100.00 | 1.30 | -9 |
| July | 2,823 | 3,071 | 96.65 | 99.81 | 3.35 | . 19 |
| August | 2,673 | 2,885 | $\stackrel{.}{ } \times 1$ | - 93.76 | 8.49 | 6.24 |
| September | 2,605 | 2,846 | 89.15 | 92.49 | 10.85 | 7.51 |
| October . . | 2,603 | 2,773 | 89.11 | 93.57 | 10.89 | 6.63 |
| November | 2,665 | 2.810 | 91.24 | 91.32 | 8.76 | 8.68 |
| December | 2,761 | 2,903 | 94.52 | 94.31 | 5.48 | 5.69 |

3. Other Presentations.

| Classification. |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |

## WOODENWARE-9 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classified Weekly Earnings. | 1900 |  |  |  | 1901 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Fe male. | Total. |  | Male. | $\begin{aligned} & \text { Fe- } \\ & \text { male. } \end{aligned}$ | Total. |  |
|  |  |  | No. | Perct. |  |  | No. | Per ct. |
| Under \$5.00 .......... | 46 | 7 | 53 | 11.49 | 49 | 6 | 55 | 11.48 |
| $\$ 5.00$ but under $\$ 6.00$ | 26 |  | 26 | 5.64 | 28 |  | 28 | 5.85 |
| 6.00 but under 7.00 | 76 |  | 70 | 16.49 | 79 |  | 79 | 16.49 |
| 7.00 but under 8.00 | 105 | 4 | 109 | 23.64 | 107 | 4 | 111 | 23.17 |
| 8.00 but under 9.00 | 58 | 1 | 59 | 12.80 | 60 | 1 | 61 | 12.75 |
| 9.00 but under 10.00 | 63 | 1 | 64 | 13.88 | 67 | 1 | 68 | 14.19 |
| 10.00 but under 12.00 | - 46 |  | 46 | 9.98 | 47 |  | 47 | 9.81 |
| 12.00 but under 15.00 | 5 |  | 5 | 1.09 | 6 |  | 6 | 1.25 |
| 15.00 but under 20.00 | 16 |  | 16 | 3.47 | 18 |  | 18 | 3.76 |
| 20.00 and over ....... | 6 | 1 | 7 | 1.52 | 6 |  | 6 | 1.25 |
| Total | 447 | 14 | 461 | 100.00 | 467 | 12 | 479 | 100.00 |

2. Number of Persons Employed, Range of Employment-by Months.

| Months. | Total No. of I'ersons EmPLOYED. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1900. | 1901. | 1900. | 1901. | 1900. | 1901. |
| January | 307 | 376 | 70.25 | 83.37 | 29.75 | 16.63 |
| February | 313 | 379 | 71.62 | 84.04 | 28.38 | 15.96 |
| April . | 330 344 | 382 387 | 78.72 | 84.71 85.81 | $\stackrel{24.49}{ } 21.28$ | 15.39 14.19 |
| May | 403 | 443 | 92.22 | 98.23 | 7.78 | 1.77 |
| June | 404 | 445 | 92.45 | 98.67 | 7.55 | 1.33 |
| July | 417 | 451 | 95.42 | 100.00 | 458 |  |
| August | 416 | 449 | 95.19 | 99.56 | 4.81 | . 44 |
| September | 421 | 449 | 96.34 | 99.56 | 3.66 | . 44 |
| October | 414 | 429 | 94.73 | 97.34 | 5.27 | 2:66 |
| November | 487 | 450 | 100.60 | 99.78 |  | . 22 |
| December | 428 | 440 | 97.94 | 97.56 | 2.06 | 2.44 |

3. Other Presentations.

| Classification. | 1900. | 1901. | Increatse or DeCREASE IN 1901. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | Pret, |
| Smallest No. of persons employed.. | 307 | 376 | 69 | 22.48 |
| Greatest No. of persons employed.. | 437 | 451 | 14 | 3.20 |
| Average No. of persons employed.. | 386 |  | 38 | 9.84 |
| Average vearly earnings | \$355 05 | \$376 28 | \$21 23 | 5.98 |
| Average time in operation, days.... | 248.33 | 239.22 | 9.11 | 3.67 |
| No. of private firms | 5 |  |  |  |
| No. of male partners | 7 | 7 | .............. |  |
| No. of female partners |  |  |  |  |
| Total N'o. of partners | 7 | 7 |  |  |
| No. of corporations ${ }^{\text {No. }}$ of... | 8 |  |  |  |
| No. of female stockholders | 4 | 2 |  |  |
| Total No. of stockholders | 22 | 22 |  |  |
| Total No. of partners and stockholders | 29 | 29 |  |  |
| Amount of capital invested | 3428.489 | \$556.299 98+ | \$127.756 98 | 29.82 |
| Value of goods made or work donel | 4 n 5 500 n | 474.958 081+ | 79,458 08 | 18.00 |
| Amount paid as wages ............ | 137.050 0n | 159.544 46I+ | 22,494 46 | 16.41 |
| Av. capital to each person emploved | 1,110 กf | 1.31189. | 2 ก 8 ? | 18.18 |
| Av. product to each person employed | 1,042 75 | 1,120 181+ | 7743 | 7.43 |

WOOLEN GOỌDS-17 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classified Weekly Earnings.; | 1900 |  |  |  | 1901 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\begin{gathered} \mathrm{Fe}- \\ \text { male. } \end{gathered}$ | Total. |  | Male. | $\mathrm{Fe}-$ male. | Total. |  |
|  |  |  | No. | Per ct. |  |  | No. | Perct. |
| Under $\$ 5.00 \ldots \ldots \ldots$ | 102 | 297 | 399 | ${ }^{3} / .25$ | ${ }_{26}^{96}$ |  | $\begin{array}{r}373 \\ 84 \\ \hline\end{array}$ | 36.57 8.23 |
| $\$ 5.00$ but under $\$ 6.00$ | 24 | 60 | 84 | 7.84 | 26 75 | 58 60 | $\begin{array}{r}84 \\ 135 \\ \hline\end{array}$ | 13.24 |
| 6.00 but under 7.00 | 1.03 | 72 | 175 | 16.34 | 75 60 | 60 46 | 106 | 10.59 |
| 7.00 but under 8.00 | 72 | $\stackrel{64}{22}$ | 136 61 | 12.70 5.70 | 60 52 | 46 38 | 106 90 | 10.59 8.88 |
| ${ }_{9}^{8.00}$ Dut under 9.00 | 39 57 | $\stackrel{22}{31}$ | 61 88 | 5.70 8.22 | 52 51 | 43 | 90 94 | 9.8 |
| 9.00 but under 10.00 | 57 | 31 15 | 88 | 8 | 73 | 43 4 |  |  |
| 10.00 but under 12.00 | 50 | 15 | 65 20 | 6.07 1.87 | 73 19 | 4 | 19 | 1.8 |
| 12.00 but under 15.00 | 20 |  | $\stackrel{20}{35}$ | ${ }_{3}^{1.87}$ | 19 37 |  | 37 | 3.6 |
| 15.00 20.00 but under over 20.00. | 35 8 |  | ${ }_{8}^{35}$ | $\begin{array}{r}1.8 \\ \hline\end{array}$ | 5 |  | 5 | . 49 |
| - Total ........... | 510 | 561 | 1,071 | 100.00 | 494 | 526 | 1,020 | 100.00 |

2. Number of Persons Employed, Range of Employment-by Months.

| Months. | Total No. of Pelesons EmPLOYED. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1900. | 1901. | 1900. | 1901. | 1900. | 1901. |
| January | 1,019 | 989 971 | 100.00 99.80 | 98.70 96.91 | . 20 | 1.30 3.09 |
| February | 1,017 | 971 | 99.80 | 96.91 | . 80 | 3.09 4.99 |
| March . | 1,010 | 952 | 99.12 | 95.01 | 1.88 | 3.59 |
| April | 999 | 966 | 98.04 | 96.41 | 1.96 | 3.59 |
| May | 985 885 | 966 938 | 886.65 | 96.41 | 3.34 3.15 | 3.59 |
| June | 885 978 | 938 | 86.85 95.98 | 93.61 95.01 | 3.15 4.02 | 6.39 4.99 |
| July | 978 | 952 | 95.98 | 95.01 | -4.02 | 4.99 |
| August | 938 | 928 | 91.07 | 92.61 | 8.93 | 7.39 |
| September | 948 | 1,002 | 93.03 | 100.00 | 6.97 | . $\cdot$ |
| October . . | 982 | 997 | 96.37 | 99.50 | 3.63 | . 50 |
| November | 915 | 971 | 89.79 | 96.91 | 10.21 | 3.09 |
| December | 931 | 951 | 91.36 | 94.91 | 8.64 | 5.09 |

3. Other Presentations.

| Classification. |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |

## MISCELLANEOUS-34 ESTABLISHMENTS.

1. Classified Weekly Earnings.

| Classified WeeklyEarnings. | 1900 |  |  |  | 1901 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\underset{\text { male. }}{\text { me. }}$ | Total. |  | Male. | $\begin{gathered} \mathrm{Fe}- \\ \text { male. } \end{gathered}$ | Total. |  |
|  |  |  | No. | Per ct. |  |  | No. | Per ct. |
| Under $\$ 5.00 \ldots \ldots \ldots$ | 313 | 528 | 841 |  | 264 | 568 | 832 | 27.27 |
| $\$ 5.00$ butu nder $\$ 6.00$ | 90 | 211 | 301 | 1.39 | 93 | 202 | 295 | 9.67 |
| 6.00 but under .7 .00 | 108 | 49 | 157 | 5.42 | 111 | 21 | 132 | 4.33 |
| 7.00 but under 8.00 | 163 | 14 | 177 | 6.11 | 148 | 22 | 170 | 5.57 |
| 8.00 but under 9.00 | 243 | 11 | 254 | 8.76 | 306 | 12 | 318 | 10.42 |
| 9.00 but under 10.00 | 339 | 10 | 349 | 12.04 | 543 | 8 | 551 | 18.06 |
| 10.00 but under 12.00 | 225 | 7 | 232 | 8.00 | 286 | 11 | 297 | 9.73 |
| 12.00 but under 15.00 | 138 | 1 | 139 | 4.80 | 167 | 1 | 168 | 5.51 |
| 15.00 but under 20.00 | 290 |  | 290 | 10.01 | 102 | 1 | 103 | 3.38 |
| 20.00 and over | 158 |  | 158 | 5.45 | 185 |  | 185 | 6.06 |
| Total | 2,067 | 831 | 2,898 | 100.00 | 2,205 | 846 | 3,051 | 100.00 |

2. Number of Persons Employed, Range of Employment-by Months.

| Months. | Total No. of Persons Em. PLOXED. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemploymerrt. |  |
|  | 1900. | 1901. | 1900. | 1901. | 1900. | 1901. |
| January | 1,945 | 1,749 | 77.80 | 78.64 | 22.20 | 21.36 |
| February | 2,059 | 1,941 | 82.36 | 87.28 | 17.64 | 12.72 |
| March | 2,228 | 2,092 | 89.12 | 94.06 | 10.88 | 5.94 |
| April | $\stackrel{2,387}{2}$ | ${ }_{2}^{2,106}$ | 95.48 | 94.69 | 4.52 | 5.31 |
| June | $\xrightarrow{2,500}$ | 2,074 1,855 | 100.00 93.36 | 93.26 83.41 |  | 6.74 16.59 |
| July | 1,959 | 2,061 | ${ }_{78.36}$ | ${ }_{92.67}$ | 21.64 | 16.59 7.33 |
| August | 1,926 | 2,159 | 77.04 | 97.08 | 22.96 | 2.92 |
| September | 2,025 | 2,224 | 81.00 | 100.00 | 19.00 |  |
| October | 2,152 | 2,210 | 86.08 | 99.37 | 13.92 | . 63 |
| November | 2,046 | 2,185 | 81.84 | 98.25 | 18.16 | 1.75 |
| December | 1,815 | 1,848 | 72.60 | 83.09 | 27.40 | 16.91 |

3. Other Presentations.

| Classification. | 1900. | 1901. | Increase or DeCrease in 1901. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | Pret |
| Smallest No. of persons. employed.. | 1,815 | 1,749 | 66 | 3.64 |
| Greatest No. of persons employed.. | 2,500 | 2,224 | 276 | 11.04 |
| Average No. of persons employed.. | 2,115 | 2,042 | 73 | 3.45 |
| Average yearly earnings .......... | \$382 61 | \$416 78 + | \$34 17 | 8.93 |
| Average time in operation, days .. | 250 | 243 - |  | 2.80 |
| No. of private firms | 10 |  |  | 10.00 |
| No. of male partners | 16 |  | 1 | 25.00 |
| No. of female partners |  |  |  |  |
| Total No. of partners | 16 | 12 | 4 | 25.00 |
| No. of corporations... | 24 | $25+$ | 1 | 4.17 |
| No. of female stockholders | 161 |  | 7 | 4.35 |
| Total No. of stockholders ... | 185 | 192 |  | 3.78 |
| Total No. of partners and stock- |  |  |  |  |
| holders | 201 | $204+$ | 3 | 1.49 |
| Amount of capital invested | \$4,056,277 27 | \$4,272.134 54\|+ | \$215,857 27 | 5.32 |
| Value of goods made or work done | 6,858,029 75 | 7,042,928 96- | 184,899 21 | 2.70 |
| Amount paid as wages.............. | 809,229 10 | 851,060 341+ | 41,831 24 | 5.17 |
| Av. capital to each person cmployed | 1.91786 | 2,092 131+ | $17427 \mid$ | 9.99 |
| Av. product to each person employed\| | 3,242 57\| | 3,439 001+ | $19743 \mid$ | 6.16 |

! SUMMARY OZ 42 INDUSTRIES.
1: Classified Weekly Earnings.

| Classified Weekly Earnings. | 1900 |  |  |  | 1901 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Fe. | Total. |  | Male. | $\begin{gathered} \mathrm{Fe}- \\ \text { mal. } \end{gathered}$ | Total. |  |
|  |  |  | No. | Per ct. |  |  | No. | Pelct. |
| Under $\$ 5.00$ | 7,074 | 9,086 | 16,160 | 16.71 | 6,906 | 9,058 | 15,964 | 16.00 |
| $\$ 5.00$ but under $\$ 6.00$ | 2,390 | 2,745 | 5,135 | 5.31 | 2,578 | 2,783 | 5,361 | 5.37 |
| 6.00 but under 7.00 | 6,241 | 1,269 | 7,510 | 7.77 | 5,717 | 1,331 | 7,048 | 7.07 |
| 7.00 but under 8.00 | 8,925 | -604 | 9,529 | 9.86 | 8,319 | 653 | 8,972 | 8.99 |
| 8.00 but under 9.00 | 10,730 | 316 | 11,046 | 11.42 | 10,454 | 346 | 10,800 | 10.83 |
| 9.00 but under 10.00 | 16,426 | 238 | 16,664 | 17.24 | 18,031 | 299 | 18,330 | 18.37 |
| 10.00 but under 12.00 | 11,675 | 150 | 11,825 | 12.23 | 13,146 | 181 |  |  |
| 12.00 but under 15.00 | 10,253 | 88 | 10,341 | 10.70 6.66 | 10,936 6,759 | 116 | 11,052 | +6.81 |
| 15.00 <br> 20.00 but under 20.00 | 6,425 2,025 | 12 | 6,437 2,028 | 6.66 2.10 | 6,759 2,113 | 30 2 | 6,789 2,115 | 6.81 2.12 |
| 20.00 and over | 2,025 |  | 2,028 |  |  |  |  |  |
| Total | 82,164 | 14,511 | 96,675 | 100.00 | 84,959 | 14,799 | 99,758 | 100.00 |

2. Number of Persons Employed, Range of Employment-by Months.

| Months. | Total No. of Persons Em ployed. |  | Percentages of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employmont. |  | Unemployment. |  |
|  | 1900. | 1901. | 1900. | 1901. | 1900. | 1901. |
| January | 75,015 | 76,495 | 91.50 | 88.74 | 8.50 | 11.26 |
| February | 76,144 | 78,353 | 92.87 | 90.90 93.35 | 5.55 | 9.65 |
| March | 77,437 79 | 80,463 83,384 | 94.45 97.27 | ${ }_{96.74}^{93.35}$ | ${ }_{2} .73$ | ${ }_{3.26}$ |
| May | 81,354 | 85,612 | 99.23 | 99.32 | . 77 | . 6 |
| June | 81,987 | 85,617 | 100.00 | 99.33 |  | . 67 |
| July | 79,976 | 86,198 | 97.55 | 100.00 | 2.45 | 71 |
| August | 80,004 | 85,582 | 97.58 | 99.29 | 2.42 | . 71 |
| September | 80,021 | 84,276 | 97.60 96 | 97.77 | 2.40 310 | 2.23 1.97 |
| October | 79,443. | 84,497 |  | 98.03 97.09 | 3.10 4.89 | 1.97 2.91 |
| November | 77,973 74,483 | 83,690 79,131 | ${ }_{90.85}^{95.11}$ | 97.09 91.80 | 4.89 9.15 | 8.20 |
| December | 74,483 | 79,131 | 90.85 | 91.80 | 9.15 |  |

3. Other Presentations.

| Classification. | 1800. | 1901. | Jncrease or DeCREASE IN 1901. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount. | Pret. |
| Smallest <br> ployed <br> No. of persons em- | 74,483 | 76,495 | + 2,012 | 2.70 |
| Greatest No. of persons employed | 81,987 | 86,198 | . 4,211 | 5.14 |
| Average ployed No. of persons em-................................. | 78,632 | 82,775 | + 4,143 | 5.27 |
| Average yearly earnings ........ | \$41200 | \$42200 | + $\begin{aligned} & \text { \% }\end{aligned}$ | 2.43 |
| Av. time in operation, days.... | 272 | 276 |  | 1.47 |
| No. of private firms .............. | 540 |  | - ${ }_{8}$ | . 56 |
| No. of male partners .............. | ${ }_{38}{ }_{38}$. |  | + <br> $+\quad 8$ | 7.89 |
| No. of female partners . ${ }^{\text {co...... }}$ | - 890 |  | 's | 7.56 |
| Total No. of partners | 890 |  | 3 | . 50 |
| No. of corporations ${ }^{\text {No. of }}$ male stock | 13,838 | 14.338 | 500 | 3.61 |
| No. of female stockholders | 3,118 | 3.571 | 453 | 14.53 |
| Total No. of stockholders........ | 16,956 | 17,909 | 953 | 5.62 |
| Total No. of partners and stockholders | 17,846 | 18,804 | + 958 | 5.37 |
| Amount of canital invested | \$180,451,489 02 | \$195,696,029 05 | \|+\$15,234,547 $03 \mid$ | 8.44 |
| Value of goods made or work done | 205.068 .157221 | 219.657 .5812 | + 14589.49400 | 7.07 |
| Amount paid as wages .......... | 32,378,587 52 | 34,863,673 5 | 1+ $+2,485,08604$ | 7.68 |
| Average capital to each person employed | 2,294 89 | 2,364 0 | $+\quad 6918$ | 3.01 |
| Average product to each person employed | 2,615 60 | 2,653 7 | 01+ 3810 | 1.45 |

## ANAI.YSIS.

The foregoing tables have been compiled from the reports for 1900 and 1901 from 1,135 identical manufacturing institutions. The facts for the two years were not only received from the same establishments but have been classified upon the same basis and so arranged in the tables that comparisons between them are easily drawn.

The presentations as a whole âre really a comparison as between the two years. They show the changes in the different factors that had taken place during the period and thus indicate the condition. An increase in the output and in all or some of the other factors indicates unquestionably a healthy condition. A decrease on the other hand must necessarily mean the contrary. It would at least certainly indicate a temporary depression. This holds good for each industry as well as for all when combined. That every industry should have shown either an increase or a decrease was not to be expected. Exen in the best of times there are some among the industries which suffer from adverse conditions. Just as in hard times there are industries which are forging ahead. The real measure of the condition for the state as a whole must therefore be found in the amount of increases or decireases which are shown by the figures for "All Industries" when combined. In order to bring out more clearly the changes that took place in different factors not only for each industry, but for all industries when combined, the facts presented will be subjected to further analysis.

## CI.ASSIFIED WEEKLY EARNINGS.

The first part of the tables as already shown deals with the classified weekly earnings. The wage-earners were namely classified according to the amount earned each week and the number of persons in each class is shown. The basis upon which these classifications were made have been pointed out above and no further explanations are needed. Suffice it to say that the tables
show the number of persons who received under $\$ 5$ per week, the number who received $\$ 5$ per week but less than $\$ 6$, and so on with proper divisions up to the class $\$ 20$ and over.

The following table is taken from that for "All Industries" and shows the total number of persons in the 42 industries when combined who received classified weekly earnings in 1900 and 1901.

| Classified Weekly | 1900 |  |  | 1901 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female. | Total. | Male. | Female. | Total. |
| Under $\$ 5.00$ | 7,074 | 9,086 | 16,160 | 6,906 | 9,058 | 15,964 |
| $\$ 5.00$ but under $\$ 6.00$. | 2,390 | 2,745 | 5,135 | 2,578 | 2,783 | 5,361 |
| 6.00 but under 7.00. | 6,241 | 1,269 | 7,510 9 | 5,717 | 1,331 | 8,972 |
| 7.00 8.00 but under under 9.00 | 8,925 10,730 | 604 316 | 7,529 11,036 | re, ${ }^{8,3154}$ | 346 | 10,800 |
| 8.00 9.00 | 16,420 | 238 | 16,664 | 18,031 | 299 | 18,330 |
| 9.00 10.00 but under buder 12.00 | 11,675 | 150 | 11,825 | 13,146 | 181 | 13,327 |
| 12.00 but under 15.00 . | 10,253 | 88 | 10;341 | 10,936 | 116 | 11,052 |
| 15.00 but under 20.00 . | 6,425 | 12 | 6,437 | 6,759 | 30 | 6,789 |
| $\$ 20.00$ and over .. | 2,025 |  | 2,028 | 2,113 | 2 | 2,115 |
| Total | 82,164 | 14,511 | 96,675 | 84,959 | 14,799 | 99,758 |

Here is shown not only the total number of persons who received classified weekly earnings, but also the number in each class.

The total number was 96,675 in 1900, and 99,758 in 1901. This is an increase for the latter year of 3,083 persons, or 3.19 per cent. of the total for the former year.

The number of persons as between the classes varied greatly. In some the number was quite large, in others comparatively small. Thus, class $\$ 9$ but under $\$ 10$ in 1900 included 16,664 , while that for $\$ 20$ and over included only 2,028 persons: This is the greatest and smallest number for any of the classes and the difference between them leaves room enough for a variety of number in the others. For 1901 the variation was quite as wide, in fact, when the increase in the total number is considered, the proportion of the number in each class was about the same as for 1900.

| Classified Weekly Earnings. | 1900 |  |  | 1901 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female. | Total. | Male. | Female | Total. |
| Under $\$ 5.00$......... | 8.61 | 62.61 | 16.71 |  |  |  |
| \$5.00 but under $\$ 6.00$. | 2.91 | 18.92 | 16.71 5.31 | 8.13 3.03 | 61.21 18.81 | 16.00 |
| ${ }^{6.00}$ but under 7.00 but under 8.0 | 7.60 | 8.75 | 7.77 | 3.03 6.73 | 18.81 8.99 | 5.37 7.07 |
| ${ }^{7.00}$ but under ${ }^{8.00}$ but under 9.00. | 10.86 | 4.16 | 9.86 | 9.79 | 4.41 | 7.99 |
| 9.00 but under 10.00 . | 13.06 | 1.18 | 11.42 | 12.31 | 2.34 | 10.83 |
| 10.00 but under 12.00 . | 14.21 | 1.64 | 17.24 | 21.22 | 2.02 | 18.37 |
| 12.00 but under 15.00 . | 12.48 | 1.03 .61 | 12.23 | 15.47 | 1.22 | 13.36 |
| 15.00 but under 20.00 | 7.82 | . 08 | 10.66 | 12.87 | . 79 | 11.08 |
| $\$ 20.00$ and over | 2.46 | . 02 | 2.10 | 2.49 | . 01 | 6.81 2.12 |
| Total | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 10000 |

In the preceding table is shown the per cent of the number of persons in each class of the total for all. The meaning of this is perhaps best illustrated from the tables. Thus, it has been seen, that in 1900 the male persons included numbered 82,164 , and that the male persons in the class under $\$ 5$ per week numbered 7,074. In this case the latter constitute 8.61 per cent of the former. It is this relation for each class that is shown in the above table.

It is seen in this table that the class under $\$ 5$ included 8.61 per cent. of the male persons employed in 1900, and 8.13 per cent. in 1901. In this case there was thus a slight decrease in the proportion as between the two years. The same class also included 62.61 per cent. of the female persons in 1900 and 61.21 per cent. in 1901. In this case also there was a small decrease. What is thus true for both male and female must be true of the total for both. This is also borne out by the table, for it shows that the proportion of both males and females of the total for both decreased from 16.71 in 1900 to 16.00 per cent. in 1901. In this class there was thus a decrease all around.

A closer study of this table will show that the proportion in the different classes did not vary greatly in the two years. Such variation as may be noticed seems to indicate an upward trend in wages.

Considering the totals for both sexes the greatest proportion of persons is found in the class $\$ 9$ but under $\$ 10$. This class included 17.24 per cent. of the total in 1900 and 18.37 per cent. in 1901, pointing to a slight increase for the latter year. The
second class in order in point of the number it includes is that of under $\$ 5$ per week which shows 16.71 per cent. of the total in the former, and 16.00 in the latter year. The third in importance in this respect is that of $\$ 10$ but under $\$ 12$, while the fourth in order is probably that of $\$ 12$ but under $\$ 15$, at least this is true for 1901. In examining the figures for the male and female persons separately it is plain that the greatest variations in the proportion as between the classes are found in the columns showing the male persons.

In order that the figures for each year may be still more readily compared they have been reduced to four classes only and in this form are presented as follows:

| $\underset{\substack{\text { Earnings. } \\ \text { Classified } \\ \text { Eekly }}}{ }$ | 1900 |  |  | 1901 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female. | Total. | Male | Female. | Total. |
| \$9.00 and over. | 56.96 8088 | 3.38 9.72 | 48.93 70.21 | 60.01 82.11 | 4.24 10.99 | ${ }_{71.56} 51.7$ |
| 6.00 and over... | 88.48 | 18.47 | 77.80 | 88.84 | 19.98 | ${ }_{7}^{73.63}$ |
| Under $\$ 6.00$............. | 11.52 | 81.53 | 22.12 | 11.16 | 79.02 | 21.37 |

Even a hasty glance at this table will suffice to show that there was an upward tendency in wages during the period. The class $\$ 9$ and over, for instance, includes a larger proportion of both the males and the females in 1901 than in 1900. This is also true of the class $\$ 7$ and over and $\$ 6$ and over. The class under $\$ 6$, on the other hand, shows in every case a smaller proportion in 1901 than in the preceding year. This is evidence enough of the fact that, on the whole, earnings were on the increase. It is true that the increases are not, from all appearances, very large. Still they amount to something and certainly indicate a healthy industrial condition.

| Classified WeeklyEarnings. | 1900 |  |  | 1901 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female. | - Total. | Male. | Female. | Total. |
| Under $\$ 5.00$ | 43.77 | 56.23 |  |  |  |  |
| $\$ 5.00$ but under $\$ 6.00$ | 46.54 | ${ }_{53.46}$ | 100.00 | 43.26 48.09 | 56.74 51.91 | 100.00 |
| ${ }^{6.00}$ but under 7.00 but | 83.10 | 16.90 | 100.00 | 81.12 | 18.88 | 100.00 100.60 |
| 8.00 but under 9.00 | 93.66 | 6.34 | 100.00 | 92.72 | 7.28 | 100.00 |
| 9.00 but under 10.00 | 99.14 | 2.86 | 100.00 | 96.79 | 3.21 | 100.00 |
| 10.00 but under 12.00 . | 98.73 | 1.43 | 100.00 | 98.26 | 1.74 | 100.00 |
| 12.00 but under 15.00 | ${ }_{99} 9.75$ | 1.27 | 100.00 | 98.64 | 1.36 | 100.00 |
| 15.00 but under 20.00 | 99.81 | . 19 | 100.00 | 98.50 | 1.50 | 100.00 |
| 20.00 and over | 99.85 | .15 | 100.00 100.00 | 99.56 99.91 | . 46 | 100.00 100.00 |
| Total | 84.99 | 15.01 | 100.00 | 85.17 | 14.83 | 100.00 |

In this is found the relative proportion of the male and female persons in each wage-class. Thus, out of every 100 persons in the class under $\$ 5$, about 44 persons were male and 56 female in 1900, and 43 male and 57 female in 1901. In this class therefore the females outnumber the males. This is also true of the class $\$ 5$ but under $\$ 0$ as is seen from the fact that and 14,511 were female ; and that of the 99,758 persons in 1900, and 48 males and 52 females in 1.901. From this point on through all the better paid classes, however, the male greatly outnumbered the female. In fact the tendency in this respect was so strong that in the classes towards the foot of the table where the earnings were high the females constitute only a small fraction of the whole. This is entirely in keeping with facts that are well known to almost everybody.

This table also throws a great deal of light upon the relative proportion of the male and female employes in our manufacturing institutions. In one of the preceding tables it was seen that of the 96,675 persons employed in 1900, 82,164 were male and 14,511 were females; and that of the 99,758 persons in 1901, 84,959 were males and 14,799 females. In this table is found the per cent relation of these numbers. Thus of the whole number who received classified earnings in 1900, 84.99 per cent were male and 15.01 per cent female; while in 1901, 85.17 per cent are in the male column and 14.83 per cent in the female. According to these figures there was a slight decrease in the proportion of women who were employed in fac-
tories. The change in this direction, however, is so small that it cannot be said to point to any given tendency,

| $\begin{aligned} & \text { Classified Weekly } \\ & \text { Earnings. } \end{aligned}$ | 1900 |  |  | 1901 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female. | Total. | Male. | Female. | Total. |
| Under \$5.00 | \$21,222 | \$27,258 | \$48,480 | $\$ 20,718$ <br> 14.179 | \$27,174 | \$47,892 ${ }^{29,486}$ |
| \$5.00 but under $\$ 6.00$ | - ${ }_{40,557}^{13,145}$ | 15,098 8,249 | 28,243 48,806 | $\stackrel{147,161}{ }$ | - 8 8,652 | ${ }_{45}^{45}, 813$ |
| ${ }^{6} .000$ but under buter 8.00 . | 66,938 | 4,539 | 71,468 | -62,393 | $\begin{array}{r}4,898 \\ 4 \\ 4 \\ \hline 181\end{array}$ | 67,291 91,800 |
| 8.00 but under 9.00 | 91,205 | ${ }_{2}^{2,686}$ | 93,891 158,308 | r8, 171,295 | $\stackrel{\text { 2, }}{2,841}$ | 174,136 |
| 9.00 but under 10.00 | ${ }_{128,425}$ |  | 130,075 | 144,606 | 1,991 | 146,597 |
| ${ }^{10.00}$ but under 12.00 but under 15.00 | 128,163 | 1,188 | 129.351 | 147.636 | 1,566 | 149,262 |
| 15.00 but under 20.00 | 112,438 | 210 | 112,648 | $\begin{array}{r}118.283 \\ 47.543 \\ \hline\end{array}$ | 525 45 | 118.808 47,588 |
| 20.00 and over ... | 45,563 | 68 | 45,631 | 47,543 |  |  |
| Total | \$803,703 | \$63,198 | \$866,901 | \$852,673 | \$65,940 | \$918,613 |
| Per cent | 92.71 | 7.29 | 100.00 | 92.82 | 7.18 | 100.00 |

The preceding tảble shows the total weekly earnings of all the persons in each class as well as the total of all classes. In this connection it is seen that all the persons included in the class under $\$ 5$ per week received $\$ 48,480$ per week in 1900 and $\$ 47,892$ in 1901. For this class there was thus a decrease in the amount received owing to the fact that there was a decrease in the number of persons for the latter year. The total amount per week for all classes was $\$ 866,901$ in the former year and $\$ 918,613$ in the latter.
In considering the respective amounts received by total males and total females it develops that in 1900 the share of male persons amounted to 92.71 per cent of the total, and that in 1901 it footed up to 92.82 per cent of the total. The share of the female persons was therefore only 7.29 and 7.18 per cent respectively for the two years. In comparing these figures with the proportion of the number of the females employed 11, another example of the inequality of the earnings as between the males and females is furnished. In the presentation showing the per cent of each sex it was shown that the females constituted 15.01 per cent of the total in 1900 and 14.83 per cent in 1901. Taking these facts in connection with those in the above table it is found that while the females constituted about 15 per cent of the total persons employed they received as wages only a little over 7 per cent of the total wages. These facts are important.

Among other things it has thus been shown what the total weekly earnings for all persons in all classes amounted to, and from these facts further deductions may be made. By dividing the total earnings in each case by the number of persons included the weekly amount to each worker is obtained, as the weekly amount is based upon six working days, the average daily rate of wages can be had by dividing weekly earnings by six. The average yearly earnings in turn may be found by multiplying the weekly or daily wages by the time employed, which for all industries, as will be seen later was 272 and 276 days, respectively, for the two years.

The following table shows the average weekly, daily and yearly earnings to each person as based upon the calculations just explained.

| Classlfied WeeklyEarnings. | 1900 |  |  | 1901 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female. | Total. | Male. | Female. | Total. |
| Average per week | \$9 78 |  |  |  |  |  |
| Average per day | 162 |  | $\$ 897$ 149 | $\$ 1013$ 169 | \$4 46 | $\$ 9$ 1 153 |
| Average per year | 44400 | 19900 | 40900 | 45600 | 20400 | 153 42300 |

This table thus, shows the estimated weekly, daily, and yearly earnings of the persons included.

Taking the sexes separately it is seen that males received $\$ 9.78$ per week, or $\$ 1.62$ per day, or $\$ 444$ per year in 1900 , and $\$ 10.13$ per week, or $\$ 1.69$ per day, or $\$ 456$ per year in 1901 ; and that the earnings of the females were $\$ 4.36$ per week, 73 cents per day, and $\$ 199$ per year in the former and $\$ 4.46$ per week, 74 cents per day, and $\$ 204$ per year in the latter year.

For the total of both sexes the average earnings were $\$ 8.97$ per week, $\$ 1.49$ per day, and $\$ 409$ per year in 1900 ; and $\$ 9.21$ per week, $\$ 1.53$ per day and $\$ 423$ per year in 1901 .

These figures are of course largely based upon estimates, and absolute reliance ought not perhaps be placed upon them. It is believed, however, that they are not misleading, and this position is confirmed by the fact that they practically correspond to the average earnings for all industries as shown in the last table in the series, the one for all industries, as well as elsewhere in this part.

## PERSONS EMPLOYED BY MONTHS AND RANGE OF EMPLOYMENT

 AND UNEMPLOYMENT.The second part of the basic tables shows the number of persons employed each month and the range of employment or unemployment. The number employed were reported by the employers, the range of employment etc., has been computed from the figures thus reported.

The following table gives for all industries the number of persons employed each month in 1900 and 1901.

| Months. | Total No. of Persons EmPLOYED. |  | Per Cent. of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1900. | 1901. | 1900. | 1901. | 1900 | 1901. |
| January | 75,015 | 76,495 | 91.50 | 88.74 | 8.50 | 11.26 9 |
| February | 76,144 | 78,353 80,463 | 92.87 | 90.90 93.35 | 5.55 | 6.65 |
| March | 77,437 79 | 80,463 83,384 | 94.27 | 96.74 | 2.73 | 3.26 |
| April | 81,354 | 85,612 | 99.23 | 99.32 | . 77 | . 68 |
| June ${ }^{\text {a }}$ | 81,987 | 85,617 | 100.00 | 99.33 |  | . 67 |
| July | 79,976 | 86,198 | 97.55 | 100.00 99 | 2.45 |  |
| August | 80,004 | 85,582 | 97.58 | 99.29 | 2.42 | . 71 |
| September | 80,021 79 | 84,276 84,497 | 97.60 96.90 | ${ }_{98}^{97.77}$ | 3.40 | 1.97 |
| October | 79,443 77973 | 84,497 83 8390 | 96.90 95.11 | ${ }_{97.09}^{98.03}$ | 4.89 | 2.91 |
| November | 77,973 | 83,690 79,131 | ${ }_{90.85}^{90.85}$ | 91.80 | 9.15 | 8.20 |
| December | 74,483 | 79,131 | 9.35 |  |  |  |
| Average | 78,632 | 82,775 | 95.89 | 96.03 | 4.11 | 3.97 |

The number employed varies considerably from month to month. This is clearly shown in the above table. In 1900 the greatest number, or 81,987 persons, were employed in June, and the smallest number, or 74,483 persons, in December. In 1901 July shows the greatest number, 86,198 persons, and January the smallest, 76,495 persons. Between the greatest and the smallest there is considerable difference in the number. In fact this difference amounted to 9.15 per cent. in the former, and 11.26 per cent. in the latter year. Between the other months the differences in number are of course smaller than this, but in all cases they are present.

Now, as already explained, it is these differences that are regarded as the range of unemployment. The greatest number for any month is considered as full employment or 100 per cent.

At this time all who could get employment were employed. The number for the other months are looked upon as partial employment, the difference being the range of unemployment. In December, 1900, 9.15 per cent were unemployed, in January 8.50 per cent were unemployed, while in February the range stood at 7.13 per cent. These months show the greatest proportion of unemployed persons. During the remaining months of the same year the range is very narrow which means that the unemployed were few in number. The average range of unemployment for that year, 1900, was 4.11 per cent.

For 1901 also the widest range of unemployment is found in January, February and December. In January the range was 11.26 per cent., in February 9.10 per cent. and in December 8.20 per cent. During the remaining months the range is even narrower than for the same months in 1900. The average number unemployed constituted 3.97 per cent. or a trifle less than for the former year.

## OTHER PRESENTATIONS.

Under this the third part of the table is found a variety of facts. Most of these relate to the number of persons employed, yearly earnings, time in operation, private firms and corporations, capital invested, value of the product and total amount paid as wages.

## Smallest Number.

Under this head is shown the smallest number of persons employed for all industries during the years 1900 and 1901.

$$
\begin{aligned}
& \text { Smallest No. persons, } 1901 \text {. . . . . . . . . . . . . 76,495 } \\
& \text { Smallest No. persons, } 1900 \text {. . . . . . . . . . . . . . 74,483 } \\
& \text { Increase for } 1901 \text {. . . . . . . . . . . . . . . . . . . . 2,012 } \\
& \text { Per cent. of increase }
\end{aligned}
$$

These figures as said represent the totals for the 42 industries included. The smallest number of persons in 1901 was 76,495 , and for $1900,74,483$. This is an increase for 1901 of 2,012 persons, or 2.70 per cent. It ought perhaps to be ex-
plained that smallest number of persons means the number for the month during which the smallest number were employed.

The smallest number for each industry will be found in the basic tables.

## Greatest Number.

The following figures show for all industries the greatest number of persons employed during any month for the two years covered.

$$
\begin{aligned}
& \text { Greatest No. in } 1901 \text {. . . . . . . . . . . . . . . . . . 86,198 } \\
& \text { Greatest No. in } 1900 \text {. . . . . . . . . . . . . . . . . . . 81,987 } \\
& \text { Increase for } 1901 \text {. ......................... } 4,211 \\
& \text { Per cent. of increase . . . . . . . . . . . . . . . . . . } 5.14
\end{aligned}
$$

In 1901 the greatest number was 86,198 while in 1900 it was 81,987 . The increase during the period thus amounted to 4,211 persons, or 5.14 per cent.

These figures represent the month each year during which the greatest number were employed.

The following is a comparison between the greatest and smallest number of persons in 1900.

$$
1900 .
$$

| Greatest--June | 81,987 |
| :---: | :---: |
| Smallest-December | 74,483 |
| Difference | 7,504 |
| Per cent. of Differen | 9.15 |

From these figures it is seen that the difference between the greatest and smallest number in 1900 amounted to 7,504 , or 9.15 per cent. This, as has been explained, was the widest range of unemployment for that year.

In 1901 the difference between the greatest and smallest number employed was as follows.
1901.
Greatest Number-July . . . . . . . . . . . . . . . . 86,198
Smallest Number-January . . . . . . . . . . . . 76,495
Difference . ........... . ................... . 9,703
Per cent. of Difference .................... 11.26

For this year the greatest number were employed in June and the smallest in January. The number in the former case exceeds that of the latter by 9,703 persons, or 11.26 per cent. According to these figures there were 9,703 persons employed in June who could not have obtained similar employment in the month of January.

> Average Number.

The average number of persons employed is an important figure from several points oie view. In the first place it is the best and safest measure of the number that can find employment in any industry. Then again, and mostly because of what has been said, the average number has mostly been the one used in several computations that have been made. For these and other reasons the average number for each of the 42 industries included has been given in both years.

| No. | Industries. | Average No. Persons Employed in |  | Increase or DeCrease in 1901. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1900. | 1901. | No. |  | cent. |
| 1 | Agricultural implements | 2,478 | 2,639 | + 161 | $+$ | 6.50 |
|  | Artisuns' tools .......... | b26 | 569 | + 43 | + | 8.17 |
| 3 | Beef and pork packing | 1,398 | 1,348 | - 50 |  | 3.58 |
| 4 | Boots and shoes ....... | 2,443 | 2,584 | + 141 | $\pm$ | 5.77 |
| 5 | Boxes-packing | 1,003 | 1,033 | + 30 | + | 2.99 |
| 6 | Breweries | 3,693 | 4,130 | + 437 | + | 11.83 |
| 7 | Brick | 450 | 459 | + 9 | + | 2.00 |
| 8 | Brooms and brushes | 209 | 230 | + $+\quad 21$ $+\quad 19$ | $+$ | 10.05 |
| 9 | Cement | 469 | 488 | $+\quad 19$ | $+$ | 4.05 |
| 10 | Cigars | 799 | 785 | - 14 |  | 1.75 |
| 11 | Clothing | 2,838 | 3,176 | + 338 | + | 11.91 |
| 12 | Cooperage | 435 | 409 | - 26 |  | 5.98 |
| 13 | Cotton and linen goods | 443 | 339 | $\rightarrow \quad 104$ |  | 23.48 |
| 14 | Crackers and contectionery | 1,586 | 1,743 | + 157 |  | 9.90 |
| 15 | Electric and gas apparatus | 1,414 | 1,597 | 183 | $+$ | 12.94 |
| 16 | Flour | 779 | 811 | + 32 | + | 4.11 |
| 17 | Food preparations | 595 | 483 | - 112 |  | 18.82 |
| 18 | Furniture | 7,408 | 7,704 | $+\quad 296$ | $+$ | 4.00 |
| 19 | Furs .. | 393 | 482 | + 89 | + | 22.65 |
| 20 | Iron | 3,286 | 3,709 | + 423 | + | 12.87 |
| 21 | Knit goods | 3,237 | 3,124 | - 113 |  | 3.49 |
| 22 | Leather | 3,467 | 3,562 | + 95 | + | 2.74 |
| 23 | Lumber | 11,926 | 11,453 | - 473 |  | 3.97 |
| 24 | Machinery | 8,061 | 8,554 | + 493 | $+$ | 6.12 |
| 25 | Malt | 238 | 261 | + 23 | + | 9.66 |
| 26 | Paint | 76 | 84 | + 8 | + | 10.53 |
| 27 | Paper and cigar boxes | 632 | 697 | + 65 | + | 10.28 |
| 28 | Paper and pulp ........ | 3,888 | 4,468 | + 580 | + |  |
| 29 | Saddlery .... | 239 | 260 | + 21 | + | 8.79 |
| 30 | Sash, doors and blinds | 2,593 | 2,974 | + 381 | + | 14.69 |
| 31 | Sheet metal | 1,843 | 2,456 | + 613 | + | 33.26 |
| ¢2 | Ship building | 879 | 998 | + 119 | + |  |
| 33 | Soap ........ | 152 | 153 | + 1 | + |  |
| 34 | Staves | 262 | 296 | + 34 |  | 12.98 |
| 35 | Stone | 325 | 356 | + 31 | + | 9.54 |
| 36 | Toys | 559 | 563 | + 4 | + | . 72 |
| 37 | Trunks | 848 | 839 | - 9 |  | 1.06 |
| 38 | Veneer | 521 | 595 | + 74 |  | 14.20 |
| 39 | Wagons | 2,773 | 2,933 | + 160 | + | 5.77 |
| 40 | Woodenware | 386 | 424 | + 38 | + | 9.84 |
| 42 | Woolen goods Miscellaneous | 967 2,115 | 965 2,042 | - $\quad \begin{array}{r}2 \\ \hline\end{array}$ |  | .21 3.45 |
|  | Total average | 78,632 | 82,775 | + 4,143 | + | 5.27 |

This table thus shows by industries for 1900 and 1901 the average number of persons employed together with the increase or decrease as the case may be for the latter year when compared with the former.

In considering the total for all industries the following facts will appear first.

Average No. employed in 1901 . . . . . . . . . 82,775
Average No. employed in 1900 . .......... . 78,632
Increase for 1901 . . . . . . . . . . . . . . . . . . . . . . 4, 143
Per cent. of increase . . . . . . . . . . . . . . . . . . 5.27

During the period of 1900 and 1901 there was thus an increase in the average number of persons employed of 4,143 persons, or 5.27 per cent. as based upon the former year. This increase is somewhat greater than that for both the greatest and smallest number of persons employed and indicates a healthy condition in the industries included.

Taking the industries in detail it is found that 32 showed an increase in the average number employed and 10 a decrease. Those showing a decrease are : beef and pork packing, cigars, cooperage, cotton and linen goods, food preparations, knit goods, lumber, trunks, woolen goods and miscellaneous. As a rule the decreases were not very large, though in cotton goods it amounts to about 23.5 per cent., and in food preparations to 18.8 per cent.

## Average Yearly Earnings.

By the average yearly earnings is meant the amount to each worker, or person employed, when the total amount paid as wages during the year is divided equally among the average number of workers.

It is important to know the average amount to each worker, and this for several reasons. While it is true that it may not represent the actual earnings of a single person, it throws more light upon the approximate income of the class as a whole than any other of the presentations included here. When obtained for more than one year these figurès also furnish a very good basis of comparing the course of wages from year to year or from one period to another. This is of special value, since classified earnings and almost every other method of presenting the wages paid are cumbersome and offer few opportunities for more definite comparisons. When presented by industries the figures also furnish good evidence. of the conditions as to wages in each. It is of course well known that wages are higher in some industries than in others. Some occupations require much greater skill than others, and hence through the operation of the law of supply and demand and other forces have to pay a higher wage. Other occupations again may be dangerous, extremely unpleasant, or require
greater physical strength and for these or other reasons may command a comparatively high wage. Children and women are paid less for their work than adult male persons and where employed this fact is strongly reflected in the average earnings.

The table which follows shows, by industries, for 1900 and 1901, the average yearly earnings together with the increase or decrease in the latter year when compared with the former.

| No. | Industries. | Average Yearly Earnings in |  | Increase or DeCREASE in 1901. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1900. | 1901. | Amount |  | cent |
| 1 | Agricultural implements | \$556 00 | \$570 00 | + \$1400 |  | 2.52 |
| 2 | Artisans' tools ............ | 42603 | 43415 | + 812 |  | 1.91 |
|  | Beef and pork packing | 42444 | 43532 | + 1088 | + | 2.56 |
| $\stackrel{4}{5}$ | Boots and shoes | 34206 | 33446 | - 760 |  | 2.22 |
| 5 | Boxes (packing) | 35231 | 34975 | - 256 |  | . 73 |
| 7 | Breweries | 50830 | 49413 | - 1417 |  | 2.79 |
| 7 | Brick | 33895 | 35936 | + 2041 | $+$ | 6.02 |
| 8 | Brooms and brushes | 27065 | 28177 | $1+1112$ | $+$ | 4.10 |
| 9 | Cement | 39471 | 38235 | 1 - 1236 |  | 3.13 |
| 10 | Cigars | 37077 | 39112 | $11+2035$ | $+$ | 5.49 |
| 11 | Clothing | $352 \cdot 45$ | 31643 | - 3602 |  | 10.22 |
| 12 | Cooperage | 42810 | 43352 | + 542 | + | 1.27 |
| 13 | Cotton and linen goods | 33628 | 33840 | $1+\quad 212$ | $+$ | -. 63 |
| 14 | Crackers and conrectionery | 22061 | 22667 | $11+606$ | $+$ | 2.75 |
| 15 | Electric and gas apparatus | 44710 | 41751 | 1 - 2959 |  | 6.62 |
| 16 | Flour | 50202 | 49174 | - 1028 |  | 2.05 |
| 17 | Food preparations | 23939 | 24988 | $11+1049$ | $+$ | 4.38 |
| 18 | Furniture | 35561 | 37077 | $1+1516$ | $+$ | 4.26 |
| 19 | Furs | 34051 | 29311 | $11-4740$ |  | 13.92 |
| 20 | Iron | 46414 | 49417 | + 3003 | + | 6.47 |
| 21 | Knit goods | 22584 | 24040 | + 1456 | + | 6.45 |
| 22 | Leather | 40311 | 43076 | $11+2765$ | $+$ | 6.86 |
| 23 | Lumber .. | 46776 | 46479 | $11-297$ |  | . 63 |
| 24 | Machinery | 51539 | 56099 | $1+4560$ | $+$ | 8.85 |
| 25 | Malt ....... | 55797 | 54918 | - 879 |  | 1.58 |
| 26 27 | Paint | $45461$ | $47290$ | $1 \begin{array}{r}1 \\ \pm \\ \hline\end{array} 1888$ | $\pm$ | 4.02 14.98 |
| $\stackrel{27}{28}$ | Paper and cigar boxes | 246 <br> 379 <br> 42 | 21039 43133 | 1 - $\quad 3588$ | + | 14.98 13.68 |
| 29 | Saddlery ..... | 36585 | 33389 | (\|- 3196 |  | 8.74 |
| 30 | Sash, doors and blinds | 37799 | 38784 | + 985 | + | 2.61 |
| 31 | Sheet metal | 30517 | 30514 | 03 |  |  |
| 32 | Ship building | 47462 | 50227 | + 2765 | $+$ | 5.83 |
| 33 | Soap | 29623 | 30121 | $11+498$ | + | 1.68 |
| 34 | Staves | 33126 | 33163 | + 37 | $+$ | . 11 |
| 35 | Stone | 56049 | 56264 | + 215 | $+$ | . 38 |
| 36 | Toys | 28745 | 29091 | + 346 | $+$ | 1.20 |
| 37 | Trunks | 32424 | 33611 | $1+1187$ | $+$ | 3.66 |
| 38 | Veneer | 32681 | 31350 | $11-1331$ |  | 4.07 |
| 39 | Wagons | 44305 | 47038 | $11+2733$ | + | 6.17 |
| 40 | Woodenware | 35505 | 37628 | $11+2123$ | $+$ | 5.98 |
| 41 | Woolen goods | 31760 | 31506 | 254 |  | . 80 |
| 42 | Miscellaneous | 38261 | 41678 | + 3417 | $+$ | 8.93 |
|  | Average all industrie | \$412 00 | \$42200 | $11+\$ 1000$ | + | 2.43 |

The preceding table shows for each industry included the average yearly earnings in 1900 and 1901.

To begin with it is perhaps proper to call attention to the situation when all industries are included. In the last entry at the foot of the table it is seen that the average yearly earnings to each person for all industries was $\$ 412$ in 1900 and $\$ 422$ in 1901. A comparison of the figures for the two years thus shows that the earnings in the latter exceeded those of the former by $\$ 10$, which is the same as an increase of 2.43 per cent.

In considering each industry by itself many striking features may be noticed. One of the first things to attract attention is differences in the earnings as between the different industries. The reasons for this are many. No attempt will be made to explain them, though in most cases they are quite plain. Another feature to attract attention is the increase and decrease as between the two years. With these our concern is greater and for this reason a few of the leading facts will be pointed out.

In looking over the table it will be noticed that 15 industries show a decrease in the earnings in 1901, and that 27 show an increase for that year. These changes varied greatly in both cases. In some instances they amounted to quite a sum, in others they were merely nominal.

Of the decreases, one, that for furs amounted to about $\$ 47$ for the year. Four other changes, those for electric goods, boxes, saddlery, and clothing ranged from about $\$ 30$ to about $\$ 36$ for the year. The remaining decreases were quite low, amounting to only a few dollars each.

Of the increases the highest of about $\$ 52$, was that for paper and pulp. The next in order with about $\$ 46$ is machinery. Ship building shows an increase of about $\$ 34$ and seven others have increases ranging from about $\$ 20$ to about $\$ 30$. For the remaining seventeen industries the increase varies from a nominal sum only to about $\$ 20$.

As to the causes of these changes the returns did not offer much in the way of explanation. In some cases they occurred through the increase in the proportion of the cheaper or lower
priced labor and other changes of this nature. In other instances again other forces were at work with the net result that wages suffered. In few, if any cases were the decreases due to any direct reduction in the rate.

## Time in Operation.

Each establishment reporting gave the number of days it had been in operation during the year. From these facts the average days in operation by each industry and by all indus. tries were computed.

In judging of industrial conditions facts of this kind are of the greatest importance. They show among other things what proportion of the time they were doing business and how long they were idle. That such facts alone will shed a great deal of light upon the business situation goes without saying. For no one would say that the business was brisk if the amout of it on hand could be disposed of in one-half or even two-thirds of the time. On the other hand few complain of dull times when they have as much to do as they can attend to when they devote all their time to it. They are also useful in comparing conditions from year to year. The year which shows the most time in operation is usually regarded as the best from a business point of view. For not only is it likely that more goods have been turned out but that larger sums have been paid as wages. And these facts are after all the real measure of industrial conditions.

The following table relates to the time in operation. It shows the average number of business days for each industry as well as for all industries. It also shows the changes in 1901 as compared with the preceding year expressed both in number and per cent.


For all industries this table shows that the average time of operation was 272 days in 1900 and 276 days in 1901. This is an increase of 4 days, or one and one-half per cent. for the latter year.

Considering the industries in detail it is found that 20 show a decrease in days in operation; that 20 show an increase in this respect and that 2 show no change. On the whole, however, the increases amounted to more than the decreases, as is
plain from the fact that on the whole there was a gain during the period.

Idieness on the part of a manufacturing plant is not always caused by lack of orders or business. There are many other causes in operation many of which have absolutely no relation to the amount of business on hand. Thus there is not a plant in existence that is not compelled to shut down for repairs about so often. In fact the greater the volume of business, or the pressure under which it is run, the oftener repairs are apt to become necessary. Then again there may be a shortage in material or help. Things counted on may have miscarried. Shipments may have been delayed. Accidents may have occurred. In short the operating time may be effected in many different ways.

## Private Firms and Corporations.

The establishments reporting also disclosed whether they were operating under private or corporate management. The respective number in each case is shown in the basic tables. The changes between the two years are as follows:

Number of private firms in 1900 . . . . . . . . . . . 540
Number of private firms in 1901 . ............. . . 537
Decrease in 1901 ............................... 3
Per cent. of decrease . . . . . . . . . . . . . . . . . . . . . . 56
In comparing these figures we find that the private firms decreased in number during the period. The change in this respect was not very large amounting only to 3 firms, but it is probably big enough to illustrate the tendency.

The number of corporations for the two years was as follows.

$$
\text { Number of corporations in } 1901 \text {. . . . . . . . . . . . } 598
$$

Number of corporation in 1900 ............... 595
Increase for 1901 ............................... 3
Per cent. of increase . . . . . . . . . . . . . . . . . . . . . . 50
The corporations increased from 595 in 1900 to 598 in 1901. This increase thus corresponds to the decrease in the private firms. As time goes on there is a gradual change from the old
style of private or partnership management to corporate control. These figures thus seem to be in full harmony with the general tendency in the industrial world.

## Partners and Stockholders.

The respective number of partners and stockholders for the two years were also reported. The number of partners stood as follows:


In the 540 establishments under private firm management in 1901 there were 890 partners, or about 1.65 partners on the average to each establishment.

In 1901 for the 537 private firms there were 895 partners, or an average of 1.66 to each.

The male partners numbered 852 in 1900 and 860 in 1901, showing an increase of 8 .

The female partners numbered 38 in 1900 and 35 in 1901, a decrease of 3 partners.

The total number of partners numbered 890 in the former and 895 in the latter year showing an increase of 5 .

While there was a decrease of 3 in the number of the private firms there was an increase of 5 in the number of the partners.

Facts of this nature are important because they throw much light upon the tendencies in the form of the management and the number of those who are interested as proprietors.

The respective number of male, fmale, and total stockholders stood as follows:

|  | Male. | Female. | Total. |
| :---: | :---: | :---: | :---: |
| Number of stockholders, 1901 |  |  |  |
| Number of stockholders, 1900 | 14,388 | 3,571 3,118 | 17,909 16,956 |
| Changes (increase) ........... | 500 | ${ }^{3} 453$ | $\begin{array}{r}16,953 \\ \hline\end{array}$ |

In 1901 there were 17,909 stockholders, of whom 80 per cent. were male and about 20 per cent. were female.

In 1900 the stockholders numbered 16,956. Of these about 81.60 per cent. were male, and 18.40 per cent. female.

The average number of the stockholders was 28.5 to each of the 595 corporations in 1900, and 29.9 to each of the 598 corporations in 1901.

In comparing the male stockholders it is found that they increased from 13,838 in 1900 to 14,338 in 1901. This increase amounts to 500 persons.

For the female the increase is 453 or from 3,118 in the former to 3,571 in the latter year.

The relative proportion of males and females who are interested as owners seems to differ greatly under the two forms of management. Thus we find that the female stockholders constituted about 20 per cent. of the whole number in 1901, as against only 4.27 per cent. for the female partners. In 1900 the relation is 18.40 per cent. for the female stockholders and 4.28 per cent. for the partners. The reasons for this variation could only be made clear through a complete analysis of the relative merits; from an investment point of view, of undertakings under private and corporate management.

## Capital Invested.

Capital is the third factor in production. It is one of the most important elements in all productive undertakings. It seems to rank with labor and land. It makes both more productive. In the industrial world it has grown to such an importannce that the amount used in any industry must be known before any intelligent opinion as to the condition can be rendered.

By capital here is meant all concrete objects that have been made to assist in production. Thus it includes the respective amounts invested in land, buildings, machinery, tools and other equipment. It also includes the amount of cash capital employed whether on hand or invested in materials, stocks, and sundries.

The following table shows, by industries, the amount of capital invested in 1900 and 1901, together with changes for the latter year.


Here we find the investment for 1900 and 1901. It is given by industries and the table also shows the increase and decrease as the case may be for the latter year when compared with 1900.

The total capital for all industries was $\$ 180,451,482.02$ in 1900 and $\$ 195,686,029.05$ in 1901. Between the two years there was thus an increase in the amount of capital used of $\$ 15,234,547.03$ or of 8.44 per cent.

In taking each industry separately it is seen that 37 showed an increase in the amount of capital employed and that 5 showed a decrease. Those showing a decrease were knit goods, leather, lumber, paint, paper and cigar boxes. These decreases are not large. Especially is this so when the whole invesment is considered. The largest decrease was for lumber amounting to $\$ 4,250,981.57$ or to 12.92 per cent. of the investment for 1900 . In the other cases it ranges from about three and one-half per cent. to about five and one-half. The lumber industry in this state is on the decline and hence the decrease is expected. In the other four industries, however, the falling off was, as far as could be determined, only due to some temporary cause.

The figures in this table are certainly gratifying. They go far toward showing the healthy condition of our manufacturing industries.

## Value of the Goods Made or Work Done.

Each one of the 1,135 establishments included reported in full as to the value of their product for the years in question. The facts thus obtained are important. For certain purposes, those for instance, of showing the business condition in our manufacturing industries they are perhaps the most valuable of any that are presented. Without going into details it can perhaps be said that an increase in the output indicates growth. It shows that business is on the increase, and this in turn usually means that conditions are prosperous. A decrease on the other hand, particularly when observed for more than one year, is apt, in fact almost certain to indicate directly the opposite conditions from those that exist when an increase is shown.

In the table which follows is shown for each one of the in-
dustries included and for all of them when combined, the value of the product for 1900 and 1901.

| No. | Industries. | Value of Goods Made or <br> WORK DONE IN |  | Increase or DeCREASE IN 1901. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1903. | 1901. | Number. | Perct. |
| 1 | Agricultural implements.. | \$7,606,108 15 | \$7,613,868 24 + | \$7,760 09 |  |
|  | Artisans' tools ............. | 654,689 88 | $753,20026+$ | 98,510 38 | $+15.05$ |
| 3 | Beef and pork packing | 15,247,159 65 | 16,189,283 05 \|| | 942,123 40 | - 6.18 |
| 4 | Boots and shoes | 4,302,105 48 | 4,629,859 96\||+ | 327,754 48 | + 8.08 |
| 5 | Boxes (packing) | 1,521,277 76 | $1744,78057 \\|+$ | 223,502 81 | +14.69 |
| 6 | Breweries | 23,086,905 21 | 23,447,987 24 | 351,082 03 | 1.52 |
| 7 | Brick | 444,690 50\| | 426,496 14\|| | 18,194 36 | - 4.09 |
| 8 | Brooms and bru | 234,141 25 | 272,295 8911+ | 38,154 64 | $+16.30$ |
| 9 | Cement | 1,354,977 68 | 1,542,812 47\||+ | 187,834 79 | +13.86 |
| 10 | Cigars | 1,071,888 37 | 1,067,085 18\|| | 4,803 19 | . 45 |
| 11 | Clothing | 5,569,254 74 | 5,814,488 23\||+ | 245,233 49 | 4.40 |
| 12 | Cooperage | 718,788 43 | $729,431391 \mid+$ | 10.64296 | + 1.48 |
| 13 | Cotton and linen | 682,495 77] | 466,896 53\||- | 215,599 24 | $-31.59$ |
| 14 | Crackers and confectionery | 2,914,118 43 | $3,644,02513!+$ | 729,906 70 | + 25.05 |
| 15 | Electric and gas appa- ratus .............. | 3,222,283 59 | $3,922,02947!\mid+$ | 699,745 88 | $21.72$ |
| 16 | Flour | 13,979,590 75 | 14,235,613 3811+ | 256,022 63 | 1.83 |
| 17 | Food prepa | 1,366,120 74 | 1,130.745 1211- | 235.37562 | -17.23 |
| 18 | Furnitu | 9,009,185 85 | 9,246,101 43II+ | 236,915,581 | + 2.63 |
| 19 | Furs | 743,616 37 | $847.6305411+$ | 104.004171 | + 13.99 |
| 20 | Iron | 8,630,831 48 | 10,283,592 3011+ | 1,652,760 82 | 19.15 |
| 21. | Knit gcods | 3,750.731 92 | 3.612,680 6911- | 138.05123 | 3.70 |
| 22 | Leather | 13,155,027 59 | 13,769,956 8311+ | 614,929 24\| | 4.67 |
| 23 | I, umber | 28,145,985 97\| | 27.135,703 8411- | 1,010.282 13 | - 3.60 |
| 24 | Machine | 16.508,303 44 | 18.206.285 8811+ | 1,697.982 441 | + 10.29 |
| 25 | Malt | 2,913,696 66 | 3,146,856 3311+ | 233,159 67\| | 8.00 |
| 26 | Paint | 482,492 75 | $439.0529311-$ | 43,439 82 | 9.00 |
| 27 | Paper and cigar boxes | 925,695 24 | 826.620 9711- | 109,074 271 | - 11.66 |
| 28 | Paper and pulp | 10,090.344 241 | 12,699.395 0711+ | 2,609.050 831 | + 25.86 |
| 29 | Saddlery | 466.83859 | $502.7759511+$ | 35.93736 | + 7.70 |
| 30 | Sash | 5,068,839 02 | 5,875,235 4511+ | 806,396 43 | $+15.91$ |
| 31 | Sheet metal | 3.058 .64366 | 4.081 .174 0511+ | 1,022.530 39 | $+33.43$ |
| 32 | Ship building | 1,227,269 401 | 1,313.326 7911+ | 86.057391 | $+7.01$ |
| 33 | Soap | 695,260561 | $721.8858611+$ | 26.635301 | 3.83 |
| 34 | Staves | 300.319531 | $335.997 \mathrm{n411}+$ | 25.607 511 | + 11.86 |
| 35 | Stone | 525,111 50 | 691,397 7911+ | 166,286 29 |  |
| 26 | Toys | 542.824571 | $560.4915911+$ | 17.66702 | $+3.25$ |
| 27 | Trunk | 1,459.747 341 | 1,491, $\mathrm{ORO} \mathrm{nOll}+$ | 31.259 661 | + 2.14 |
| 38 | Veneer | 632.259911 | $652.4267311+$ | 20.176821 | + 3.19 |
| 29 | Wagnss | 5,699.29781! | 6,375.566 0411+ | 746.268231 | $+13.26$ |
| 40 | Wooden | 402,500 001 | $474,9580811+$ |  |  |
| 41. | Woolen goods | 1.848.707 6.91 | 1.693 .711 83 81 l | 154.99586 | 8.28 |
| 42 | Miscellaneous | 6,858,029 751 | 7,042,928 9611+ | 184;,899 21\| |  |
|  | Total all industries.. | $\$ 205,068,15722$ |  |  |  |

This table should be studied in detail. It gives not only the value of the business for each year, but these facts have been compared, and the results of these comparisons are so presented as to show the increases and decreases in the latter year.

In going over the table and examining each industry by itself,
it is found that most of them show the largest product in 1901. In fact the increase in most cases is quite marked.

The figures which represent all the industries included show the total output was valued at $\$ 205,068,157.22$ in 1900 and $\$ 219,657,581.22$ in 1901. In the latter year over the former there was thus an increase of $\$ 14,589,424$, or 7.07 per cent. This is a change that in most cases corresponds quite closely to that for the other elements.

Of the 42 industries 33 thus show a greater business in the latter year while for 9 there was a falling off in the output. Those showing a decrease are: Brick, cigars, cotton and linen goods, food preparations, knit goods, lumber, paint, paper, etc., boxes, and woolen goods. The change is greatest in lumber. This was of course to be expected in view of the situation of this industry in this state. Next in order from this point of view are food preparations and cotton goods. Then comes woolen goods and paper boxes. The remaining decreases are small.

Considering the per cent. of the decrease, cotton goods come first and food preparations second, with a respective change of 31.59 and 17.23 per cent. Paint 9 per cent. and woolens 8.38 per cent., while lumber with the largest actual decrease only show 3.60 when it comes to be figured out in per cent.

The largest actual increases are in sheet metal goods, iron, paper and pulp, wagons, machinery. In many of these the changes are not only large when the actual amount is considered but they are so relatively.

On the whole the figures in this table indicate beyond a doubt a healthy and substantial growth in our manufacturing industries.

## Total Amount Paid as Wages.

The following table shows for each industry in 1900 and 1901 the total amount paid as wages together with increase or decrease in 1901 when compared with the former year.

By the total wages in this case is meant the entire amount paid as wages for the labor employed in obtaining the product for the year.

This table, like the ones for capital, product, etc., is merely a summary of the basic tables. That is the figures, etc., presenting the total wages here are the same as those given in the basic tables.


The total amount paid as wages by all industries was $\$ 32,378,587.52$ in 1900 , and $\$ 34,863,673.56$ in 1901. Between the two years there was according to this an increase of
$\$ 2,485,086.04$, or of 7.68 per cent. These facts are shown in the above table, and may be taken as representing the situation for the state.

While thus there was an increase in the amount paid when all industries are included ; it is a fact that this increase was shared by each industry. This is plainly pointed out in the table. It is seen there that of the 42 industries included 33 show an increase and 9 show a decrease. That the former exceed the latter in amount as well as in number is evident from the figures for all industries.

The general tendency in wages as well as in other respects was thus upward. The industries which showed a deviation from the general tendency were: Agricultural implements, packing, cooperage, cotton goods, food preparations, lumber, paper boxes, saddlery, and woolens. The changes in these respects, with possibly one exception that of beef, etc., packing, seems to be in harmony with the changes in most of the other factors.

The increases were greatest in machinery, and paper and pulp. This of course applies to the amount of increase only when it comes to the per cent. Sheet metal goods had the lead with paper and pulp a close second. Iron, ship building and several other industries also show heavy increases.

## SUMMARIES.

From the facts thus brought out in the foregoing analysis the following summaries may be made.

## Classified Weekly Earnings.

The presentations under this head show clearly the situation with respect to wages. For 1900 they included 96,675 persons of whom 82,164 , or 84.99 per cent were male, and 14,511 , or 15.01 per cent, were female. For 1901, 99,758 persons are included, of whom 84,959 , or 85.17 per cent. were male, and 14,799 , or 14.83 per cent., female. For comparative purposes except as between the classes the presentations are somewhat unwieldy, and for this reason it is rather difficult to ascertain the exact increase in 1901 over 1900. That there was a substantial
increase for 1901 is plain. Of this the tables furnish an abundance of evidence. One illustration may be in point. In 1900, $\check{5} 6.96$ per cent. of the male, 3.38 per cent. of all the female, and 48.93 per cent. of the total of both received $\$ 9$ or over per week. In 1901 this amount was received by 60.01 per cent. of the male, 4.24 per cent. of the female and 51.74 of the total of both sexes. Another point may help to show the increase. Thus in 1900 tle average weekly earnings to each person was $\$ 9.78$ for the male, $\$ 4.36$ for the female, and 8.97 for both; while for 1901 the amount was: male 10.13 , female $\$ 4.46$, total both male and female $\$ 9.21$. These figures have been computed upon precisely the same basis and are believed to represent the situation.

## Persons Employed.

The presentations relating to the number of persons employed each month and to the range of employment disclosed some interesting facts. For both years the largest number for any month are found during the summer season, and the smallest number in the winter. In 1900, for instance, June shows $81,9 \dot{7} 7$ persons and December 74,483. In 1901, July shows 86,198 persons and January 76,495. In both cases these are the highest and lowest months. The range between the highest and lowest was 7,504 , or 9.15 per cent. in 1900 , and 9,122 , or 11.26 per cent. in 1901 . With the highest month each year representing full employment, it necessarily follows that for each of the other months a certain per cent. were unemployed. For one month the proportion of the unemployed was greater in $190 \overline{1}$ than in 1900, but for the other months the range was a trifle narrower, making the average number unemployed 4.11 per cent. in 1900 and 3.97 per cent. in the latter year. As a whole the figures indicate that not only were more persons employed in 1901, but that, with the exception of one or two months, the fluctuations were less, or employment slightly more steady.

## Smallest; Greatest, Average Number Persons.

The smallest number of persons employed during any month was 74,483 in 1900 and 76,495 in 1901, an increase for the latter year of 2,012 , or 2.70 per cent. The greatest number was

81,997 in 1900, and 86,198 in 1901. Here the increase is 4,211 persons or 5.14 per cent.

The average nurnber of persons was 78,632 in 1900 , and 82,775 in 1901 , an increase of 4,143 , or 5.27 per cent. In the latter year there was thus a substantial increase in the number employed. Taking each industry by itself it was found that 32 showed an increase in the average number employed and that 9 gave a decrease. The largest increases were noticed for sheet metal goods, paper and pulp, machinery, breweries, iron, sashdoors and blinds, clothing and furniture. In each of these industries were employed on the average from 300 to 600 more persons in the latter year than in the former. The largest decrease was in lumber where it amounted to 473 persons. Knit goods had 113 persons less, food preparations 112, and cotton goods 104 persons less than in 1900. The decreases, however, do not foot up to nearly as many persons as the increases.

## Average Yearly Earnings.

The average yearly earnings for all persons regardless of sex and age was $\$ 412$ in 1900 and $\$ 422$ in 1901. There was thus an increase for the latter year of $\$ 10$. These figures represent all industries. In taking up each industry separately many variations were found. In some the earnings were a great deal higher, in others lower. Some showed an increase in earnings for 1901 others again a decrease. Among the industries in which the earnings were the highest are: Agricultural implements, breweries, flour, iron, machinery, malt, ship building, and stone cutting. There are several others in which the earnings are comparatively high, but those enumerated are in the lead. Among the industries with the lowest earnings are found: Brooms, crackers, etc., food preparations, furs, knit goods, paper boxes, toys, etc. In all of these the earnings were below $\$ 300$ per year. In all 27 out of the 42 industries showed an increase in earnings, while 15 showed a decrease. But as seen, the net result of these changes was an increase in the earnings when all are included.

## AVERAGE NUMBER OF DAYS IN OPERATION.

As a whole the establishments included were in operation more days in 1901 that in 1900. This is seen from the fact that the average days in operation was 276 in the former year and 276 in the latter, or an increase of four days for 1901. Not all of the industries shared in this increase for of those included, 20 showed a decrease and 2 no change. The industries showing the greatest increase were: Artisans' tools, boxes, brooms, etc., furs, iron, trunks and veneer. The largest decreases were in cotton, saddlery, and ship building.

## Private Firms, Corporations.

There is a slow but constant change from year to year in the mode of management of our manufacturing plants. The old style of doing business seems to be gradually fading away. The corporation with public ownership is replacing the private firm or the old partnershíp. Of the 1,135 establishments included, 540 were private firms and 595 corporations in 1900, while in 1901 the private firms had decreased to 537, and the corporations increased to 598. During the period therefore three establishments changed from private firms to the corporate mode of management. The average amount of capital invested to each establishment was about $\$ 159,000$ in 1900 and $\$ 171,500$ in 1901. The average number of persons employed to each establishment was about 69 and 73 respectively for the two years; and the average value of the product was about $\$ 180,000$ for the former and $\$ 193,530$ for the latter year.

## Partners and Stoclholders.

In 1900, the 540 firms had 852 male and 38 female, or a total of 890 partners. In 1901 the 537 firms had 860 male, 35 female, or a total of 895 partners. For the latter year there was thus an increase of 8 in the number of male partners and a decrease of 3 in the female. The average number of partners to each firm was 1.65 in the former year and 1.67 in the latter.

The corporations increased in number from 595 in 1900 to 598 in 1901. The male stockholders increased from 13,838 to 14,338 , or 500 persons. The females increased from 3,118 to 3,571 , or 453 persons. The average number of stockholders to each increased from 28.5 to 29.9 persons.

## Capital Invested.

During the period there was an increase of $\$ 1 \check{s}, 234,547$, or 8.44 per cent., in the capital invested. In other words the total amount changed from $\$ 180,451,482$, to $\$ 195,686,029$. Of the industries included 37 show an increase of the amount invested for the latter year as compared with the former, and 5 a decrease. The greatest actual increases were shown for breweries, iron, machinery, paper and pulp and wagons, etc. The greatest decrease was that for lumber.

## Value of Goods Made or Work Done.

The products of all the industries increased from $\$ 205,068,157$ in 1900 to $\$ 219,657,581$ in 1901. The increase thus amounted to $\$ 14,589,424$, or 7.07 per cent. Every industry, however, did not show an increase. Of the 42 which are included, 9 gave a decrease. The greatest increase is that for paper and pulp, while lumber shows the greatest decrease. The changes in the value of the output seem on the whole in full harmony with those that took place in most of the other elements of production.

## Total Amount Paid as Wages.

In obtaining their product all the establishments included paid in wages $\$ 32,378,587$ in 1900 and $\$ 34,863,673$ in 1901. The change thus amounts to $\$ 2,485,068$, or 7.68 per cent. Thirty-three industries show an increase in the amount of wages paid and nine a decrease. The greatest increases were those for machinery, paper and pulp, iron, and furniture. The greatest decrease on the other hand was in lumber.

## Stock or Raw Material.

The value of the materials and supplies consumed or used up in production was $\$ 103,600,000$, or about 50.5 per cent of the total value of the product in 1900 , and $\$ 110,568,000$, or about 50.3 per cent. of the value of the product in 1901. For the latter year there was thus an increase in the value of the material used amounting to $\$ 6,986,564$, or 6.75 per cent. The facts as to the cost of materials were not included in the tables. The data, however, were obtained and the totals were given here.
employment and earnings for 12 industries in 1899 and 1900.

Under this head in this part are included a compilation of the reports from 383 establishments for 1899 and 1900. These reports have been classified into 12 industries, and the basic facts will be found in five tables which may be described as follows:

Table I shows by industries, for each of the two years covered, the classified weekly earnings for the week when the greatest number of persons were employed. The males and females have been classified separately as well as together, and the tables as they stand give the number of persons in each wage class. The per cent. of the total number in each class of the total number included are also given.

Table II shows by industries for the two years, the number of persons employed each month. It also shows the range of employment and unemployment, as computed from the number thus employed. In these computations the number for the month during which the greatest number were employed is regarded as full employment.

In table III is shown the total yearly earnings, or the amount paid as wages in 1899 and 1900 for each one of the 12 industries included, together with the increase or decrease, as the case may be in 1900 , when compared with 1899.

In table IV is given for each industry the average yearly earnings to each person employed. The average earnings were obtained by dividing the total amounts paid as wages with the average number of persons employed.

Table V gives by industries the average number of days in operation. It also shows the changes for 1900 when compared with the preceding year.

As will be noticed the tables that follow are, in form, precisely like those employed for the presentation of similar facts for other indusiries in this report.

## CLASSIFIED WEEKLY EARNINGS IN 1899-1900-12 INDUSTRIES.

Table I.

| Classifed Wages. | 1899 |  |  |  | 1900 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\underset{\text { male. }}{\mathrm{Fe}}$ | Tot al. |  | Male. | Fe. male. | Total. |  |
|  |  |  |  | Per ct. ${ }_{1}$ |  |  | No. | \| Perct. |

Beverages- 20 Establishments.


Chemicals-9 Establishments.

| Under $\$ 5.00$ | 6 | 15 | 21 | 17.80 | 8 | 17 | 25 | 21.74 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\$ 5.00$ but under $\$ 6.00$ |  | 4 | 4 | 3.39 | 7 | 3 | 10 | 8.70 |
| 6.00 but under 7.00 | 4 | 4 | 8 | 6.78 | 9 | 4 | 13 | 11.30 |
| 8.00 but under ${ }^{8.00}$ | 9 |  | 9 | 7.63 | 11 |  | 11 | 9.57 |
| 9.00 but inder 10.00 | 13 |  | ${ }_{13}^{9}$ | 7.63 | 11 | 1 | 12 | 10.43 |
| 10.00 but under 12.00 | 21 |  | 21 | 17.80 | 14 |  | 13 | 11.30 |
| 12.00 but under 15.00 | 18 |  | 18 | 15.25 | 11 |  | 11 | 9.57 |
| 15.00 but under 20.00 | 9 |  | 9 | 7.62 | 5 |  | 5 | 4.35 |
| 20.00 and over | 6 |  | 6 | 5.08 | 1 |  | 1 | . 87 |
| Total | 95 | 23 | 118 | 100.00 | 90 | 25 | 115 | 100.00 |

Coal and Wood-27 Establishments.


Fancy Articles-12 Establishments.

| Under \$5.00 ......... | 69 | 192 | 261 | 52.10 | 52 | 153 | 205 | 41.67 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\$ 5.00$ but under $\$ 6.00$ | 17 | 4 | 21 | 4.19 | 20 | 16 | 36 | 7.32 |
| 6.00 but under 7.00 | 43 | 1 | 44 | 8.78 | 43 | 16 2 | 45 | 9.15 |
| 7.00 but under 8.00 | 26 |  | 26 | 5.19 | 23 | 2 | 25 | 5.08 |
| 8.00 but under 9.00 | 21 |  | 21 | 4.19 | 22 |  | 22 | 4.47 |
| ${ }_{10}^{9.00}$ but under 10.00 | 50 |  | 50 | 9.98 | 42 | 1 | 43 | 8.74 |
|  | 28 |  | 28 | 5.59 | 62 |  | 62 | 12.60 |
| 15.00 but under 20.00 | 12 |  | 12 | 5.99 29 | 28 |  | 28 | 5.69 |
| 20.00 and over ...... | 8 |  | 8 | 1.60 | 19 |  | 19 | 3.86 1.42 |
| Total | 304 | 197 | 501 | 100.00 | 318 | 174 | 492 | 100.60 |

## CLASSIFIED WEEKLY EARN'INGS IN 1899-1900.

Table I-Continued.

| Classified Wages. | 1899 |  |  |  | 1900 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | $\underset{\text { male- }}{\text { Fe }}$ | Total, |  | Male. | $\begin{gathered} \text { Fe- } \\ \text { male. } \end{gathered}$ | Total. |  |
|  |  |  | No. | Per ct. |  |  | No. | Perct. |

Grain and Warehouse-18 Establishments.

| Under $\$ 5.00 \ldots \ldots .$. |  |  |  |  | 4 | 1 | 5 | 1.83 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\$ 5.00$ but under $\$ 6.00$ |  |  |  |  | 1 |  | 1 | . 37 |
| 6.00 but under 7.00 |  |  |  |  | 1 |  | 1 | . 37 |
| 8.00 but under 9.00 | 3 |  | 3 | . 97 | 1 |  | 1 | . 37 |
| 9.00 but under 10.00 | 80 | 5 | 85 | 27.69 | 72 | 5 | 77 | 20 |
| 10.00 but under 12.00 | 57 |  | 57 | 18.57 | ${ }_{8}^{62}$ |  | ${ }_{83}^{62}$ | 22.71 |
| 12.00 but under 15.00 | 122 |  | 122 | 39.74 | 83 |  | 83 | 120 |
| 15.00 but under 20.00 | 34 6 |  | 34 6 | 11.08 1.95 | 35 7 |  | 35 7 | 12.56 |
| 20.00 and over ...... | - 302 | 5 | 307 | 100.00 | 267 | 6 | 273 | 100.00 |

Laundries-69 Establishments.

| Under $\$ 5.00$ |  | 319 | 326 | 33.61 | 26 | 336 188 | 362 196 | 36.16 19.58 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\$ 5.00$ but under $\$ 6.00$ | 6 | 238 | 244 | 25.15 | 8 | 188 | 178 | 17.78 |
| 6.00 but under 7.00 | 12 | 144 | 156 | 16.08 | 11 | 167 | 178 | 17.78 |
| 7.00 but under 8.00 | 13 | 38 | 51 | 5.26 | 13 | 64 | 77 | . 3.69 |
| 8.00 but under 9.00 | 14 | 12 | 26 | 2.68 | 9 | 21 | 30 | 3.00 |
| 9.00 but under 10.00 | 35 | 6 | 41 | 4.23 | 25 | 8 | 33 | 3.30 |
| 10.00 but under 12.00 | 50 | 9 | 59 | 6.08 | 50 | 12 | 62 | 6.19 |
| 12.00 but under 15.00 | 43 | 3 | 46 | 4.74 | 41 | 3 | 44 | 4.40 |
| 15.00 but under 20.00 | 18 |  | 18 | 1.86 | 17 |  | 17 | 1.70 |
| 20.00 and over | 3 |  | 3 | . 31 | 2 |  | 2 | . 20 |
| Total | 201 | 769 | 970 | 100.00 | 302 | 799 | 1,001 | 100.00 |

Light and Power and Street Railways-65 Establishments.

| Under \$5.00 ......... | 60 | 1 | 61 | 1.94 | 60 | 1 | 61 | 1.83 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\$ 5.00$ but under $\$ 6.00$ | 5 |  | 5 | . 16 | 6 | 1 | 7 | . 21 |
| 6.00 but under 7.00 | 9 | 2 | 11 | . 35 | 20 | 2 | 22 | . 66 |
| 7.00 but under 8.00 | 26 | 1 | 27 | . 86 | 44 | 1 | 45 | 1.35 |
| 8.00 but under 9.00 | 183 | 1 | 184 | 5.86 | 208 | - | 208 | 6.25 |
| 9.00 but under 10.00 | 428 |  | 428 | 13.62 | 511 |  | 11 | 15.35 |
| 10.00 but under 12.00 | 1,086 | 1 | 1,087 | 34.60 | 1,101 | ........ | 1,101 | 33.06 24.75 |
| 12.00 but under 15.00 | 846 |  | 846 | 26.92 | 824 | . | 824 | 24.75 14.65 |
| 15.00 but under 20.00 | 460 |  | 460 | 14.64 | 488 |  | 488 | 14.65 1.89 |
| 20.00 and over | 33 |  | 33 | 1.05 | 63 |  | 63 | 1.89 |
| Total | 3,136 | 6 | 3,142 | 100.00 | 3,325 | 5 | 3,330 | 100.00 |

Lithographing-12 Establishments.

\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline Under \$5.00 \& 112 \& 54 \& 166 \& 33.74 \& 105 \& 54 \& 159 \& 33.13 <br>
\hline $\$ 5.00$ but under $\$ 6.00$ \& 21 \& \& ${ }_{25}^{21}$ \& 4.27 \& 28 \& 1 \& $\stackrel{29}{29}$ \& 5.83 <br>
\hline 6.00
7.00
but under

under \& 34
25 \& 1 \& $\stackrel{35}{26}$ \& 5.29 \& 20 \& 1 \& 21 \& 4.38 <br>
\hline 8.00 but under 9.00 \& 21 \& \& 21 \& 4.27 \& 24 \& \& 24 \& 5.00 <br>
\hline 9.00 but under 10.00 \& 12 \& \& 12 \& 2.44 \& 17 \& \& 17 \& 3.54 <br>
\hline 10.00 but under 12.00 \& 43 \& 1 \& 44 \& 8.94 \& 40 \& \& 40 \& 8.33 <br>
\hline 12.00 but under 15.00 \& 44 \& \& 44 \& \& 43 \& \& 43 \& 11.96 <br>
\hline 15.00 but moder 20.00 \& 70
53 \& \& 70
53 \& 14.23
14.77 \& $\stackrel{55}{64}$ \& \& 64 \& 13.33 <br>
\hline Total \& 435 \& 57 \& 492 \& 100.00 \& 423 \& 57 \& 480 \& 100.00 <br>
\hline
\end{tabular}

## CLASSIFIED WEEKLY EARNINGS IN 1899-1900.

Table I-Continued.

| Classified Wages. | 1899 |  |  |  | 1900 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\underset{\text { male. }}{\substack{\text { Fe- }}}$ | Total. |  | Male. | $\begin{aligned} & \mathrm{Fe} . \\ & \text { male. } \end{aligned}$ | Total. |  |
|  |  |  |  | Per ct. |  |  | No. | Per ct. |

Miscellaneous-42 Establishments.

| Under \$5.00 | 182 | 540 | 722 | 33.35 | 429 | 321 | 50 | 7 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$5.00 but under $\$ 6.00$ | 31 | 32 | 63 | ${ }_{2} 2.91$ | 56 | 55 | 111 | 4.84 |
| 6:00 but under 7.00 | 119 | 20 | 139 | 6.42 | 131 | 29 | 160 | 6.98 |
| 7.00 but under 8.00 | 158 | 5 | 163 | 7.53 | 147 | 12 | 159 | 6.93 |
| 8.00 but under 9.00 | 179 | 3 | 182 | 8.41 | 122 | 12 | 126 | 5.50 |
| 9.00 but under 10.00 | 151 | 1 | 151 | 6.79 | 235 | 6 | 241 | 10.51 |
| 10.00 but under 12.00 | 333 | 1 | 334 | 15.43 | 358 | 2 | 360 | 15.70 |
| 12.00 but under 15.00 | 210 | 1 | 211 | 9.74 | 180 | 1 | 181 | 7.89 |
| 15.00 but under 20.00 | 58 |  | 58 | 2.68 | 50 |  | 50 | 2.18 |
| 20.00 and over | 142 |  | 142 | 6.56 | 155 |  | 155 | 6.76 |
| Total | 1,562 | 603 | 2,165 | 100.00 | 1,863 | 430 | 2,293 | 100.00 |

Mixed Textiles-7 Establishments:

| Under $\$ 5.00$ | . 97 | 255 | 352 | 65.55 | 78 | 265 | 343 | 66.09 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\$ 5.00$ but under $\$ 6.00$ | 8 | 48 | 56 | 10.43 | 11 | 48 | 59 | 11.37 |
| 6.00 but under 7.00 | 6 | 29 | 35 | 6.52 | 1 | 22 | 23 | 4.43 |
| 7.00 but under 8.00 | 11 | 18 | 29 | 5.40 | 11 | 12 | 23 | 4.43 |
| 8.00 büt under 9.00 | 5 | 3 | 8 | 1.49 | 12 | 3 | 15 | 2.89 |
| 9.00 but under 10.00 | 9 |  | 9 | 1.68 | 11 | 3 | 14 | 2.70 |
| 10.00 but under 12.00 | 9 | 1 | 10 | 1.86 | 5 |  | 5 | . 96 |
| 12.00 but under 15.00 | 29 |  | 29 | 5.40 | 30 |  | 30 | 5.78 |
| ${ }_{20}^{15.00}$ but under 20.00 | 7 |  | 7 | 1.30 | 5 |  | 5 | . 96 |
| 20.00 and over | 2 |  | 2 | . 37 | 2 |  | 2 | . 39 |
| Total | 183 | 354 | 537 | 100.00 | 166 | 353 | 519 | 100.00 |

Printers and Publishers-89 Establishments.

| Under $\$ 5.00 \ldots \ldots . .$. | 194 | 135 | 329 | 28.41 II | 202 | 134 | 336 | 28.19 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$5.00 but under \$6.00 | 70 | 24 | 94 | 8.12 II | 66 | 32 | 98 | 8.22 |
| 6.00 but under 7.00 | 53 | 11 | 64 | 5.53 II | 50 | 27 | 77 | 6.46 |
| 7.00 but under 8.00 | 53 | 16 | 69 | 5.96 | 59 | 11 | 70 | 5.87 |
| 8.00 but under 9.00 | 47 | 15 | 62 | 5.35 II | 71 | 13 | 84 | 7.05 |
| 9.00 but under 10.00 | 73 | 4 | 77 | 6.65 II | 73 | 3 | 76 | 6.38 |
| 10.00 but under 12.00 | 119 | 14 | 133 | 11.49 II | 119 | 11 | 130 | 10.91 |
| 12.00 but under 15.00 | 161 | 2 | 163 | 14.07 II | 153 | 5 | 158 | 13.25 |
| 15.00 but under 20.00 | 97 |  | 95 | 8.20 II | 114 |  | 114 | 9.56 |
| 20.00 and over ...... | 72 |  | 72 | 6.22 II | 49 |  | 49 | 4.11 |
| Total | 937 | 221 | 1,158 | 100.00 II | 956 | 236 | 1,192 | 100.00 |

Railway Equipment-13 Establishments.

| Tnder $\$ 5.00$.........$\$ 5.00$hut under $\$ 6.001$ |  |  | $\begin{array}{r} 26 \\ 7 \end{array}$ | $\begin{aligned} & .48 ~ \\| ~ \\ & .13 \end{aligned}$ | 523 |  | 52 | . 99 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
| 6.00 but under 7.001 | 89 |  | 89 | 1.63 | 93 |  | 93 | 1.77 |
| 7.00 hut under 8.001 | 79.9 | 3 | 741 | 13.60 | 699 | 3 | 702 | 13.35 |
| 8.00 but under 9.001 | 500 |  | 500 | 9.18 | 519 | 1 | 520 | 9.89 |
| 9.00 hut under $10.00 \mid$ | 1.2 m |  | 1.202 | 23.06 | 1,078 | 1 | 1.079 | 20.52 |
| 10.00 but under 12.001 | 1940 |  | $194 n$ | 17.25 | 871 |  | 871 | 16.56 |
| 19.00 hut wnder 15.00\| | $1 . n 6 \pi$ |  | $1 . \mathrm{nan}$ । | 19.45 | $1 . \mathrm{n78}$ |  | 1.098 | 19.55 |
| 15.00 but under 20.001 | 577 |  | 577 | 10.59 | 590 |  | 590 | 11.21 |
| 20.00 and over | 307 |  | 307 | 5.63 | 321 |  | 321 | 6.10 |
| Total | 5,446 | 3 | 5,449 | 100.00 | 5,254 | 5 | 5,259 | 100.00 |

## PERSONS EMPLOYED, BY MONTHS-PER CENT., 1899 AND 190012 INDUSTRIES.

Table II.

| Classification byMonths. | Persons Employed in |  | Per Cent. of Employment in |  | Per Cent. of Unemployment in |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1899. | 1900. | 1899. | 1900. | 1899. | 1900. |
| Beverages-20 Establishments. |  |  |  |  |  |  |
| January | 177 | 189 | 74.68 | 74.70 759 | 25.32 | 25.30 24.11 |
| February | 175 | 192 | 73.84 81.86 | 79.89 79.45 | 18.14 | 20.55 |
| Maril . | $\stackrel{194}{19}$ | 224 | ${ }_{91.56}$ | 88.54 | 8.44 | 11.46 |
| May . | 223 | 231 | 94.09 | 91.30 | 5.91 | 8.70 |
| June | 227 | 234 | 95.78 | 92.77 | 4.22 | 7.23 |
| July | 237 | 253 | 100.06 | 100.00 |  |  |
| August | 229 | 251 | 96.62 | ${ }_{99}^{99.21}$ | 5.38 | 9.79 |
| September | 225 | 230 | 94.94 | ${ }^{90.91}$ | 5.06 12.24 | 9.09 17.79 |
| October | 208 | 208 | 87.76 | ${ }_{72}^{82.21}$ | 15.19 | 17.67 |
| November | 191 | 183 | 84.81 80.59 | 72.33 | 19.41 | 27.67 |
| Average | 209 | 215 | 88.19 | 84.98 | 11.81 | 15.02 |

Chemicals-9 Establishments.

| January | 71 | 79 | 62.83 | 74.53 | 37.17 898 | 25.47 26.42 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| February | 68 | 78 | 60.18 | 73.58 | 39.82 |  |
| March ... | 70 | 77 | 61.95 | 72.64 |  | ${ }_{27.36}^{27.36}$ |
| April | 75 | 77 | ${ }^{66.37}$ | 72.64 90 | 15.04 | 27.36 9.43 |
| May | 96 | 96 | 84.96 | 90.57 | 114.04 | 7.45 |
| June | 97 | 98 | 80.84 | 92.45 | ${ }_{7} 1.16$ | 7.55 |
| July . | 104 | 98 98 | 92.04 | ${ }_{93}^{92.45}$ | 4.42 | 6.60 |
| Sugust $\ldots$ | 1113 | $\stackrel{99}{97}$ | 95.58 100.00 | ${ }_{91}^{93.51}$ | 4.42 | 8.49 |
| September | 110 | 97 | 97.35 | 91.51 | 2.65 | 8.49 |
| November | 107 | 106 | 94.69 | 100.00 | 5.31 |  |
| December | 85 | 80 | 75.22 | 75.47 | 24.78 | 24.53 |
| Average | 92 | 90 | 81.42 | 84.91 | 18.58 | 15.09 |

Coal and Wood-27 Establishments.

| January | 1,335 | 1,209 | 63.57 | 55.95 | ${ }^{36.43}$ | 44.05 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| February | 1,375 | 1,268 | 65.48 | 58.68 | 34.52 | 41.32 |
| March ... | 1,299 | 1,213 | 61.86 | 56.13 | 38.14 | 43.87 |
| April | 1,230 | 1,169 | 58.57 | 54.10 | 41.43 | 45.90 |
| May | 1,655 | 1,657 | 79.29 | 76.68 | 20.71 | 23.32 |
| June | 1,608 | 1,571 | 76.57 | 72.70 | 23.43 | 27.30 |
| July | 1,774 | 1,773 | 84.48 | 82.05 | 15.52 | 17.95 |
| August | 1,957 | 1,964 | 93.19 | 90.88 | 6.81 | 9.12 |
| September | 2,088 | 2,022 | 99.43 | 93.57 | . 57 | 6.43 |
| October .. | 2,100 | 2,161 | 100.00 | 100.00 89 |  |  |
| N'ovember | 1,977 1,633 | 1,939 1,579 | 94.14 77.76 | 89.73 73.07 | 5.86 22.24 | 10.27 26.93 |
| December | 1,603 | 1,51 | 7.6 |  |  |  |
| Average | 1,669 | 1,627 | 79.48 | 75.29 | 20.52 | 24.71 |

Fancy Articles-12 Establishments.

| January | 359 | 373 | 72.23 | 76.54 | 27.77 | 23.46 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| February | 382 | 378 | 76.86 | 77.78 | 23.14 |  |
| March ... | 402 | 433 | 80.89 | 89.09 | 19.11 | 10.91 |
| April | 396 | 419 | 97.68 | 86.21 | 2.32 | 13.79 |
| May | 408 | 416 | 82.09 | 85.60 | 17.91 | 14.40 |
| June | 399 | 390 | 80.26 | 80.25 | 19.74 | 19.75 |
| July | 421 | 401 | 84.71 | 82.51 | 15.29 | 17.49 |
| August | 442 | 417 | 88.93 | 85.80 | 11.07 | 14.20 |
| September | 433 | 409 | 87.12 | 84.16 | 12.88 | 15.84 |
| October | 466 | 459 | 93.76 | 94.44 | 6.24 | 5.56 |
| November | 487 | 470 | 97.99 | 96.71 | 2.01 | 3.29 |
| December | 497 | 486 | 100.00 | 100.00 |  |  |
| Average | 424 | 421 | 85.31 | 86.63 | 14.69 | 13.37 |

## PERSONS EMPLOYED, BY MONTHS-PER CENT., 1899-1900.

Table II-Continued.

| Classification by Months. | Persons Employed in |  | Per Cent. of Em ployment in |  | Per Cent. of Unemployment in |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1899. | 1900. | 1899. | 1900. | 1900. | 1899. |

Grain and Warehouse-18 Establishments.

| January |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| February March | 206 | 207 | 73.83 6.13 | 75.09 73.67 | 26.17 30.87 | 24.91 |
| April | 214 | 230 | 71.81 | 81.85 | 28.19 | 18.15 |
| May | 212 | $\stackrel{227}{217}$ | 72.82 | 80.78 | 27.18 | 19.22 |
| June | 218 | $\stackrel{217}{206}$ | 71.14 | 77.21 | 28.86 | 22.79 |
| July | 211 | 206 | $73: 15$ 70.87 | 73.31 | 26.85 | 26.69 |
| August | 213 | 200 | 71.14 | 73.31 | 29.13 | 26.69 |
| September | 287 | 243 | 71.14 | 72.24 86 | 28.86 | 27.76 |
| October | 298 | 281 | 96.31 100.00 | 86.48 10000 | 3.69 | 13.52 |
| November | 270 | 265 | 100.60 |  |  |  |
| December | 240 | 232 232 | 90.60 80.54 | 94.31 82.56 | 9.40 19.46 | $\begin{array}{r} 5.69 \\ 17 \end{array}$ |
| Average | 234 | 227 | 78.52 | 80.78 | 21.48 | 19.22 |

Laundries-69 Establishments.

| January | 711 | 763 | 73.53 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| February | 724 | 760 | 74.87 | 77.70 77.39 | 26.47 75.13 | 22.30 22.61 |
| April | 745 | 769 | 77.04 | 78.31 | 22.96 | ${ }_{21.69}$ |
| May | 850 | 818 | 81.80 | 83.90 | 18.20 | 16.10 |
| June | 922 | ${ }_{954}$ | 85.90 | 89.82 | 12.10 | 10.18 |
| July | 945 | ${ }_{978}^{954}$ | 97.35 97.72 | 97.15 99.59 | 4.65 | 2.85 |
| August | 967 | 988 | 97.72 100.00 | 99.59 109.00 | 2.28 | . 41 |
| September | 958 | 963 | -99.07 | 100.00 98.07 |  |  |
| October | 865 | , 882 | 89.45 | 88.82 | 10.95 | 1.93 |
| Devember | 828 | 831 | 85.63 | 84.62 | 110.57 | 10.18 |
| December | 793 | 813 | 82.01 | 82.79 |  | 15.38 17.21 |
| Average | 842 | 866 | 87.08 | 88.19 | 12.92 | 81 |

Light, Power and Street Railways-65 Establishments.

| January | 2,085 | 2,156 | 72.40 | 69.80 | 27.60 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| March ... | ${ }_{2}^{2,150}$ | 2,231 | 74.65 | 72.22 | 25.35 | ${ }_{27.78}^{30.20}$ |
| April | 2,226 | 2,291 | 77.29 | 74.17 | 22.71 | 25.83 |
| May | 2,807 | -2,006 | ${ }_{99}^{81.28}$ | 81.13 | 18.72 | 18.87 |
| June | 2,880 | 3,965 3,059 | 99.47 100.00 | ${ }_{99}^{95.99}$ | . 53 | 4.01 |
| July . | 2,871 | 3,089 | 100.00 99.69 | 99.03 100.00 |  | . 97 |
| Augcst ${ }_{\text {September }}$ | 2,719 | 2,906 | 94.41 | 94.08 | 5.59 | 5.92 |
| October .. | 2,656 | 2,823 | 92.22 | 91.39 | 7.78 | ${ }_{8} 9.91$ |
| November | 2,760 | 2,846 | 93.75 | 92.13 | 6.25 | 7.87 |
| December | 2,684 | $\stackrel{2}{2,769}$ | ${ }_{93} 92.53$ | 89.74 | 7.47 | 10.26 |
| Average |  | 2,769 | 93.19 | 90.00 | 6.81 | 10.00 |
| age | 2,565 | 2,701 | 89.06 | 87.78 | 10.94 | 12.22 |

Lithographing-12 Establishments.

| January | 472 | 459 | 96.11 | 94.64 | 3.89 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| March ... | 465 | 457 | 94.70 | 94.23 | 5.30 | 5.36 |
| April | 471 | 456 | 95.93 | 94.02 | 4.07 | 5.98 |
| May | 468 | 465 469 | ${ }_{95}^{95.93}$ | 95.88 | - 4.07 | 4.12 |
| June | 475 | 450 | 95.32 96.74 | 96.70 | 4.68 | 3.30 |
| July . | 466 | 453 | 96.74 94.91 | 92.78 93 | 3.26 | 7.22 |
| August | 461 | 460 | 94.91 93 | 93.40 | 5.09 | 6.60 |
| September | 471 | 448 | ${ }_{95.93}$ | ${ }_{92}^{94.82}$ | 6.11 | 5.18 |
| October | 479 | 462 | 97.55 | 92.37 95.26 | 4.07 | 7.63 |
| November | 491 | 485 | 97.55 100.00 | 95.26 100.00 | 2.45 | 4.74 |
| December | 484 | 471 | 98.57 | 107.11 | 1.43 | 2.89 |
| Average | 473 |  | 96.33 | 95.05 | 3.67 | 4.95 |

PERSONS EMPLOYED, BY MONTHS-PER CENT., 1899-1900.
Table II-Continued.

| Classification of Months. | Persons Employed in |  | Per Cent. of Em ployment in |  | Per Cent. of Unemployment in |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1899. | 1900. | 1899. | 1900. | 1899. | 1900. |

Miscellaneous-42 Establishments.

| January | 1,651 | 1,769 | 84.23 | 88.32 90.06 | 15.77 13.57 | 11.68 9.94 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| February | 1,694 | 1,804 | 86.43 94.44 | 98.10 | 5.56 | 1.93 |
| March | 1,851 | 1,000 | 100.00 | 100.00 |  |  |
| April | 1,960 | 1,920 | 192.55 | ${ }^{95.86}$ | 7.45 | 4.14 |
| May | 1,814 | 1,964 | 75.66 | 93.66 | 24.34 | 6.94 |
| June | 1,463 | 1,554 | 74.80 | 77.58 | 25.20 | ${ }_{2}^{22.42}$ |
| July . | 1,768 | 1,523 | 90.20 | 76.04 | 9.80 12.45 | 23.90 10.18 |
| August ${ }_{\text {September }}$ | 1,716 | 1,799 | 87.55 | ${ }_{88} 8.82$ | 12.97 | 11.28 |
| October .. | 1,647 | 1,777 | 84.03 90.00 | ${ }_{91.16}$ | 10.00 | 8.84 |
| November | 1,760 | 1,826 1,774 | 88.56 | 88.57 | 11.44 | 11.43 |
| December |  |  |  | 89.77 | 12.65 | 23 |
| Average | 1,712 | 1,798 | 87.35 | 89.7 | 12.65 |  |

Mixed Textiles-7 Establishments.


Printers and Publishers-89 Establishments.


Railway Equipment-13 Establishments.

| January | 4,976 | 4,668 4 |  | 97.86 96.04 | 90.62 87.94 | 2.14 3.96 | 9.38 2.06 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| February | 4,925 |  |  | 99.47 | 87.94 87 | $\stackrel{.}{ } .5$ | 12.19 |
| March | $\stackrel{5}{5}, 039$ | 4,707 |  | 98.26 | 91.38 | 1.74 | 8.62 |
| April | 5,039 | 4,740 |  | 99.47 | 92.02 | . 53 | 7.98 |
| May | 5,062 | 4,825 |  | 98.71 | 93.24 | 1.29 | 6.78 5.96 |
| June | 5,077 | 4,844 |  | 99.01 | 94.04 94.89 | 1.99 | 5.11 |
| August | 5,058 | 4,888 |  | ${ }_{100.00}^{98.03}$ | 100.00 |  |  |
| September | ${ }_{5}^{5,124}$ | 5,066 |  | 99.92 | 98.35 | . 08 | 1.65 |
| October ... | 5,1867 | 4,850 |  | 94.91 | 94.16 | 5.09 | 5.84 |
| November | 4,893 | 4,807 |  | 95.42 | 93.32 | 4.58 | 6.68 |
| Average | 5,029 | 4,800 |  | 98.07 | . 19 | 1.93 | 6.81 |

## TOTAL YEARLY EARNINGS IN 1899-1900-12 INDUSTRIES.

Table III.

| Industries. | No. of estab-lishments | Total Yearly Earnings in |  | Increase + De-CREASE- IN 1900. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1899. | 1900. | Amount. | Per cent. |
| Cheverages | $\stackrel{20}{9}$ | \$85,705 13 | \$91,273 53 | \$5,568 40 | 6.50 |
| Coal and wood | 9 | 40,14327 | 42,273 14 | 2,129 87 | 5.31 |
| Fancy articles | 12 | 848,029 29 | 840,890 63 | 7,138 66 | . 84 |
| Grain and warchouses... | 18 | 127,583 80 | 116,673 97 | + $\quad 10,60988$ | ${ }_{9}^{14.31}$ |
| Laundries | 69 | 243,167 11 | 257,366 98 | - 14,19987 | 5.84 |
| Light, power and street railways. | 65 | - | 1167,660 <br> $1,396,872$ | 14,199 87 | 5.84 |
| Lithographing ............. | 12 | $\begin{array}{r}1,418,206 \\ 214,828 \\ \hline 19\end{array}$ | $\begin{array}{r}1,396,872 \\ 218 \\ \hline 18 \\ \hline 18\end{array}$ | 21,333 3 377 7 | 1.50 |
| Miscellaneous | 42 | 526,823 53 | 629,918 72 | 3,377 103,095 19 | 1.11 |
| Mixed textiles | 7 | 116,714 19 | 114,844 05 | 10309519 1,870 14 | 10.14 1.60 |
| Printers and publishers. | 89 | 510,476 50 | 488,193 62 | 22,282 88 | 4.37 |
| Railway equipment ....... | 13 | 2,972,359 84 | 2,904,765 89 | 67,593 95 | 2.27 |
| Total | 383 | \$7,221,218 94 | \$7,335,064 62 | \$113,845 68 | 1.58 |

## AVERAGE YEARLY EARNINGS IN 1899 AND 1900-12 INDUSTRIES.

Table IV.

| Industries. | No. of estabments. | Average Yearly <br> Earnings in |  | $\begin{array}{r} \text { INCREASE }+ \text { DE- } \\ \text { CREASE }- \text { IN } 1900 . \end{array}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1899. | 1900. | Amount. | Per cent. |
| Beverages' | 20 | \$410 07 | \$424 53 | \$14.46 | 3.22 |
| Chemicals | 9 | 43634 | 46970 | + $\quad 33.36$ | 7.28 |
| Coal and wood | 27 | 50811 | 51069 | + 2.58 | . 25 |
| Fancy articles ............ | 12 | 27637 | 31778 | + 4141 | 14.27 |
| Grain and warehouses.. | 18 69 | 545 288 288 | 51398 | - 31.25 | 6.41 |
| Light, power and street | 69 | 28880 | 29719 | 839 | 2.26 |
| railways ............... | 65 | 55291 | 51717 | 35.74 |  |
| Lithographing | 12 | 45418 | 47313 | 1895 | 4.18 |
| Miscellaneous | 42 | 30772 | 36730 | $+\quad 5958$ $+\quad 1598$ | 12.27 |
| Printers and publishers.. | 7 8 | 25539 <br> 446 <br> 20 | 27022 | + 14.83 | 5.21 |
| Railway equipment ..... | 13 | 496 404 | 44584 61581 | $\begin{array}{r} 38 \\ 2477 \end{array}$ | 4.11 |
| Average | 383 | \$422 70 | \$435 28 | + $\$ 1258$ | 2.98 |

## AVERAGE NUMBER OF DAYS IN OPERATION, 1899 AND 190012 INDUSTRIES.

Table V.

| Industries. | No. of ostab-lishments. | Days in Operation in |  | $\underset{\text { CREREASE }}{\text { INCRE }^{+}+\underset{1909 .}{\text { DE- }}}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1899. | 1900. |  | unt | Per cent. |
| Beverages ...t............. | 20 | 294 | ${ }_{330} 295$ | + | 1 37 | 12.64 |
| Chemicals ..... | 9 | 293 | 330 |  |  |  |
| Coal and wood ........... | 12 | 300 | 301 | + |  | . 33 |
| Fancy articles ............ | 18 | 290 | 302 | + | 12 | 4.14 |
| Laundries ................. | 69 | 282 | 286 | + | 4 | 1.42 |
| Light, power and street railways | 65 | 361 | 363 | $\pm$ | 2 | . 55 |
| Lithographing ............. | 12 | 305 | 301 |  | 4 4 4 | 1.31 |
| Miscellaneous ...... ..... | $\stackrel{42}{7}$ | 293 300 | 289 294 |  | 4 | 1.30 |
| Mixed textiles . ${ }_{\text {printers }}$ and publishers... | 89 | 300 307 | ${ }_{308}$ | + | 1 | 2.33 |
| Printers and ${ }^{\text {publishers.. }}$ Railw ${ }^{\text {equipment }}$.... | 13 | 308 | 315 | $+$ | 7 | 2.27 |
| Average | 383 | 303 | 307 | + | 4 | 1.32 |

The foregoing tables thus show for 383 establishments in 12 industries in 1899 and 1900, the classified weekly earnings, the number of persons employed by months, the total amount paid as wages, the average yearly earnings to each worker, and the average number of days in operation. These facts are presented by industries and in such a way as to facilitate comparisons between each.

The total number of persons for the 12 industries who received classified weekly earnings for the two years are presented in the following table:

NUMBER OF PERSONS IN 12 INDUSTRIES RECEIVING CLASSIFIED WEEKLY EARNINGS IN 1899 AND 1900.

| Classified WeeklyEarnings. | 1899 |  |  | 1900 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female. | Total. | Male | Female. | Total. |
| Under \$5.00 | 789 | 1,513 | 2,302 | 1,052 | 1,282 | 2,334 |
| $\$ 5.00$ but under $\$ 6.00$. | 178 | 350 | ${ }_{607} 528$ | 220 | 345 257 | 565 |
| 6.00 but under 7.00 . | - 393 | ${ }_{82} 21$ | 607 1.202 | 419 1,124 | 106 | 1,230 |
| 7.00 but under 8.00. | 1,120 | 82 35 | 1, 1,130 | 1,142 | 44 | 1,186 |
| 9.00 but under 10.00 . | 2,580 | 16 | 2,596 | 2,570 | 29 | 2,599 |
| 10.00 but under 12.00 . | 3,351 | 27 | 3,378 | 3,301 | 25 | 3,326 |
| 12.00 but under 15.00 . | 3,348 | 6 | 3,354 | 3,217 | 9 | 3,226 |
| 15.00 but under 20.00 | 1,528 |  | 1,528 | 1,581 |  | 1,581 |
| Total | 15,207 | 2,243 | 17,450 | 15,497 | 2,097 | 17,594 |
| Per cent. | 87.15 | 12.85 | 100.00 | 88.08 | 11.92 | 100.00 |

This is a sort of a summary of Table I. It includes all of the 12 industries and for male, female, and the total shows the respective number of persons in each wage class together with the total for all.

For the male persons the greatest number for both years are found in the class $\$ 10$ but under $\$ 12$. For the females the greatest is found in the class under $\$ 5$.

In 1899 the total number of all classes was 17,450. of thase 1.5,207 were male and 2,243 female.

- In 1900 the total for all was 17,594 , and of these 15,49 were male persons, and 2,097 females.

In the following table the number of persons as shown above are expressed in their present relation to their totals.

PER CENT. OF PERSONS IN 12 INDUSTRIES RECEIVING CLASSIFIED WEEKLY EARNINGS IN 1899 AND 1900.

| Classified Weekly | 1899 |  |  | 1900 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M Male. | Female. | Total. | Male. | Female. | Total. |
| Under $\$ 5.00$ | 5.19 | 67.46 | 13.19 | 6.79 | 61.14 | 13.26 |
| $\$ 5.00$ but under $\$ 6.00$ | 1.17 | 15.60 | 3.03 | 1.42 | 16.45 | 3.21 |
| 6.00 but under 7.00 | 2.58 | 9.54 | 3.48 | 2.70 | 12.26 | 3.84 |
| 7.00 but under 8.00 . | 7.36 | 3.66 | 6.89 | 7.25 | 5.05 | 6.99 |
| 8.00 but under 9.00 | 7.20 | 1.56 | 6.47 | 7.37 | 2.10 | 6.74 |
| 9.00 but under 10.00. | 16.97 | . 71 | 14.87 | 16.59 | 1.38 | 14.77 |
| 10.00 but under 12.00. | 2,204 | 1.20 | 19.36 | 21.30 | 1.19 | 18.91 |
| 12.00 15.00 but under ${ }^{\text {but }}$ ( ${ }^{15.00}$. | 22.02 | . 27 | 19.22 | 20.76 | . 43 | 18.34 |
| Total | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |

This table relates to percentages. It shows for instance that in 1899, 5.19 per cent. of all the male persons, 67.46 per cent. of all the female persons and 13.19 per cent. of the total of both received under $\$ 5$ per week, and that in 1900 this relation stood at $6.79,61.14$, and 13.26 per cent. respectively. The largest proportion of the persons, however, ars found in the classes $\$ 10$ but under $\$ 12$ and $\$ 12$ but under $\$ 15$ per week. These two classes included 38.58 per cent. of the persons in 1899, and 37.25 per cent. of the persons in 1900 .

The table which follows shows the relative proportion of male and female persons in each wage class.

PER CENṪ. OF MALES AND FEMALES IN 12 INDUSTRIES RECEIVING CLASSIFIED WEEKLY EARNINGS IN 1899 AND 1900.

| Classified WeeklyEarnings. | 1899 |  |  | 1900 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female. | Total. | Male. | Female. | Total. |
| Under \$5.00 | 34.27 | 65.73 | 100.00 | 45.07 | 54,93 | 100.00 |
| $\$ 5.00$ but under $\$ 6.00$ | 33.71 | 66.29 | 100.00 | 38.94 | 61.06 | 100.00 |
| 6.00 but under 7.00 . | 64.74 | 35.26 | 100.00 | 61.98 | 38.02 | 100.00 |
| 7.00 but under 8.00 . | 93.18 | 6.82 | 100.00 | 91.38 | 8.62 | 100.00 |
| 8.00 but under 9.00. | 96.90 | 3.10 | 100.00 | 96.29 | 3.71 | 100.00 |
| 9.00 but under 10.00 | 99.38 | . 62 | 100.00 | 98.88 | 1.12 | 100.00 |
| 10.00 but under 12.00 | 99.20 | . 80 | 100.00 | 99.25 | . 75 | 100.00 |
| 12.00 but under 15.00 . | 99.82 | . 18 | 100.00 | 99.72 | . 38 | 100.00 |
| 15.00 but under 20.00 . | 100.00 |  | 100.00 | 100.00 |  | 100.00 |
| 20.00 and over | 100.00 |  | 100.00 | 100.00 |  | 100.60 |
| Total | 87.15 | 12.85 | 100.00 | 88.08 | 11.92 | 100.00 |

The above tables shows the per cent. of males and females. Thus in class under $\$ 5,34.27$ per cent. were.males and 65.73 per cent. were females in 1899, while in 1900 the relation was, males 45.07 per cent., females 54.93 per cent.

Of the total number employed in 1899, 87.15 per cent. were male and 12.85 per cent. female persons.

In $1900,88.05$ per cent. of the total number wer male and 11.92 per cent. were female.

The next table in order is a summary of table II. It shows the total number employed each month by the 12 industries. It also gives the range of employment.

TOTAL NUMBER OF PERSONS EMPLOYED IN THE 12 INDUSTRIES AND RAN'GE OF EMPLOYMENT.

| Months. | Total No. of Persons Employed in |  | Percentages of |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemplorment. |  |
|  | 1899. | 1900. | 1839. | 1900. | 1899. | 1900. |
| January | - 13,668 | 13,374 | 87.59 | 84.93 | 12.41 | 15.07 |
| February | 13,787 | 13,437 | 88.37 | 85.33 | 11.63 | 14.67 |
| March .. | 14,209 | 13,732 | 91.07 | 87.20 | 8.93 | 12.80 |
| April | 14,431 | 14,197 | 92.49 | 90.15 | 7.51 | 9.85 |
| May | 15,270 | 15,161 | 97.87 | 96.27 | 2.13 | 3.73 |
| June | 14,974 | 15,168 | 95.97 | 96.32 | 4.03 | 3.68 |
| July | 15,141 | 15,127 | 97.05 | 96.06 | 2.95 | 3.94 |
| August... | 15,450 | 15,191 | 99.03 | 96.46 | . 97 | 3.54 |
| September | 15,603 | 15,566 | 100.00 -09 | 98.84 |  | 1.16 |
| October | 15,339 | 15,748 | 99.60 | 100.00 | . 40 |  |
| November | 15,236 | 15,255 | 97.65 95.25 | ${ }_{93.82}$ | 4.75 | ${ }_{6.18}$ |
| December | 14,861 | 14,774 | 95.25 | 93.82 | 4.75 | 6.18 |
| Average | 14,847 | 14,728 | 95.16 | 93.52 | 4.84 | 6.48 |

In the above summary is seen for the twelve industries the total number employed each month in 1899 and 1900.

The greatest number for any month is found in September for $1899^{\circ}$ and in October for 1900. The smallest number for both years is found in January. The difference between the two amounted to 12.41 per cent. in the former and 15.07 in the latter year. This difference was the range of unemployment in January, or in other words, it was the proportion of persons who, during that month, could not find employment in the establishments included.

The average number of persons was 14,847 in 1899 , and 14,728 in 1900 ; and the average range of unemployment was accordingly 4.84 and 6.48 per cent. respectively for these years.

As already explained table III relates to the total amount paid as wages. It gives this amount for each industry as well as for all, the total being $\$ 7,221,218.94$ in 1899, and $\$ 7,335,064.62$ in 1900 . For the latter year there was an increase of $\$ 113,845.68$ or of 1.58 per cent.

Of the 12 industries, 6 show an increase in the amount paid as wages and 6 a decrease, but as stated the former on the whole exceeded the latter.

In table IV was given the average yearly earnings to each worker. It shows that the average was $\$ 422.70$ in 1899 and $\$ 435.28$ in 1900. This is an increase for the latter year of $\$ 12.58$, or 2.98 per cent. Nine industries show an increase in the earnings and three a decrease.

Table V shows the average number of days in operation. For 1899 the average was 303 days, for 1900 it was 307 days. The increase for the latter year thus amounted to 4 days, or to 1.32 per cent. Eight industries gave an increase, three a decrease and one no change.
employment and earnings in 12 industries in 1900 and 1901.

Under this head are found several presentations that have been compiled from the reports of 356 establishments classified in 12 industries. The reports covered the years 1900 and 1901.

The industries into which the reports were classified are as follows: Beverages, chemicals, coal and wood, electric and gas light plants, etc., grain elevators, fancy articles, laundries, lithographing, mixed textiles, printing and publishing, railway shops, and miscellaneous.

The reports have been compiled into 5 basic tables described as follows: Table I snows, for each industry in 1900 and 1901, the classified weeklv garnings for the week when the greatest number of perso sere employed. Table II shows for the same industries anc period the number of persons employed each month, together with the range of employment and unemployment as based upon the number for the month when the greatest number were employed. Table III shows the total amount paid as wages each year by the establishments included. Table IV shows the average yearly earnings to each employe, and table V gives the average number of days in operation.

The reports for both years were received from the same establishments, and are therefore a good indication of the business situation in the same. But they mean more than this. Representing as they do the greater proportion of the productive capacity of the industries included, they necessarily show the condition of these industries, as a whole, for this state.

## CLASSIFIED WEEKLY EARNINGS IN 1900-1901.

Table I.

| Classified Wages. | 1900 |  |  |  | 1901 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | $\underset{\text { male. }}{\text { Fe- }}$ | Total. |  | Male | $\underset{\text { male- }}{\text { Fe- }}$ | Total. |  |
|  |  |  | No. | Perct. |  |  | No. | Perct |

Beverages- 15 Establishments.

| Under \$5.00 | 13 |  | 13 | 7.88 | 13 | 1 | 14 | 8.00 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\$ 5.00$ but under \$6.00 | 10 |  | 10 | 6.06 | 12 |  | 12 | 6.86 |
| 6.00 but under 7.00 | 22 |  | 22 | 13.33 | 17 | 1 | 18 | 10.29 |
| 7.00 but under 8.00 | 45 |  | 45 | 27.27 | 30 |  | 30 | 17.14 |
| 8.00 but under 9.00 | 16 | 1 | 17 | 10.31 | 15 |  | 15 | 8.57 |
| 9.00 but under 10.00 | 15 | 2 | 17 | 10.31 | 37 |  | 37 | 21.14 |
| 10.00 but under 12.00 | 27 |  | 27 | 16.36 | 20 |  | 20 | 11.43 |
| 12.00 but under 15.00 | 8 |  | 8 | 4.85 | 16 |  | 16 | 9.14 |
| 15.00 but under 20.00 | 6 |  | 6 | 3.63 | 6 |  | 6 | 3.43 |
| 20.00 and over |  |  |  |  | 7 |  | 7 | 4.00 |
| Total | 162 . | - 3 | 165 | 100.00 | 173 | 2 | 175 | 100.00 |

Chemicals-5 Establishments.


Coal and Wood-21 Establishments.

| Under $\$ 5.00$ | 6 |  |  | . 40 | 1 |  | 1 | . 09 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\$ 5.00$ but under $\$ 6.00$ |  | 1 | 1 | . 07 | 1 | 1 | 2 | . 17 |
| 6.00 but under 7.00 | 2 | 1 | 3 | . 20 | 8 | 1 | 9 | . 78 |
| 7.00 but under 8.00 | 36 |  | 36 | 2.40 | 17 |  | 17 | 1.48 |
| 8.00 but under 9.00 | 126 |  | 126 | 8.40 | 29 |  | 29 | 2.52 |
| 9.00 but under 10.00 | 292 |  | 292 | 19.45 | 266 |  | 266 | 23.07 |
| 10.60 but under 12.00 | 307 |  | 307 | 20.45 | 452 |  | 452 | 39.20 |
| 12.00 but under 15.00 | 483 |  | 483 | 32.18 | 183 |  | 183 | 15.87 |
| 15.00 but under 20.00 | 129 |  | 129 | 8.59 | 103 |  | 103 | 8.93 |
| 20.00 and over | 118 |  | 118 | 7.86 | 91 |  | 91 | 7.89 |
| Total | 1,499 | \| 2 | 1,501 | 100.00 | 1,151 | 2 | 1,153 | 100.00 |

Electric and Gas Light-66 Establishments.

| Under: $\$ 5.00 . . . . . . .$. | 64 | 1 | 65 | 2.24 | 62 | 2 | 64 | 2.42 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$5.00 but under \$6.00 | 5 | 1 | 6 | . 21 | 5 |  | 5 | . 19 |
| 6.00 but under 7.00 | 19 |  | 19 | . 66 | 11 | 1 | 12 | . 45 |
| 7.00 but under 8.00 | 46 |  | 46 | 1.59 | 61 | 1 | 62 | 2.35 |
| 8.00 but under 9.00 | 163 |  | 163 | 5.63 | 209 |  | 209 | 7.92 |
| 9.00 but under 10.00 | 408 |  | 408 | 14.08 | 427 |  | 427 | 16.18 |
| 10.00 but under 12.00 | 817 |  | 817 | 28.20 | 821 |  | 821 | 31.15 |
| 12.00 but under 15.000 | 821 |  | 821 | 28.34 | 863 |  | 863 | 32.71 |
| 15.00 but under 20.00 | 501 |  | 501 | 17.29 | 141 |  | 141 | 5.34 |
| 20.00 and over . | 51 |  | 51 | 1.76 | 34 |  | 34 | 1.29 |
| Total | 2,895 | 2 | 2,897 | 100.00 | 2,634 | 4 | 2,638 | 100.00 |

CLASSIFIED WEEKLY EARNINGS IN 1900-1901.
Table 1-Continued.

| Classified Wages. | 1900 |  |  |  | 1901 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | $\underset{\text { male- }}{\text { Fe- }}$ | Total. |  | Male. | $\underset{\text { male- }}{\text { Fe- }}$ | Total: |  |
|  |  |  | No. | Per ct. |  |  | No. | Perct. |

Elevator and Grain Warehouses-18 Establishments.

| Under $\$ 5.00$ | 1 | 1 | 2 | . 91 | 1 |  | 1 | . 44 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\$ 5.00$ but under $\$ 6.00$ | 1 |  | 1 | . 45 |  |  |  |  |
| 6.00 but under 7.00 | 2 |  | $\stackrel{1}{2}$ | . 91 | 3 |  | 3 | 1.32 |
| 7.00 but under 8.00 | 8 |  | 8 | 3.62 | 10 |  | 10 | 4.41 |
| 8.00 but under 9.00 |  |  |  |  | 3 |  | 3 | 1.32 |
| 9.00 but under 10.00 | 32 |  | 32 | 14.48 | 31 |  | 31 | 13.66 |
| 10.00 but under 12.00 | 69 |  | 69 | 31.22 | 74 | ........ | 74 | 32.60 |
| 12.00 but under 15.00 | 76 |  | 76 | 34.59 | 78 |  | 78 | 34.36 |
| 15.00 but under 20.00 | 26 |  | 26 | 11.76 | 21 |  | 21 | 9.25 |
| 20.00 and over | 5 |  | 5 | 2.26 | 6 |  | 6 | 2.64 |
| Total | 220 | 1 | 221 | 100.00 | 227 |  | 227 | 100.00 |

Fancy Articles-12 Establishments.

| Under $\$ 5.00$ | 52 | 153 | 205 | 41.67 | 53 | 139 | 192 | 40.51 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\$ 5.00$ but under $\$ 6.00$ | 20 | 16 | 36 | 7.32 | 26 | 10 | 36 | 7.59 |
| 6.00 but under 7.00 | 43 | 2 | 45 | 9.15 | 38 | 1 | 39 | 8.23 |
| 7.00 but under 8.00 | 23 | 2 | 25 | 5.08 | 29 | 1 | 30 | 6.33 |
| 8.00 but under 9.00 | 22 |  | 22 | 4.47 | 22 |  | 22 | 4.64 |
| 9.00 but under 10.00 | 42 | 1 | 43 | 8.74 | 39 | 1 | 40 | 8.44 |
| 10.00 but under 12.00 | 62 |  | 62 | 12.60 | 42 |  | 42 | 8.86 |
| 12.00 but under 15.00 | 28 | . .... | 28 | 5.69 | 41 |  | 41 | 8.65 |
| 15.00 but under 20.00 | 19 |  | 19 | 3.86 | 23 | 1 | 24 | 5.06 |
| 20.00 and over ...... | 7 |  | 7 | 1.42 | 8 |  | 8 | 1.69 |
| Total | 318 | 174 | 492 | 100.00 | 321 | 153 | 474 | 100.00 |

## Laundry-69 Establishments.

| Under $\$ 5.00$ but under $\$ 6.000$ |  | 16 | 328 | 344 | 32.73 | 13 | 296 | 309 | 29.18 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 10 | 211 | 221 | 21.03 | 9 | 251 | 260 | 24.55 |
|  | but under 7.00 | 12 | 157 | 169 | 16.08 | 10 | 168 | 178 | 16.81 |
| 7.00 | but under 8.00 | 15 | 86 | 101 | 9.61 | 21 | 82 | 103 | 9.73 |
| 8.00 | but under 9.00 | 10 | 32 | 42 | 4.00 | 15 | 26 | 41 | 3.87 |
| 9.00 | but under 10.00 | 25 | 5 | 30 | 2.86 | 17 | 6 | 23 | 2.17 |
| 10.00 | but under 12.00 | 52 | 11 | 63 | 5.99 | 49 | 10 | 59 | 5.57 |
| 12.00 | but under 15.00 | 47 | 4 | 51 | 4.85 | 54 | 2 | 56 | 5.29 |
| 15.00 | but under 20.00 | 26 |  | 26 | 2.47 | 28 |  | 28 | 2.64 |
|  | and over ....... | 4 |  | 4 | . 38 | 2 |  |  | . 19 |
|  | Total | 217 | 834 | 1,051 | 100.00 | 218 | 841 | 1,059 | 100.00 |

Lithographing-12 Establishments.

| Under $\$ 5.00$ | 105 | 54 | 159 | 32.38 | 105 | 111 | 216 | 39.13 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\$ 5.00$ but under $\$ 6.00$ | 28 | 1 | 29 | 5.91 | 21 | 2 | 23 | 4.17 |
| 6.00 but under 7.00 | 27 | 1 | 28 | 5.70 | 20 | 1 | 21 | 3.81 |
| 7.00 but under 8.00 | 21 | 1 | 22 | 4.48 | 27 |  | 27 | 4.89 |
| 8.00 but under 9.00 | 24 |  | 24 | 4.89 | 28 | 1 | 29 | 5.23 |
| 9.00 but under 10.00 | 17 |  | 17 | 3.46 | 27 | 1 | 28 | 5.08 |
| 10.00 but under 12.00 | 40 |  | 40 | 8.15 | 43 |  | 43 | 7.79 |
| 12.00 but under 15.00 | 43 |  | 43 | 8.76 | 49 |  | 49 | 8.88 |
| 15.00 but under 20.00 | 65 |  | 65 | '13.24 | 59 |  | 59 | 10.69 |
| 20.00 and over | 64 |  | 64 | 13.03 | 57 |  | 57 | 10.33 |
| Total | 434 | 57 | 491 | 100.00 | 463 | 116 | 552 | 100.00 |

## CLASSIFIED WEEKLY EARNINGS IN 1900-1901.

Table I-Continued.


Mixed Textiles-7 Establishments.

| Under $\$ 5.00 \ldots . . . . .$. | 78 | 265 | 343 | 66.09 | 103 | 286 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\$ 5.00$ but under $\$ 6.00$ | 11 | 48 | 59 | 11.37 | 11 | 286 86 | 389 97 | 59.76 14.90 |
| 6.00 but under 7.00 | 1 | 22 | 23 | 4.43 | 11 | 26 | 37 | 5.68 |
| 7.00 bitu nder 8.00 | 11 | 12 | 23 | 4.43 | 21 | 17 | 38 | 5.84 |
| ${ }_{9.00}$ but under ${ }^{9.00}$ | 12 | 3 | 15 | 2.89 | 7 | 4 | 11 | 1.69 |
| 10.00 but under 12.00 | 11 | 3 | 14 | 2.70 | 18 | 3 | 21 | 3.22 |
| 12.00 but under 15.00 | 30 |  | 5 | 5.98 | 11 | 1 | 12 | 1.84 |
| 15.00 but under 20.00 | 5 |  | 5 | 5.78 .96 | 38 |  | 38 | 5.84 |
| 20.00 and over ....... | 2 |  | 2 | . 39 | 7 |  | 7 | 1.08 .15 |
| Total | 166 | 353 | 519 | 100.00 | 228 | 423 | 651 | 100.00 |

Printing and Publishing-100 Establishments.

|  |  |  |  | 29755 | $\begin{array}{r} 226 \\ 36 \end{array}$ | $\begin{array}{r} 523 \\ 91 \end{array}$ | 36.916.42 | 28950 | 253 | 54296 | 38.33 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |
| 6.00 | but | under | 7.00 | 46 | 27 | 73 | 5.15 | 52 | - 27 | 79 | 5.59 |
| 8.00 | but | under | 8.00 9.00 | 56 77 | 13 | 69 | 4.87 | 50 | 11 | 61 | 4.31 |
| 9.00 | but | under | 10.00 | 68 | 14 | 91 70 | 6.42 4.94 | ${ }_{59}^{63}$ | 13 | 76 | 5.38 |
| 10.00 | but | under | 12.00 | 116 | 10 | 126 | 4.94 8.90 | 114 | 7 | 66 | 4.67 |
| 12.60 | but | under | 15.00 | 149 | 3 | 152 | 10.73 | 114 | 12 | 126 | 8.91 |
| 15.00 | but | under | 20.00 | 162 |  | 164 | 11.57 | 161 | 2 | 158 | 11.17 |
| 20.00 | Total ... |  |  | 58 |  | 58 | 4.09 | 47 | 2 | 163 | 11.53 3.32 |
|  |  |  |  | , 084 | 333 | 1,417 | 100.00 | 1,042 | 372 | 1,414 | 100.00 |

Railway Equipment-10 Establishments.

| Under \$5.00 | 27 |  | 27 | . 47 | 22 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\$ 5.00$ but under $\$ 6.00$ | 10 |  | 10 | .17 | 16 | 22 16 | . 34 |
| ${ }_{7}^{6.00}$ but under 7.00 | 89 |  | 89 | 1.53 | 87 | 87 | 1.36 |
| 8.00 but under ${ }^{8} 9.00$ | 776 | 3 | 779 | 13.43 | 527 | 527 | 8.23 |
| 9.00 but under 10.00 | 1,355 |  | 1,335 | 8.96 | 719 | 719 | 11.22 |
| 10.00 but under $12.00 \mid$ | 1,972 |  | 1,372 | 23.35 | 1,565 | 1,565 | 24.43 |
| 12.00 but under 15.00 | 1,103 |  | 1,103 | 16.75 19.01 | 1,060 1,023 | 1,060 | 16.54 |
| 15.00 but under 20.00 | 635 |  | 1,635 | 10.94 | 1,023 | 1, 0123 | 15.97 |
| 20.00 and over | 313 |  | 313 | 5.39 | 476 | 9176 | 14.23 7.43 |
| Total | 5,800 | 3 | 5,803 | 100.00 | 6,407 | 6,407 | 100.00 |

Miscellaneous-21 Establishments.

| Under $\$ 5.00 \ldots \ldots \ldots$ | 17 | 99 | 116 | 36.71 | 14 | 93 | 107 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\$ 0.00$ 6.00 but under under | ${ }_{11}^{4}$ | 39 | 43 | 13.61 | 6 | 35 | 41 | 12.81 |
| 7.00 but under 8.00 | 17 | 19 | 30 27 | 9.49 | 11 | 19 | 30 | 9.37 |
| 8.00 but under 9.00 | 32 | 10 | ${ }_{33}$ | 8.55 | 12 | 5 | 17 | 5.31 |
| 9.00 but under 10.00 | 11 | 4 | 15 | 10.43 | 46 | 2 | 48 | 15.00 |
| 10.00 but under 12.00 | 14 | 3 | 17 | 5.38 | 18 |  | 21 | 6.56 |
| 12.00 but under 15.00 | 21 | 1 | 22 | ${ }_{6} 6.96$ | 18 23 | 1 | 19 | 5.94 |
| 15.00 but under 20.00 | 11 | 1 | 12 | 3.80 3.80 | 12 | 1 | 24 | 7.50 |
| 20.00 and over . | 1 |  | 1 | $\stackrel{3}{ } .32$ | 1 |  | 12 | 3.75 |
| Total .... ..... | 139 | 177 | 316 | 100.00 | 164 | 156 | 320 | 100.00 |

## PERSONS EMPLOYED-BY MONTHS-PER CENT. IN 1900-190112 INDUSTRIES.

Table II-Continued.

| Classification by Months. | Persons Employed in |  | Per Cent. of Employment in |  | Per Cent. of Unemployed in |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1900. | 1901. | 1900. | 1901. | 1900. | 1901. |

Mixed Textiles- 7 Establishments.

| January | 416 | 468 | 84.38 | 90.35 | 15.62 | 9.65 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| February | 452 | 477 | 91.68 | 92.08 | 8.32 |  |
| March | 478 | 495 | 96.96 | 95.56 | 3.04 | 4.44 |
| April | 493 | 499 | 100.00 | 96.33 |  | ${ }_{4} .25$ |
| May | 472 | 496 | 95.74 87.22 | 90.75 90.73 | 12.78 | 9.27 |
| June | 430 | 470 | 87.22 | ${ }_{97}^{90.73}$ | 17.65 | 2.32 |
| July | 406 | 506 | 79.92 | 100.00 | 20.08 |  |
| August | $\stackrel{397}{287}$ | 439 | 58.22 | 84.75 | 41.78 | 15.25 |
| September | 402 | 470 | 81.54 | 90.73 | 18.46 | 9.27 |
| October . | 424 | 516 | 86.00 | 99.61 | 14.00 | . 39 |
| December | 457 | 455 | 92.70 | 87.84 | 7.30 | 12.16 |
| Average | 426 | 484 | 86.41 | 93.44 | 13.59 | 6.56 |

Printing and Publishing-100 Establishments.


Railway Equipment-10 Establishments.

| January | 5,394 | 5,474 | 97.24 | 90.23 | 2.76 | 9.77 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| February | 5,347 | 5,517 | 96.39 | 90.93 | 3.61 | 9.07 |
| March | 5,509 | 5,521 | 99.31 | 91.00 | . 69 | 9.00 |
| April | 5,479 | 5,544 | 98.77 | ${ }_{93} 91.38$ | 1.23 | 8.62 |
| May | 5,465 | 5,665 | 98.52 98.50 | ${ }_{94.30}$ | 1.48 | 5.70 |
| June | 5,464 | $\stackrel{5}{5}, 721$ | 98.70 | 94.55 | 1.30 | 4.45 |
| July | 5,475 5,473 | 5,897 5,815 | ${ }_{98.67}^{98.60}$ | 95.85 | 1.33 | 4.15 |
| August ${ }_{\text {Sentember }}$ | 5,532 | 6,032 | 99.73 | 99.42 | . 27 | . 5 |
| October ... | 5,547 | 6,044 | 100.00 | 99.62 |  | . 38 |
| November | 5,303 | 6,067 | ${ }_{95}^{95.60}$ | 100.00 | 4.40 | 4.83 |
| December | 5,308 | 5,774 | 95.69 | 95.17 | 4.31 | 4.83 |
| Average | 5,441 | 5,748 | 98.09 | 94.74 | 1.91 | 5.26 |

Miscellaneous-21 Establishments.

| January | 214 | 244 | 75.09 | 82.43 | 24.91 | 17.57 12.16 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| February | 227 | 260 | ${ }_{86} 9.65$ | 87.84 | 20,35 | 12.16 |
| March | 247 | 279 | 86.67 |  | 13.33 | 6.42 |
| April | ${ }_{268}^{266}$ | 277 287 | 93.33 94.04 | - 93.58 | 5.96 | 3.04 |
| May | $\stackrel{268}{256}$ | 276 | ${ }_{89.82}^{94.04}$ | 93.24 | 10.18 | 6.76 |
| June | 249 | 258 | 87.37 | 87.16 | 12.63 | 12.84 |
| Jugy . | 230 | 251 | 80.70 | 84.80 | 19.30 | 15.20 |
| September | 271 | 279 | 95.09 | 94.26 | 4.91 | 5.74 |
| October .. | $\stackrel{279}{ }$ | ${ }_{293}^{296}$ | 97.89 100.00 | 100.00 98.99 | 2.11 | . 01 |
| November | 285 | 293 <br> 272 | 100.00 92.63 | 98.99 91.89 | 7.37 | 8.11 |
| Average | 255 | 273 | 89.47 | 92.23 | 10.53 | 7.77 |

## PERSONS EMPLOYED-BY MONTHS-PER CENT. IN 1900-1901.

Table II-Continued.

| Classification byMonths. | Persons Employed in |  | Per cent. of Employment in |  | Per cent. of Unemployed in |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1900. | 1901. | 1900. | 1901. | 1900. | 1901. |

Beverages-15 Establishments.

| January | 123 | 135 | 77.85 | 80.36 | 22.15 | 19.64 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| February | 126 | 139 | 79.75 | 82.74 | 20.25 | 17.26 |
| March | 129 | 143 | 81.65 | 85.12 | 18.35 | 14.88 |
| May | 140 | 150 | 88.61 | 89.29 | 11.39 | 10.71 |
| June | 142 | 164 | 88.61 89.87 | ${ }_{97}^{92.86}$ | 11.39 | 7.14 |
| July | 157 | 168 | 89.87 98 | 97.62 100.00 | 10.13 | 2.38 |
| August | 158 | 166 | 100.00 | 100.00 98.81 | . 63 |  |
| September | 157 | 154 | 99.37 | 91.67 | .63 | 8.33 |
| October | 146 | 150 | 92.41 | 89.29 | 7.59 | 10.71 |
| November | 142 132 | 147 | 89.87 | 87.50 | 10.13 | . 12.50 |
|  | 132 | 143 | 83.54 | 85.12 | 16.46 | 14.88 |
| Average | 141 | 151 | 89.24 | 89.88 | 10.76 | 10.12 |

Chemicals-5 Establishments.

| January | 49 | 44 | 94.23 | 74.58 | 5.77 | 25.42 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| February | 49 | 45 | 94.23 | 76.27 | 5.77 | 23.73 |
| April | 48 | 46 | 92.31 | 77.97 | 7.69 | 22.03 |
| May | 45 | 54 | 88.46 86.54 | 81.36 91.53 | 11.54 | 18.64 |
| June | 46 | 54 | 88.54 88.46 | ${ }_{91.53}^{91.53}$ | 13.46 | 8.47 |
| July | 43 | 53 | 88.69 | ${ }_{89} 91.83$ | 11.54 | 8.47 |
| August | 42 | 54 | 80.77 | 91.53 |  | 10.17 |
| September | 36 | 45 | 69.23 | 76.27 | 19.23 30.77 | 8.47 |
| October | 41 | 44 | 78.85 | 74.58 | $\stackrel{30.77}{ }$ | 23.73 |
| November | 52 | 55 | 100.00 | 93.22 | 21.15 | 25.48 |
| December | 51 | 59 | 98.08 | 100.00 | 1.98 | . 78 |
| Average | 46 | 50 | 88.46 | 84.75 | 11.54 | 15.25 |

Coal and Wood-21 Establishments.

| January | 663 | 884 | 49.96 | 74.47 | 50.04 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| February | 712 | 922 | 53.65 | 77.67 | 46.35 | ${ }_{22.33}^{25.53}$ |
| March ... | 691 | 750 | 52.07 | 63.18 | 47.93 | 36.82 |
| May | 682 1,059 | 718 889 | 51.39 | 60.49 | 48.61 | 39.51 |
| June | 1,043 | 1,018 | 78.60 | 84.89 | 21.70 | 25.11 |
| July | 1,130 | 1,046 | 88.15 | 88.76 | 21.40 14.85 | 14.24 |
| August | 1,250 | 1,121 | ${ }_{94.20}$ | 94.44 | 14.85 5.80 | 11.88 |
| September | 1,253 | 1,164 | 94.42 | 99.06 | 5.80 5.58 | 5.56 1.94 |
| October | 1,327 | 1,167 | 100.00 | 98.32 | 5.08 | 1.68 |
| November | 1,172 | 1,187 | 88.32 | 100.00 | i1.68 | 1.68 |
| December | 930 | 1,000 | 70.08 | 84.25 | 29.92 | 15.75 |
| Average | 991 | 989 | 74.68 | 83.32 | 25.32 | 16.68 |

Electric and Gas Light and Power-66 Establishments.

| January | 2,060 | 2,149 | 74.15 | 74.98 | 25.85 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| March | 2,122 | 2,169 | 76.39 | 75.68 | ${ }_{23}^{25.61}$ | 24.32 |
| March | 2,198 | 2,263 | 79.12 | 78.96 | 20.88 | ${ }_{21} 24.34$ |
| May . | 2,673 | -2,453 | 86.54 96.22 | 85.59 | 13.46 | 14.41 |
| June | 2,778 | 2,746 2,866 | 96.22 | 95.64 | 3.78 | 4.36 |
| July .. | 2,682 | 2,777 | 96.54 | 96.89 | 3.46 |  |
| August | 2,686 | 2,866 | 96.69 | 96.89 | 3.46 | 3.11 |
| September | 2,633 | 2,760 | 94.78 | $\bigcirc 96.30$ | 5.22 | 3.70 |
| October | 2,655 | 2,773 | 95.57 | 96.76 |  |  |
| November | 2,618 | 2,629 | 94.24 | 91.73 | 5.76 | 8.27 |
| December | 2,370 | 2,413 | 85.31 | 84.19 | 14.69 | 15.81 |
| Average | 2,490 | 2,572 | 89.63 | 89.74 | 10.37 | 10.26 |

## PERSONS EMPLOYED-BY MONTHS-PER CENT IN 1900-1901.

Table II-Continued.

| Classification by Months. | Persons Em ployed in |  | Per Cent. of Employment in |  | Per Cent. of Unemployed in |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1900. | 1901. | 1900. | 1901. | 1900. | 1901. |

Elevator and Grain Warehouses-18 Establishments.

| January | 131 | 138 | 67.53 | 76.67 | 32.47 | 23.33 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| February | 128 | 137 | 65.98 | 76.11 | 34.02 | 23.89 |
| March ... | 145 | 162 | 74.74 | 90.00 | 25.26 | 10.00 |
| April | 146 | 150 | 75.26 | 83.33 77 | 24.74 | 16.67 22.22 |
| May | 141 | 140 | 72.68 | 77.78 | 27.32 | 30.56 |
| June | 122 | 125 | 62.89 | 69.44 | 37.11 | 30.56 32.78 |
| July | 121 | 121 | 62.37 | 67.22 | 37.63 | 32.78 26.67 |
| August | 119 | 132 | 61.34 | 73.33 | 38.66 | 26.67 15.00 |
| September | 162 | 153 | 83.51 | 85.00 | 16.49 | 15.00 |
| October . . | 194 | 180 | 100.00 | 100.00 |  |  |
| November | 178 | 163 | 91.75 | 90.56 | 8.25 | $\begin{array}{r}9.44 \\ \hline 18.89\end{array}$ |
| December | 146 | 146 | 75.26 | 81.11 | 24.74 | 18.89 |
| Average | 144 | 146 | 74.23 | 81.11 | 25.77 | 18.89 |

Fancy Articles-12 Establishments.

| January | 379 | 361 | 78.14 | 81.12 | 21.86 | 18:88 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| February | 378 | 370 | 77.94 | 83.15 | 22.06 | 16.85 |
| March | 434 | 389 | 89.48 | 84.42 84 | 11.61 | 15.06 |
| April | 419 | 378 373 | 86.39 85.98 | 84.94 83.82 | 14.02 | 16.18 |
| May | 417 390 | 373 352 3 | 80.38 80.41 | 79.10 | 19.59 | 20.90 |
| June | 390 401 | 352 <br> 374 | 82.68 | 84.04 | 17.32 | 15.96 |
| July Ausus | 418 | 387 | 86.19 | 86.97 | 13.81 | 13.03 |
| September | 408 | 385 | 84.12 | 86.52 | 15.88 | 13.48 |
| October . . | 458 | 416 | ${ }_{96}^{94.43}$ | 93.48 | 5.57 3.30 | 6.52 |
| November | 469 485 | 4445 | 96.70 100.00 | 100.00 99.10 | 3.30 | . 90 |
| December |  |  |  |  |  |  |
| Average | 421 | 389 | 86.80 | 87.42 | 13.20 | 12.58 |

Laundry-69 Establishments.

| January | 921. | 940 | 81.58 | 81.53 | 18.42 | 18.47 20.90 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| February | 900 | 912 | 79.72 | 79.10 | 20.28 | 20.90 |
| March | 915 | 914 | 81.05 | ${ }_{82} 73$ | 14.95 | 17.87 |
| April | 960 1,050 | 947 1,064 | 85.03 93.00 | 82.13 92 | 14.97 7.00 | 7.72 |
| May | 1,050 | 1,064 | 96.72 | ${ }_{93} 92.4$ | 3.28 | 6.59 |
| June | 1,092 | 1,153 | 100.00 | 100.00 |  |  |
| Aungest | 1,118 | 1,140 | 99.03 | 98.87 | . 97 | 1.13 |
| September | 1,118 | 1,114 | 99.03 | 96.62 | . 97 | 3.38 |
| October | 1,013 | 1,040 | 89.73 87.60 | 90.20 <br> 83 <br> 87 | . 12.40 | 16.80 |
| November | 989 944 | ${ }_{961}^{967}$ | 87.60 83.61 | ${ }_{83.35}$ | 16.39 | 16.65 |
| December |  |  |  |  |  |  |
| Average | 1,012 | 1,019 | 89.64 | 88.38 | 10.36 | 11.62 |

Lithographing-12 Establishments.

| January | 459 | 512 | 94.64 | 94.81 | 5.36 | 5.19 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| February | 457 | 502 | 94.23 | ${ }_{91} 92.96$ |  | 8.04 |
| March | 456 | 495 | 94.02 | 91.65 | 5.98 | 8.33 |
| April | 465 | 496 | 95.88 | 91.85 | 4.12 | 8.56 |
| May | 469 | 510 491 |  | ${ }_{90} 94.93$ | 7.22 | 9.07 |
| June | 450 | 493 | 93.40 | 89.44 | 6.60 | 10.56 |
| July | 453 | 486 | 94.85 |  | 5.15 | 10.00 |
| August | 460 448 | 486 | ${ }_{92.37}$ | 93.52 | ${ }_{7.63}$ | 6.48 |
| September | 448 | 505 509 | 92.37 95.26 | ${ }_{94.26}$ | 4.74 | 5.74 |
| October ${ }^{\text {November }}$ | 485 | 522 | 100.00 | 96.67 |  | 3.33 |
| December | 471 | 540 | 97.11 | 100.00 | 2.89 |  |
| Average | 461 | 504 | 95.05 | 93.33 | 4.95 | 6.67 |

TOTAL AMOUNT PAID AS WAGES, 1900 AND 1901-12 INDUSTRIES.
'Table III.

| Industries. | No. of estabments. | Total Amount Paid as Wages. |  | $\underset{\text { CREASEASE }}{\text { InNeren }^{+}+\underset{1901 .}{\text { De- }} .}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1900. | 1901. | Amount. | Per cent. |
| Beverages | 15 | \$59,975 55 | \$66,290 59 | + \$6,315 04 |  |
| Coal and wood | 5 | 22,602 22 | 27,724 00 | 5,121 78 $+\quad 1$ | 22.66 |
| Electric and gas light | 21 | 503,487 73 | 533,457 40 | + 29,9€9 67 | 5.95 |
| and power ............. | 63 | 1,431,126 26 | 1,501,674 33 | + 70,54807 | 4.93 |
| Levator and grain ware- | 18 |  | -79, 213 92 | + 590 |  |
| Fancy articles ............ | 12 | 133,785 42 | $\begin{array}{r}79,213 \\ 114,831 \\ \hline 03\end{array}$ | + $\begin{array}{r}53960 \\ \hline\end{array}$ | ${ }_{14} .69$ |
| Laundry ................. | 69 | 282,353 33 | 292,361 511 | - 18,904 391 | 14.17 3.54 |
| Lithographing . . . . . . . . . | 12 | 218,205 92 | 249,156 64 | + 30,95072 | 14.54 |
| Printing textiles . | 7 | 108,844 05 | 129,794 72 | + 20,95067 | 19.25 |
| Printing and publishing | 100 10 | $\begin{array}{r}534,162 ~ \\ \hline\end{array}$ | 556,759 501 | $1+\quad 22,59728$ | 4.23 |
| Miscellaneous ............ | ${ }_{21}^{10}$ | $\begin{array}{r}3,160,340 \\ 72,821 \\ \hline 0\end{array}$ | 3,327,700 79\|| | + 167,360 011 | 5.30 |
|  |  | 72,821 40 | 86,419 91 | 13,598 51 | 18.67 |
| Tot | 356 | \$6,606,379 20 | \$6,965,384 34 | + \$359,005 14 | 5.43 |

## AVERAGE YEARLY EARNINGS, 1900-1901-12 INDUSTRIES.

Table IV.

| Industries. | No. of estabments. | $\underset{\text { Average Yearly }}{\text { Earnings in }}$ |  | Increase and DeCREASE in 1901. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1900. | 1901. |  | mount. | Per cent. |
| Beverages | 15 | \$425 35 | \$439 01 |  |  |  |
| Chemicals .... | 5 | 49135 | ${ }^{5} 5448$ |  | ${ }_{63.13}{ }^{1}$ | +3.21 |
| Coal and wood ......... | 21 | 50806 | 53939 | $+$ | 3133 | 6.17 |
| and power ............ | 66 | 57475 | 58385 | + | 910 |  |
| Elevator and grain warehouse |  |  | 548 | $+$ | 910 | 1.58 |
| Fancy Articles ............. | 12 | 54635 <br> 317 | 54256 | - | 379 | . 69 |
| Laundry ..................... | 69 | ${ }_{279} 01$ | 295 281 | $+$ | 22.59 79 | 7.11 |
| Lithographing ............. | 12 | 473 | 28691 494 36 | $+$ |  | 2.83 |
| Mixed textiles' | 7 | 25550 | ${ }_{268} 474$ | $+$ | 2102 | 4.44 |
| Printing and publishing. | 100 | 42870 | 42717 | $\pm$ | 1267 | 4.96 |
| Railway equipment ...... | 10 10 | 58084 | 42729 57893 |  | 141 191 | . 33 |
| Miscellaneous | 21 | 28557 | 31656 |  | 3099 | 10.85 |
| Average | 356 | \$505 27 | \$511 26 | + | 599 | 1.19 |

AVERAGE NUMBER OF DAYS IN' OPERATION IN 1900-1901-12 INDUSTRIES.
Table V.

| Industries. | No. of estabments. | Days in Operation in |  | $\underset{\text { CREASE }- \text { IN }}{\substack{\text { INCREASE } \\ 1901 .}}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1900. | 1901. |  | unt. | Per cent. |
| Beverages ................. | 15 | 290 | 296 | + | 6 | 2.07 |
| Chemicals .................. | 5 | 253 | 250 |  |  | 1.19 |
| Coal and wood ........... | 21 | 307 | 308 |  |  | . 33 |
| Electric and gas light and power ............... | 66 | 364 | 362 | - | 2 | . 55 |
| Elevator and grain ware- houses ..................... | 18 | 279 | 297 | + | 18 | 6.45 |
| Fancy articles ............ | 12 | 301 | 299 | $\square$ |  | .66 .39 |
| Laundry $\ldots$................ | 69 | 289 301 | 293 | $+$ | 1 | 1.33 |
| Lithographing ............ | 12 | ${ }_{294}$ | ${ }_{290}$ | $\pm$ | 4 | 1.36 |
| Printing and publishing. | 100 | 302 | 306 | $+$ | 4 | 1.32 |
| Railway equipment ....... | 10 | 302 | ${ }_{284}^{294}$ |  | 8 | 2.65 |
| Miscellaneous ............. | 21 | 288 | 284 | - | 4 | 1.39 |
| Average ............. | 356 | 298 | 299 | + | 1 | . 34 |

In the foregoing five tables has thus been presented, for 12 industries for 1900 and 1901, the classified weekly earnings, the number of persons employed each month, etc., the total amount paid as wages, the average yearly earnings to each employe, and the average number of days in operation.

The facts are presented in detail for each industry, and furthermore are arranged in such a way that they may be readily studied, not only as standing alone, or by themselves, but in connection with similar facts for the other industries. Comparisons along these lines could be readily instituted here. But this is hardly necessary. The tables ars so plain and the arrangement of the facts in other respects so familiar that any amount of explanation would add but little to their value. For this reason attention will be called to the totals only in each case.

The following is a summary of table I. It shows the number of male, female, and total persons in each wage class as well as the total for all classes when all of the 12 industries are included. The figures cover of course, both years. The table is the first of three summary tables which are given for table I. The second of these shows the per cent of the persons in each class of the total for all classes. The third shows the per cent of males and females in each class as well as of the total number.

## NUMBER OF PERSONS IN 12 INDUSTRIES RECEIVING CLASSIFIED WEEKLY EARNINGS IN 1900 AND 1901.

| Classififi Weekly Earnings. | 1900 |  |  | 1901 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female.' | Total. | Male. | Female. | Total |
| Under $\$ 5.00$ | 679 | 1,132 |  | 686 |  |  |
| \$5.00 but under $\$ 6.00$. | 159 | - 353 | 1,512 | 158 | 1,181 | 1,867 |
| 6.00 but under 7.00. | 282 | 232 | 514 | 275 | 249 | 594 |
| 7.00 but under 8.00. | 1,060 | 127 | 1,187 | 812 | 117 | 929 |
| ${ }_{9.00}^{8.00}$ but under | 1,011 | 52 | 1,063 | 1,160 | 46 | 1,206 |
| 10.00 but under 12.00 . | $\stackrel{2,280}{2,485}$ | 17 | 2,297 | 2,509 | 20. | 2,529 |
| 12.00 but under 15.00 . | $\stackrel{2,485}{2,810}$ | $\begin{array}{r}24 \\ 8 \\ \hline\end{array}$ | 2,509 | 2,718 | 25 | 2,743 |
| 15.00 but under 20.00 . | 1,587 | 3 | 1,590 |  | ${ }_{3}^{4}$ | -2,535 |
| 20.00 and over | 1,623 |  | 1,623 | 1,432 | 3 | 1,476 |
| Total | 12,976 | 1,948 | 14,924 | 13,054 | 2,077 | 15,131 |

Here is the first summary of table I. This gives the number of persons in each class. In illustration of this may be given the figures for class "under $\$ 5$." For 1900 this class included, male, 679 ; female, 1,132 ; total, 1,811 persons. For 1901 it included, male, 686 ; female, 1,181; total, 1,867 persons. For each one of the other wage classes the number is given in the same way.

Of the 14,924 persons in $1900,12,976$ were male, 1,948 female ; while of the 15,131 persons in 1901, 13,054 were male and 2,077 females.

The per cent relation which the number in each class bears to the totals is shown in the following table.

PER CEN'T. OF PERSONS IN 12 INDUSTRIES RECEIVING CLASSIFIED WEEKLY EARNINGS IN 1900 AND 1901.

| Classified Weekly Earnings. | 1900 |  |  | 1901 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female. | Total. | Male. | Female | Total. |
| Under $\$ 5.00 \ldots \ldots$. | 5.23 | 58.11 | 12.13 | 5.25 | 56.86 | 12.34 |
| \$5.00 but under $\$ 6.00$ | 1.23 | 18.13 | 3.43 | 1.21 | ${ }_{20.80}$ | 12.34 3.90 |
| 7.00 but under 8.00 | 88.11 | 11.91 | 3.44 | 2.11 | 11.99 | 3.47 |
| 8.00 but under 9.00. | 8.79 | 6.52 2.67 | 7.95 | 8.22 | 5.63 | 6.14 |
| 9.00 but under 10.00 . | 17.57 | 2.87 | 15.12 | 8.89 | 2.22 | 7.97 |
| 10.00 but under 12.00 . | 19.15 | 1.23 | 16.82 | 19.22 | ${ }^{.96}$ | 16.71 |
| 12.00 but under 15.00. | 21.72 | . 41 | 18.88 | 19.39 | 1.20 .19 | 18.12 |
| 15.00 but under 20.00 | 12.23 | . 15 | 10.66 | 11.28 | . 15 | 16.75 9.76 |
| 20.00 and over | 4.80 |  | 4.18 | 5.61 |  | 4.84 |
| Total | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |

This is the second summary table in order. It shows for all industries the per cent. of persons in each wage class.

The class "under $\$ 5$ " had 5.23 per cent. of the males, 58.11 per cent. of the females, and 12.13 per cent. of the total of both in 1900 , and in 1901 it included 5.25 per cent. of the males, 56.86 per cent. of the females and 12.34 per cent. of the total. The class $\$ 10$ but under $\$ 12$ had 16.82 per cent. of the total number in 1900 , and 18.12 per cent. in 1901. These are only a few illustrations of what this table shows, but they are probably sufficient to convey a fairly complete idea of its importance.

The next summary deals with the proportion of male and female persons in each class.

PER CEN'T. OF MALE AND FEMALE PERSONS IN 12 INDUSTRIES RECEIVING CLASSIFIED WEEKLY EARN'INGS IN 1900 AND 1901.

| $\underset{\text { Clarisings. }}{\text { Catipd Weekly }}$ | 1900 |  |  | 1901 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female. | Total. | Male. | Female. | Total. |
| Under $\$ 5.00$ | 37.49 | 62.51 | 100.00 | 36.74 | 63.26 | 100.00 |
| \$5.00 but under $\$ 6.00$. | ${ }^{31.05}$ |  | 100.00 100 | 26.78 52.48 528 | ${ }^{73.22}$ | 100.00 100.00 |
| 6.00 but under 7.00 |  | 45.14 <br> 10 <br> 10 | ${ }_{100}^{100.00}$ | 87.41 | 12.59 | 100.00 |
| ${ }_{8.00}^{7.00}$ but under ${ }^{8} 800$ | 998.11 98.11 | 4.89 | 100.00 | 96.19 | 3.81 | 100.00 |
| ${ }_{9.00}$ but under 10.00 . | ${ }_{99.26}^{90.11}$ | . 74 | 100.00 | 99.21 | . 79 | 100.00 |
| 10.00 but under 12.00 . | 99.04 | . 96 | 100.00 | 99.09 | .91 | 100.00 |
| 12.00 but under 15.00 | ${ }_{99}^{99.72}$ | . 28 | ${ }^{100.00}$ | 99.84 99.80 | . 16 | 100.00 100.00 |
| ${ }_{20}^{15.00}$ but under 20.00. | 99.81 100.00 | . 19 | ${ }_{100.00}^{100}$ | 100.00 |  | 100.00 |
| Total | 86.95 | 13.05 | 100.00 | 86.27 | 13.73 | 100.00 |

This is the third summary, and it deals with the per cent. of males and females. In class "under $\$ 5$ " for example, 37.49 per cent. in 1900 were male and 62.51 per cent. were female. In 1901. the relation in the same class was males 36.74 per cent., females 63.26 per cent. In the next class in order the proportion of females is still greater. From this point through the higher classes the proportion of females were rapidly decreasing indicating that, comparatively speaking, they are the lowest in the wage scale.

Of the total number, 13.05 per cent. were females in 1900 and 13.73 per cent. in 1901. These figures would seem to indicate a small increase in this class of labor.

The following table is a sort of a summary of table II and shows, for all of the 12 industries for the two years, the number employed each month, together with the range of employment.

NUMBER OF PERSONS EMPLOYED, RANGE OF EMPLOYMENT-BY MONTHS.

| Months. | Total No. of Persons Employed in |  | Percentages of |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employment. |  | Unemployment. |  |
|  | 1900. | 1901. | 1800. | 1901. | 1900. | $10(1)$ |
| January | 12,040 | 12,665 | 87.35 | 87.81 | 12.65 | 12.19 |
| February | 12,164 | 12,761 | 88.25 | 88.47 | 11.75 | 11.53 |
| March ... | 12,508 | 12,747 | 90.74 | 88.37 | 9.26 | 11.63 |
| April | 12,741 | 12,945 | 92.43 | 89.75 | 7.57 | 10.25 |
| May | 13,403 | 13,639 | 97.24 | 94.56 | 2.76 | 5.44 |
| June | 13,425 | 13,836 | 97.40 | 95.92 | 2.60 | 4.08 |
| July . | 13,448 | 13,986 | 97.56 | 96.96. | 2.44 | 3.04 |
| August ... | 13,577 | 14,198 | 98.50 | 98.43 | 1.50 | 1.57 |
| September | 13,559 | 14,342 | 98.37 | 99.43 | 1.63 | . 57 |
| October | 13,784 | 14,424 | 100.00 | 100.00 |  |  |
| November | 13,401 | 14,363 | ${ }_{93} 97.24$ | 99.58 | 2.78 | 5.42 |
| December | 12,852 | 13,583 | 93.24 | 94.17 | 6.76 | 5.83 |
| Average | 13,075 | 13,624 | 94.86 | 94.45 | 5.14 | 5.55 |

For the 12 industries included, the above table shows the number employed each month, the average number, and the range of employment.

The greatest number of persons for any month was 13,784 in 1900 and 14,424 in 1901. In both cases the number is for the month of October. The smallest number was in January in both cases and for 1900 was 12,040 and for 1901, 12,665 persons. The difference between the greatest and smallest number thus amounted to 12.65 per cent. in the former year, and 12.19 per cent. in the latter. This difference was the range of unemployment in January. For the other months the range was narrower, for some in fact it amount to only a fraction of one per cent. The average range seems to have been 5.14 and 5.55 per cent. respectively for the two years.

The total amount paid as wages in 1900 and 1901 by each of the 12 industries as well as the total paid by all of them is shown in the above table. The amounts thus paid vary with the industry. Some paid more, others less. All except one, that of
fancy articles, paid more during the latter than the former year. The total for all was $\$ 6,606,379.20$ in 1900 and $\$ 6,965,384.34$ in 1901, or an increase for the latter year of $\$ 359,005.14$ or 5.43 per cent. The largest actual increase for any one industry was for railway shops, and the highest relative increase was in chemicals.

The average yearly earnings, as shown in table IV, for all industries were $\$ 505.27$ in 1900 and $\$ 511.26$ in 1901. This means that there was an increase for the latter year of $\$ 5.99$ or 1.19 per cent. 'As to the amount of this change it must be admitted that it was not very large. On the other hand it was in the right direction and indicates the tendency in this respect during the period.

In table $V$ was seen for each industry the average number of days in operation each year. Of the 12 industries included 6 had their longest run in 1901, and 6 had it in 1900 . On the whole, however, there was an increase for 1901 of one day, or from 298 to 299 days.

## THE LEAD AND ZINC INDUSTRY OF SOUTHEWESTERN WISCONSIN.*

The amount of lead and zinc ore which has been mined in southwestern Wisconsin during the last three quarters of a century within the borders of Grant, La Fayette and Iowa counties is not at all inconsiderable and yet a large number of people outside of the territory immediately surrounding these counties have yet to learn that such an industry exists within the borders of the state of Wisconsin ; an industry which, if the facts furnish any criterion from which to judge, is at present only in the beginning of its development.

In the early days when trains commonly known as lead caravans and drawn by oxen, covered the route between Mineral Point and Milwaukee the people of the Metropolis no doubt appreciated the mineral resources of southwestern Wisconsin. In those days the only mineral. mined was lead which was taken from openings within a few feet of the surface. Those areas which were early producers of mineral were abandoned by miners before the ore in sight was exhausted, owing to the supply of water. The reason for the abandoning of these productive areas was the prevailing idea that the downward extension of ore was very limited and therefore would not pay for machinery necessary to pump out the water. As a result of the surface mining which was done in early days the stranger is at once impressed by the surface appearance. Fields of twenty, thirty and forty acres of land are completely honeycombed by a vast number of depressions and elevations, the depressions varying from two to three feet to several feet in width. Many of these early-producing areas remain at present in the same condition in which they were abandoned forty or fifty years ago with the exception that erosion has been continually at work wearing

[^77]down the elevations and filling up the depressions. A few of these areas, however, have been leveled down by the owners of the land in order that they might become better adapted for grazing and agricultural purposes. A very noticeable thing which never fails to attract the attention of the careful observer as he rides across the country in the matter in which these heavyproducing areas lie in an east and west direction.

It is not the purpose of this paper to enter upon a scientific treatment of this subject. It is to be purely of a popular nature, easily understood by the ordinary individual. If anyone wishes to acquaint himself with the actual relations of the lead and zinc ores and their association with other gangue minerals, such as calcite, barite, pyrite, etc., together with the broad, underlying principles which have controlled their segregation, I know of no better geological report than that of Moses Strong, published in 1877 in volume II of the Geology of Wisconsin. However, in order to present the subject in such a way as to make it more easily understood it will be necessary to mention the geological succession of the strata and state briefly the location and mode of occurrence of the ores.

The strata of sedementary rock which form the geological series in southwestern Wisconsin were originally laid down by the water in an approximately horizontal position. Through subsequent earth movements the strata of rock have assumed an inclined position, dipping at quite an angle from northeast to southwest. Geologists have carefully worked out these formations and have found that they exist in the following order of succession: The uppermost member of the series is the Niagara limestone. This formation exists as a capping rock for the highest mounds of the region, e. g., at Sinsinawa Mound, located near Fairplay and only a short distance from the state line. The next formation is the Cincinnati group which underlies the Niagara limestone and also occurs only upon the higher mounds where the agents of erosion have not yet succeeded in wearing away the two upper formations and thereby exposing the underlying Galena limestone which is the prevailing surface rock in the lead region. This formation is by far the most important in respect to its metallic wealth of all which we have
to consider. It was in this formation that the surface mining was done in early days. In fact, the formation received its name from the abundance of lead sulphide, scientifically termed "Galena," which occurs within it. Wherever mining has been carried on in the underlying Trenton limestone, lead is usually present in the overlying Galena. These two formations constitute what is termed the Trenton division of the Lower Silurian formation. The Trenton limestone has a vertical thickness of about fifty feet, while the Galena has a varying thickness, depending upon the amount of surface denudation. These two formations have been the great producers of lead and zinc ore, the Galena limestone being especially productive of lead ore and the Trenton limestone containing mixtures of lead and zinc ores in varying proportions. Beneath the Trenton limestone lies the formation known as St. Peter's sandstone, which is about one hundred feet in thickness. This formation has been carefully examined to find if possible any indication of openings such as are characteristic of the Galena limestone. The only evidences to be found were occasional vertical fissures and seams. The fissures and seams were found, however, to contain no metallic matter, nor minerals and clay such as are found in veins and therefore probably have no connection with the vein system of the Galena limestone. Beneath the St. Peter's sandstone lies equally as thick a formation of Magnesian limestone, and beneath this occurs the deepest-lying formation of the re-gion-the Potsdam sandstone.

The reader will recall to mind the statement having been made that while these formations were evidently laid down in approximately a horizontal position, subsequent earth movements had caused them to assume a position inclined at a considerable angle to the southwest. We have already learned that the metallic wealth of southwestern Wisconsin is confined to the two formations known as Galena and Trenton limestone, the base of which in the extreme southwestern part of the district lies over two hundred feet beneath the surface. Taking into account the location of the lead and zinc, together with the dip of the formation, we are naturally led to inquire whether or not these factors have not had an important influence in de-
termining the extent of the lead and zinc region. The answer is clearly in the affirmative, for while the Galena limestone is the prevailing surface formation throughout the lead region its lower limit approaches the surface nearer and nearer as we pass toward the north and finally gives way to the next lower forma-tion--the Trenton limestone. The northern outcrop of the Galena formation conforms closely to, and lies a few feet north of, the main watershed which forms approximately the bed of the Lancaster branch of the Northwestern railroad, running from Madison to Lancaster Junction. Only a few miles north of this divide, where the Trenton limestone forms the surface rock, are found at Drybone and Highland, just as one would expect, large deposits of zinc carbonate, commonly termed dry bone. Passing north the surface gradually slopes down to the bed of the Wisconsin river, and the St. Peter's sandstone and finally the Magnesian limestone are the surface formations. The southern tributaries of the Wisconsin river, such as Otter Creek and Mill Creek, have their origin in the St. Peter's sandstone. $\Lambda$ short distance below their source the streams have cut their way down into the Magnesian limestone, and as one passes down the streams the surface of this formation is seen higher and higher on the sides of the bluff until on reaching the Wisconsin river it forms the cap of all the bluffs from Sauk City to Boscobel, usually appearing as bold and rugged cliffs, lending a very picturesque effect to the scenery of the river. A vertical section drawn through the mining district of Beetown, Potosi and Fairplay, from the Mississippi river at the mouth of the Wisconsin river to the state line, shows very admirably the manner in which the rivers have cut their way down through the successive formations. The Mississippi river at Prairie du Chien reposes on the Lower Magnesian limestone. The bluff suddenly rises to a height of about six hundred feet; showing successively beds of Lower Magnesian limestone, St. Peter's sandstone, Trenton limestone and finally the capping Galena limestone. The formation gradually becomes thinner as one approaches the drainage basin near Sand creek where it forms a very thin layer upon the summits of the higher peaks. Passing this basin the Galena formation has a thick-
ness of from one hundred to two hundred feet and retains this thickness approximately until we reach the state line, with the exception of small areas in the valleys of creeks and rivers. Grant river, Pigeon Creek and Bois Creek, for example, have succeeded in eroding away the entire thickness of the Galena limestone, Trenton limestone and St. Peter's sandstone and are now resting upon the Lower Magnesian limestone. Platte river, although it has eroded its way through the first three formations, has not succeeded in cutting its way through the St. Peter's sandstone. Again, a vertical section drawn through the mining district from Hazel Green to Benton and Mineral Point and finally to the Wisconsin river presents a different appearance. More streams have taken part in the surface drainage but no individual stream has succeeded in eroding its way through the Trenton limestone with the exception of Pecatonica, which reposes upon St. Peter's sandstone, and Sneeds Creek, which lies near the Wisconsin river. This stream and the Wisconsin river have their beds lower in the series than any of the other streams in the region. Even the Mississippi river at the mouth of the Wisconsin river lies upon Lower Magnesian limestone-the next higher formation in the series. These facts alone show that the dip of the formation must be considerable. Keeping in mind the different formations which have been the great producers of lead and zinc ore it is, seen that in certain small areas, such as drainage basins, the entire orebearing formations have been eroded away while in other areas which constitute the greater part of the lead region the entire zinc-producing formation remains intact and there is superimposed upon this formation lead-producing Galena limestone varying in thickness from a few feet to two hundred feet.

In order to make this subject easily understood by those who are unafmiliar with some of the more common mining terms used in the lead region it will be necessary to define a few of these terms.

Range.-A range is a single or several parallel crevices containing useful ores or minerals. These crevices are seldom more than a few yards apart and may be vertical or only approximately so. In some cases these crevices are connected
by quartering ones but this is rather rare. The length of a range may vary from a few hundred feet to almost half a mile. The term range is also applied to horizontal bodies of ore, either one or several superimposed upon one another. They may or may not be separated by unproductive layers of rock.

Crevice.-This term denotes a fissure, vertical or approximately so, and only a few inches in width. On becoming narrower a crevice finally verges into what is called a seam. A crevice may or may not be filled with ore or minerals.

Openings.-These are of two kinds, vertical and horizontal. Vertical openings are simply crevice openings which are mere enlargements of the crevice in certain parts. They vary in width from a few inches to several feet. There are frequently several openings in the same vertical crevice, separated by layers of unproductive rock. Horizontal openings are large, irregular spaces between the strata. They vary in thickness from one to four feet and are often superimposed upon one another and separated by unproductive rock known as cap rock, the cap of one opening being frequently the floor of the one above it.

Sheet.-This is a term used to designate a solid body of ore exclusive of other minerals which may fill either a crevice or an opening. A sheet is said to pitch when it inclines considerably from the perpendicular.

Pockets.-These usually have reference to small, irregular cavities in the strata in which ore is frequently obtained.

Lode or Lead.-This term is generally applied to ore deposits found either in crevices or openings.

Drift.-This term denotes an underground gallery or roadway.

By keeping these terms clearly in mind the reader will better understand the following portion of this paper which bears chiefly upon the relation of the lead and zinc ores to these different forms of openings and also upon the different methods of mining in use in the lead region.

A careful study of the geology of the region has shown that the ores of lead and zinc occur in various ways. Probably the simplest and most common occurrence is in sheets. These
sheets comprise a body of ore seldom more than a few inches in thickness inclosed between two walls of limestone which remain approximately parallel from a few yards to several hundred feet. The body of ore may be approximately vertical or it may be inclined at a considerable angle. The vertical extent of the sheet is greater than that of any other form of deposit, sometimes amounting to more than one hundred feet. These sheets are often intersected by others of a similar character at right angles and in quartering directions. This intersection forms an opening which is larger and more productive. Sometimes a thin film of clay intervenes between the ore and wall rock, but more often the ore is attached directly to the walls. In many cases the inclined sheet forms a continuation of the horizontal opening and results in what miners commonly call flats and pitches. Of the forty different mines which have been reported on only three have been reported as have ore bodies of any other form than "flats and pitches." The miner follows the ore body for a short distance in a horizontal direction when suddenly its horizontal extension ceases and it begins to dip downward at an angle of about 45 degrees. He follows the ore body in this direction for a short distance when suddenly it changes its direction and again assumes a horizontal position. After the ore has been removed and the stranger enters the underground passage, he is immediately struck with the succession of flats and pitches formed by the underlying wall rock.

When lead ore occurs in openings it sometimes occurs "attached to the wall rock and sometimes in loose masses mixed with earth, stone and ferruginous clay. This associated material can usually be removed without the aid of blasting. The openings are frequently s,o large as to be termed caves and often have their sides encrusted with large and well developed crystals of ore. Lead ore, scientifically termed "Galena," very frequently occurs in horizontal openings, in large, irregular bodies many feet in width, from a few inches to two or three feet in thickness, and often several hundred feet in length, associated with ores of zinc. The Galena is sometimes attached to the floor, sometimes to the roof and at other times near the middle of the opening. This mode of occurrence is confined
to the lower portion of the Galena limestone and to the underlying Trenton limestone. Galena often occurs in pockets which apparently have no connection whatever with crevices. They are simply irregular cavities, varying from a few inches to several feet in diameter, occurring at different places in the limestone where that formation seems to be exceptionally porous. When Galena occurs in pockets it is usually found as crystals attached to the wall rock. Besides occurring in various ways in rock cavities it sometimes occurs as float mineral scattered through the earth and clay near the surface of the ground. When galena occurs as float mineral it is usually distinguished by having the edges and angles of the crystals worn smooth and also by being partially decomposed on the surface and often covered by a white coating of lead carbonate.

We have already considered briefly the succession of the different formations and the mode of occurrence of the ores. We will now turn our attention to the methods of removing the ore. The occupation of mining in contrast with most other occupations always carries with it more or less uncertainty. Because of this fact the business man of ordinary means hesitates to invest in machinery sufficient to develop a property, although the existence of large bodies of ore is highly probable. Rather than invest a large amount of capital in an enterprise which very probably would yield a large income and yet in which there is a shade of uncertainty, the man of ordinary means prefers to invest very little capital and thereby receives an income much smaller in proportion. This fact, in the opinion of the writer, goes far to explain why the rich deposits of lead and zinc in southwestern Wisconsin have not been more fully developed. It explains why men preferred to use primitive methods of hoisting and separating ore for fifty or sixty years rather than adopt more modern and up-to-date methods. Notwifthstanding this fact, however, a few mining companies controlled by practical men have taken a step forward, beginning a new era in mining activity in southwestern Wisconsin.

The apparatus for hoisting ore, pumping out the excess of water and also for separating the ore, which has been in use since the beginning of the industry, is substantially as follows:

If the amount of water is small it is usually removed by bailing into a large tub or barrel and hoisting it out with a windlass. If the amount of water is too great to be bailed a pump operated by horse power is often employed. In some cases what is called a horse pump and hoisting gin are combined and can be used together or separately as conditions may demand. In practice it is customary to construct the machine so that the hoisting drum can be disconnected from the pump, and vice versa, as it is seldom desirable to carry on both processes at the same time. The combined machine may be described as follows: It consists of a vertical shaft capable of being revolved. Near the bottom of this shaft is a bevel gear which washes into a smaller gear attached to a shaft which by means of a simple mechanical apparatus operates the pump. Near the top of this vertical shaft is attached a drum around which is wrapped a rope in such a manner that each end passes over a separate pulley and down the shaft where it is attached to a bucket. A sweep is attached to the vertical shaft so that a horse, in walking, imparts to the drum a circular motion, aad one bucket goes down the shaft while the other ascends. The load which a horse can raise, including ropes, buckets and the friction of the machinery, is as much greater than his own direct force as the diameter of his circuit is greater than that of the winding drum.

The methods commonly used for dressing and separating ores is described in Vol. I of the Geology of Wisconsin very clearly and concisely as follows: "The ores of lead and zinc as they arrive at the surface are sometimes clean and pure in large masses and ready for market, but more frequently they have to undergo certain operations of dressing and cleaning. Lead ore in small pieces usually comes from the mine mixed with considerable clay and "wash dirt." It is cleaned by washing as follows: A long box about nine inches deep and open on the top and at the lower end, is set in the ground at a moderate slope and a stream of water is conducted into it over the head board at the upper end. The ore to be washed is placed in the extremity so that the water falls upon it. The operation is completed by the miner shoveling the ore against the stream uutil all foreign substances are removed. Frequently, however, a simple
washing does not suffice for the preparation of ore, especially if more than one kind of ore is present in the mass or if the ore is mixed with rock, or vein material. In such cases it is customary to prepare and separate the ore by crushing and jigging. The crushing is effected either by a rock breaking machine such as "Blake's rock breaker," or by passing it through a pair of rollers operated by horse power. It is then washed and screened, the coarser portion recrushed; and the operation of cleaning and separation concludes with jigging, which is effected by the contrivance described as follows: The jig used in the lead region consists usually of the following parts: an exterior deep box filled with water and an interior shallow box in which the ore is placed, the bottom of which consists usually of an iron plate pierced with fine holes to permit the passage of water through the mass. The box is connected with a long lever arm, at the end of which the workman places himself, being able to reach it standing on his toes, with his arms extended above his head. By alternately rising and falling on his feet he produces a slight vertical movement of the interior box and its contents. The contents of the inner box being suspended in water and agitated immediately undergo a change of position, resulting in the deposition of the heaviest material at the bottom of the box and the lightest, such as stone, at the top. After a short agitation the inner box is raised from the water by depressing and fastening the lever and the materials are removed. At the close of the operation the water is drawn off from the outer box through the plug and the fine ore, which may have passed the sieve, is collected at the bottom of the box.

The fall of bodies in water, on which the action of the machine depends, is governed first, by specific gravity, and second, by the relative size of the pieces, the large pieces falling with the greatest rapidity because the resisting surface is less in proportion to their weight. Therefore, when the materials to be separated are placed in the jig without sufficient previous classification, according to size, the separation cannot be perfect. If, however, the material is first separated by sieves of various sizes and each size treated by itself in the jig, the separation is much more perfect, as they then arrange themselves
according to their different specific gravities." Various different modifications of these simple devices for raising and separating ore have been in use in the mining district, but these serve to illustrate the primitive methods which have been in use.
In Volume II of the Geology of Wisconsin, published in 1877, with T. C. Chamberlain as chief geologist, may be found a detailed account of the different ranges, mines and diggings located in the different mining districts of the lead region, together with a statistical report of the amount of lead and zinc ore produced in each district. The production of zinc ore from 1860 to 1876 was determined, and also that of lead ore from 1862 to 1876. The use of zinc ore in the Wisconsin district began in 1860. The amount of zinc ore, therefore, could be obtained from the smelting furnaces and ascertained with a great degree of accuracy. The production of lead ore, however, even at that early date could only be ascertained approximately. Owing to the changeable, character of the industry and the failure on the part of mine owners to keep and preserve records of the different properties, only a fair estimate could be obtained in many cases. However, a great deal of care was taken in the preparation of that report, and it is, therefore, a fairly accurate statement of the mount of ore mined in southwestern Wisconsin between the dates previously referred to.

In the absence of any definite information relating to the output since 1876, the purpose of the writer has been to ascertain as accurately as the limited time would permit, the condition of the mining industry since 1876 , and how the production of ore compares with the production prior to that date. The information has been procured in many cases under difficulties owing to the failure to keep and preserve records, and in a few cases to the failure of mine owners to grant the desired information.

Notwithstanding these difficulties it is to be hoped that those who are interested in this great industry may be benefited by the results otained, which are based upon reports of mine owners, smelting furnaces and railroad companies. Notwithstanding the very limited time allotted for the completion of this paper considerable care has been exercised in order to ascertain the
names of all parties operating mines in the lead region. Each party, so far as ascertained, has been given an opportunity of reporting the condition of his mine from the standpoint of duration, amount of ore produced, number of men employed, etc. There are, no doubt, a few of the smaller mines located near the outskirts of the district, concerning which the writer has not been able to gather information. There are also a few others which have not been reported owing to failure on the part of mine owners to comply with our request. Upon the whole, however, the facts already gathered will serve as a basis from which one may get a fairly accurate idea of the importance of the lead and zinc industry in southwestern Wisconsin.

Between forty and fifty mines have been reported as being operated at the present time. Of those reported, 12 per cent. were opened up as early as 1840 . New mines were gradually opened up in various parts of the district between 1840 and 1890, but the period of greatest activity in mining is included between 1890 and 1902. The reports show that about onethird of the mines now operated had their beginning during this period. These mines which began operation during this period have been operated almost continuously and are among the best producers of the region. There are occasionally mines which have been worked almost continuously for fifty or sixty years, but instances of this kind are very rare. In most instances the older diggings have been worked off and on during a number of years and later discontinued for various reasons and again renewed under more favorable conditions and perhaps under different management. It is this intermittent character of the mines, together with the failure to preserve and transmit a record of the output which makes it absolutely impossible to ascertain more than approximately what the output has been during the last quarter of a century. Even a fair estimate would be impossible if one were compelled to rely solely upon the statements of mine owners. Fortunately there are methods of obtaining more exact information, which have been employed, and which will be mentioned later on in this paper.

The number of men employed in the different mines depends manifestly upon the extent to which the work is being carried
on. In some of the smaller diggings, which are being worked only a portion of the year, for example, during the winter when agricultural pursuits are impossible, only three or four men are employed. In some of the larger mines, on the other hand, which are controlled by incorporated companies which have purchased modern machinery for hoisting and separating the ore, from thirty-five to fifty men are employed, and the mines are worked night and day. The changeable character of the mines makes it difficult to determine the average number of men actually employed in the lead and zinc region. Judging from reports of mine owners, however, there are at present no less than six hundred men employed in mining lead and zinc ore in southwestern Wisconsin. If every individual engaged in mining, during a portion of the year was taken into account and the number determined exactly, I have no doubt that it would greatly exceed that number. At all events it is an industry which demands the attention of the people of the state and deserves all the assistance that can be given by the Wisconsin legislature in the way of promoting its development.

The depth to which the different mines are being worked varies very greatly. In a few cases lead and zinc ores are being removed at a depth of thirty feet. This, however, represents an extreme case. In most instances the depth of working varies from 75 feet to 150 feet, and in a few mines the ore is being hoisted from a depth of two hundred feet.

The manner of removing the ore depends largely upon topographical conditions. In a few instances where the topography is rough the ore is removed by merely tunneling into the side of the hill. In most of the mines, however, it has been necessary to employ some kind of hoisting apparatus. A large majority of the mines are still using very primitive apparatus for hoisting, pumping, and separating the ore, such as that already described. Mining companies are seeing the necessity of machinery of great efficiency, however, and are rapidly replacing primitive machinery by steam and gasoline engines and suitable machinery for pumping out the excess of water and hoisting the ore. At least $25 \%$ of the mines of any importance have already been provided with steam or gasoline engines,
either for hoisting or pumping, or both combined. A small number of the mines have already been provided with steam crushing machinery, and in very few instances magnetic separators are being used. Although such machinery is only rarely in use, other mining companies have signified their intentions of introducing more efficient machinery in the near future. It will not be long, therefore, before the metallic wealth of southwestern Wisconsin will be developed in such a manner as to show its real importance among the different resources of the state.

In order that the average reader may form a clear idea of the machinery which is being used in some of the most modern equipped mines of the lead and zinc district the apparatus will be described in detail. It must be remembered, however, that a modern equipped mine does not mean an especially rich deposit of ore. The most primitive kind of machinery may be operated above the richest deposit of ore. The reason the following mines were chosen are three in number: (1) Because they are about as well equipped as any others in the district; (2) because they represent separate mining districts, and (3) because the owners have very kindly furnished us with accurate and complete reports concerning them.

The Empire Mine.-This mine is located in the eastern part of the city of Platteville. It is practically a new mine. The machinery was first put in operation April 13, 1899. It is operated by the Platteville Lead and Zinc Co. The machinery in operation at this mine includes a 22 horse power gasoline engine, a Ledwood hoister, and a 16 -inch Cornish pump. The fan is revolved at 1,700 revolutions per minute to force air into the pipe. On March 15, 1902, this company had contracted for a $\$ 6,000$ mill, to be in running order June 1, 1902. During the winter of 1901 and 1902 there were 35 men employed, with a pay roll of $\$ 800$ per month. During the coming summer there were to be 50 or more men employed. The entire force is composed of one shift per day of eight hours.

Trego Mine, No. 1.-This mine is situated about four miles east of Cuba City and has been controlled by the Trego Mining Company for about a year and a half. For about six years
prior to November 1, 1900 this mine was worked in the regular old-fashioned manner and the output was small. The plant, which had already been erected May 3, 1902, is valued at $\$ 25,000$. The ore is hoisted by means of steel ore cars, which are conveyed to the surface by a regular mining cage or elevator. These cars are dumped into the mill, which handles about 200 tons of ore in nine hours, producing about forty tons of zinc blende and iron pyrites mixed. This product is then roasted to render the iron pyrites magnetic, passed through electric separating machines, which bring the magnetic iron into the field of electro magnets to which it is immediately attracted and thus removed from the ore. This plant is unique in character and well adapted to the treatment of ore, bearing a considerable percentage of iron pyrites. The working force comprises 60 men in each 24 hours, who handle about 200 tons of material and produce about 75 to 100 tons of finished zinc blende per week.

The foregoing facts concerning only two of a considerable number of what may be termed well-equipped mines, serve to show the recent tendency toward a more rapid development of the lead and zinc industry.

In the preparation of this paper the aim has been to ascertain as accurately as possible the output for the entire district. The lack of continuity, however, in the operation of many of the mines, together with the failure to keep and preserve records, show clearly that an estimate based entirely upon the reports of mine owners must be very unsatisfactory. While these reports have been of great value for the collection of other data, they have been of little service from the standpoint of the amount of lead and zinc ore produced at the present time. The difficulty has been overcome, however, through the assistance of the different railroad companies which have in the past transported ore from the various shipping stations in the district. Reports furnished by the auditors of the different companies show very accurately the amount of ore taken from shipping stations during the period from June 30, 1896, to March 31, 1902. According to these reports, $287,891,333$ pounds of lead and zine ore were shipped from the Wisconsin district by the Illinois

Central Railroad Co., the Chicago \& Northwestern Railroad Co., and the Chicago, Milwaukee \& St. Paul Railroad Co. during that period. This amount of ore, combined with a small quantity which is hauled by team and smelted within the district, chiefly by the Mineral Point Zinc Co., represents quite accurately the entire amount of lead and zinc ore mined within the lead and zinc region of southwestern Wisconsin during the last five years and nine months.

The following smelters have been in the market for Wiscon$\sin$ zinc ores at one time or another:

The Illinois Zinc Co., Peru, Ill.
The Wenona Zinc Co., Wenona, Ill.
The Mineral Point Zinc Co., Mineral Point, Wis.
The Waukegan Zinc Co., Waukegan, Ill.
The Sandoval Zinc Co., Sandoval, Ill.
The Ingalls Zinc Co., Ingalls, Ind.
Page, Krauss \& Co., St. Louis, Mo.
The Matthiessin \& Hegeler Zinc Co., La Salle, Ill.
Owing to the failure on the part of some of these companies to furnish us a complete statement of the amount of zinc ore smelted by them, no attempt will be made to determine the separate amounts of lead and zinc ore produced in the lead and zinc district. We feel greatly indebted, however, to most of these companies for the excellent reports which they have furnished, and take the liberty of publishing them in order that the reader may form his own estimate:

Wenona Zinc Co.-This plant began operations in 1892, and has been operated about six years. The ore used largely comes from Missouri. The estimate of Wisconsin ore used is as follows:


## Mineral Point Zinc Co.-The amount of Wisconsin ore smelted by the Mineral Point Zinc Co. is as follows:



Waukegan Zinc Co.-This plant began operations at North Chicago, formerly called South Waukegan, in June, 1895. The consumption of Wisconsin ores up to April 30, 1902, is as follows:

| 1895 | 200 | tons |
| :---: | :---: | :---: |
| 1896 | 593.69 | net tons |
| 1897 | 1,491.5 | net tons |
| 1898 | 2,843.91 | net tons |
| 1899 | 529.375 | net tons |
| 1900 | 1,035.05 | net tons |
| 1901 | 1,192.578 | net tons |
| 1902 | 463.873 | net tons |

Page \& Krauss.-The amount of Wisconsin ore purchased annually by this company is estimated at 2,500 tons.

Matthiessen \& Hegeler Zinc Co.-The amount of Wisconsin zinc ore purchased by this company from 1876 to 1901 is as follows:

|  | Calamine, tons. | Blende, tons. |
| :---: | :---: | :---: |
| 1876 | 1,849 | 3,180 |
| 1877 | ${ }_{916}$ | 3,539 |
| 1878 | 977 | 3,554 |
| 1879 1880 | 2,593 | 4,191 |
| 1881 | 2,079 3,320 | 2,243 |
| 1882 | 4,465 | 2,201 |
| 1883 | 6,880 | 3,604 |
| 1884 | 6,197 | 3,151 |
| 1885 | 3,812 | 3,637 |
| 1887 | 4,708 2,839 | 3,450 3,330 |
| 1888 | 3,699 | 3,308 |
| 1889 | 6,314 | 2,630 |
| 1890 | 4,922 | 4,471 |
| 1892 | 1,620 5 | 4,160 |
| 1893 |  | 3,760 3,727 |
| 1894 |  | 3,633 |
| 1895 |  | 3,544 |
| 1896 |  | 2,809 |
| 1898 |  | $\stackrel{2,803}{2,885}$ |
| 1899 |  | 2,324 |
| 1900 |  | 1,230 |
| 1901 |  | 2,427 |

Manifestly the most reliable source of information in the determination of the aggregate output of the district is the reports of the different railroad companies. Their reports show that during the five years and nine months from June 3, 1896, to March 31, 1902, the total output greatly exceeded 287,891,533 pounds of ore and would, no doubt, reach $300,000,000$ pounds. The report of Moses Strong, published in Vol. II, of the Geology of Wisconsin, shows the total production of lead and zinc ore, from 1860 to 1876 , to have been $445,364,933$ pounds. In comparing these amounts we find that the amount of lead and zinc ore mined in southwestern Wisconsin during the five years and nine months prior to March 31, 1902, equalled 67 per cent. of the total output for the sixteen years prior to 1876.

In the treatment of the subject matter contained in this paper it has been necessary to be as brief as possible. The aim has been, however, to mention some of the most important facts bearing upon the subject and to so arrange them that they may appeal to the average reader. If, after reading its contents, he has a more definite idea of the geology of the region and the way in which scientific research has aided in the development of our resources, together with a more definite idea of the occurrence of ores, the methods of treating them, and finally the importance of this industry among the others of the state, the author's purpose will have been fully accomplished.

## PART X.

## Factory Inspection.

The work embraced under the term Factory Inspection may be said to consist of enforcing the laws which regulate the conditions in factories, workshops and many other places where the safety of individuals or the public at large require such regulations. The actual work of enforcing these laws is performed by the factory inspectors. Briefly speaking, the duties of the inspectors in this respect consist of visiting each place embraced by the so called factory laws, and through an inspection of the same, ascertain whether the conditions there meet the requirements of the law. When violations are discovered they must go still further. It is their duty to see that all such violations are corrected. To this end they are even authorized to institute and maintain prosecutions before the courts. The inspectors must also report in full to this Bureau upon the condition of all places inspected, and show in detail all other acts performed by them in their official capacity.

The so called factory laws, which it is our duty to enforce, cover a good deal of ground. In a general way it can be said that they relate to the safety and comfort of those who are employed in factories and shops, and to the safety in other public or semi-public buildings. The provisions, however, are so numerous that they cannot possibly be given here in detail.

A fairly good idea of the nature and extent of this work may be had from the following statement, which is a part of the general instructions to the inspectors:

The duties of the inspectors consist mainly of enforcing the socalled factory laws; that is, the laws which regulate the condition of employment in factories and workshops, including places where cigars, cigarettes and garments or wearing apparel of all kinds are made; building operations, mercantile establishments, öffices, summer or beer gardens, bowling alleys and other places; also the laws which require fire escapes, outward swinging doors and other safety appliances on public buildings, such as hotels, tenement houses, boarding houses, school houses, opera houses, assembly halls, office buildings, hospitals, churches, etc.

The laws in question will be found in the Wisconsin statutes of 1898 and in the session laws of 1899 and 1901. They have also been compiled in a pamphlet of convenient form, fully indexed, for the use of the inspectors. Each inspector is required to be thoroughly informed as to these laws as a necessary preparation for his duties.

In order to enforce these laws and to prevent their violation, frequent inspections are necessary ; that is, the inspectors must visit the different places and thoroughly examine every part and condition that comes within the laws and pertains to the safety of those who are employed in or live there, as well as of the public in general. Each place should be inspected as often as possible. It is especially necessary to give the closest attention to places where women and children are employed.

The inspectors are provided with blank reports, one of which must be filled out at the time of inspection for each building or place inspected. A copy of all such reports must be forwarded daily or weekly to the commissioner of labor at Madison. In addition to this the inspectors must also make weekly reports upon their work on a special blank which is provided for that purpose. Daily or weekly reports are absolutely necessary to effective work, not only on the part of the inspectors, but in the office.

In filling out the reports certain rules should be observed. For instance, when for obvious reasons no answer to a question in the blanks is necessary or can be had, the blank space should be filled in with a line, thus,
answer is required or appropriate, it should be given even if an answer to the same effect has been given in another part of the blank.

Where personal examination as to any question appearing on the blanks will determine the facts, such examination is expected to be made. It is not the policy of the law to rely upon employers' statements that no employees are under the age of 14 years; that a register is kept of names, ages, and addresses of those under 16 ; that minors are physically fit for work; that minors have filed affidavits or permits; that fire escapes have balconies attached; that proper hose attachments are provided; that doors swing out or that the windows or floors are of certain dimensions. These are given only as illustrations. There are, of course, certain questions propounded on the blanks that can be answered only by the employer (the truth of which can not be detected by an examination however rigid), but all other answers are expected to be those of the inspector and to result from actual and thorough inspection.

Answers to inquiries relating to the size of rooms or windows should be given accurately after you have personally taken the measurments, as such answers will be used to ascertain the number of square feet of space that is allowed to each employee, the number of cubic feet in the room, the percentage of window area to floor space, etc. Measurements taken at previous inspections or furnished by the occupant of the premises should not be relied upon.

It is very important to have answers to a set of questions consistent with each other. The inquiries may appear unimportant, but each one has a definite object, and careless answers make the report more or less valueless.

The answers should be brief, of course, but still should be complete enough to disclose the situation. The files of the Bureau furnish abundant examples of incomplete answers. One will illustrate: The question apearing upon the blank was"Number of doors in each case which swing out, slide or swing in ?" The answer filled in this question read, "In," showing that the inspector failed to comprehend the full scope of the question.

It will be noticed that the blanks which are intended for reports for inspection vary considerably. There are several reasons for this. In the first place, buildings of nearly all classes are included, and these vary both in construction and purpose for which they are used. Then again, there is a great difference between the nature and number of the provisions by which the different places are affected. A factory, for instance, differs greatly from a mercantile establishment and is affected by more and different provisions.

For these and other reasons it was necessary to classify the places to be inspected with reference to the kind of buildings used and the business carried on in them as according to the provisions in the laws by which they are affected, and also to prepare a separate set of blanks for each of these classes. It will also be noticed that the questions in each blank are so framed and arranged that the answers to them, if carefully made, will necessarily show the condition of the building, or place to which they apply.

By the word "factory" is generally meant a larger shop or one which is driven or operated by mechanical power, and by work shop, as usually understood, a smaller shop where hand labor predominates. As to the blanks for these two classes of places, the one intended for the former is larger and more complete than the one for the smaller shops. This distinction between factory and work shop, however, is difficult to maintain in actual practice. So much depends upon the location and surrounding circumstances, that no distinct line can in every case be drawn for the purposes of inspection. As between other places, such as hotels, opera houses, etc., the distinction is usually more clearly defined, though in some cases even here the facts are such that it is hard to tell just how to classify them.

One blank inspection report should be filled out for each building inspected, regardless of ownership or whether used in connection with other buildings or not. In this connection it should be noticed that the blank to be used for reporting upon factories is divided into two parts, and that the questions in the first of these, or part I, are such that the answers must cover the business of the firm as a whole, no matter how large the firm
is and how many buildings it occupies, while the questions in part II relate to the condition or facts in one particular building only. This should be borne in mind especially, because it will tend to save labor. For firms having more than one building and for which therefore more than one blank must be used, it will not be necessary to fill out or use part I, except in one of the blanks. This, as said, for the reason that part I relates to the whole plant, while part II relates to one of the buildings only.

As emphasized already, the inspection should be personal and thorough. Mere statements as to the condition of interested parties are seldom reliable, and therefore not wanted. In all cases where irregularities or violations of the law are met with, the inspector should make a close investigation of the same, and as soon as he has learned the real situation, he should take the matter up directly with the proprietor or superintendent in charge and with him talk over and suggest the necessary changes. To come to a clear and definite understanding as to what ought to be done while on the ground is always indispensible to effective work. A good, frank and open talk between the inspector and party in charge also leads to much better feeling on the part of both sides and establishes a confidence that otherwise is apt to be lacking.

As soon as possible after the inspection, the inspector should also mail to each firm where violations have been made a statement showing in detail all such violations and request that the necessary improvements be made. Such statements are usually called orders. They are also required by law and can be made on a blank provided for that purpose.

All violations of the law should also be reported to this Bureau on the inspection blank filled out for the building where they were discovered. Appropriate space in the blank is provided for this purpose, either immediately after each set of questions, as in the case of factory inspection blank, or at the bottom, as in the case of most of the other blanks. All actions taken by the inspectors should be reported to the Bureau in the place designated for this purpose.

In order to be able to properly perform their duties and thus
be of some value to the state, it is absolutely necessary that the inspectors should be interested in their work and that they should study it closely. Their duties are not those of a police officer only, but are largely of a reformatory character. Not only must they be fully familiar with the laws they are charged to enforce, but they must know how to enforce them wisely. A good inspector must know all about the latest and best methods of guarding dangerous machinery, the most effective methods of sanitation, the kind of fire escapes, etc., which best serves the purpose, how to find, with the least amount of friction and delay, those children that are illegally employed, even though they claim to be old enough and may have papers to that effect.

These are only a few illustrations of what is required of the inspectors. The inspectors to be successful, must be able to enter upon their work in the right spirit, must have good judg: ment and know how to get on with men. They must be so familiar with the law and with what is to be done when, the laws are violated, that their position in this respect will be above criticism. Those who operate or manage factories and with whom the inspectors must deal, are experts in such matters, and unless the inspectors know as much or are fully competent, they are immediately at a disadvantage, if not made to appear ridiculous.

The inspectors should be firm and courteous, as well as well informed. Cases where they must show authority, in order to carry out the purposes of the law, are met with now and then, but, unless provoked by the conduct or incompetency on the part of the inspectors, such cases are the exception rather than the rule.

The inspectors are officers of the Bureau of Labor and Industrial Statistics. This Bureau is charged with many duties besides enforcing the factory laws and in which the inspectors may have to assist. For instance, they may be called upon by the Bureau to gather statistics and other facts. Under the law it is also the duty of the inspectors in Milwaukee to assist the superinendent of the Free Employment Bureau in his work.

All work performed by the inspectors in the line of their
duties must be reported to the Bureau either on blanks prepared for this purpose or by letter.

When in doubt as to the course to take, or confronted with questions which they do not like to decide upon their own responsibility, the inspectors should immediately put themselves in communication with the Bureau.

The following blanks are among the most important of those which will be used by the inspectors.

Form No. I will be used in the inspection of factories. This blank covers eight pages and is divided into two parts. The first of these, or part I, relates to the plant as a whole, regardless of the number of buildings occupied by it. The second part, or part II, is intended for one building only; that is, one copy of part II will be filled out for each building-not plantinspected.

Form No. II is intended for workshops only, or smaller shops, which can not properly be classed as factories. As stated above the distinction between factories and workshops is not very definite and therefore largely one of judgment. In a general way it can be said that establishments which employ steam or other mechanical power as motive power should be classed as factories.

Form No. III should be used in the inspection of cigar factories, or places where cigars, cigarettes, etc., are made. These places are affected by the factory laws in general, especially by Chapter 79 of the Laws of 1899 and Chapter 239 of the Laws of 1901.

Form No. IV is intended for "sweat shops" or places where garments or wearing apparel of all kinds are manufactured. This blank will not have to be used to any great extent outside of Milwaukee.

Form No. V will be used in the inspection of hotels, lodging, boarding and tenement houses.

Form No. VI should be used in reporting upon opera họuses, halls, schools, offices, storage, churches, hospitals and other public buildings.

Form No. VII is intended for use in inspection and report-
ing upon mercantile establishments or department stores, wholesale houses, etc.

Form No. VIII will be used when reporting upon the condition in building operations or places of work where buildings are either constructed, altered or repaired. (See Chapter 280, Laws of 1901.)

Forms III, IV, V, VI, and VII, respectively, are stitched together into packages, each one of which contains 10 blank reports. This was done for the sake of convenience only. .It does not mean that those in each package should be kept together after being completed unless it is convenient to do so. Blanks which are completed can be torn off and sent in at any time during the week.

The blank form for Orders for Changes is also stitched. This form should in all cases be made out in duplicate, one for the party to whom made and one to be kept by the inspector until ordered in by the bureau. The part to be sent out is perforated and can thus be easily separated from that to be kept on file.

In filling out these orders, the labor of writing out the extra copy may be saved by the use of a carbon to be inserted between the leaves.

There is also a blank form for weelcly reports of all the work done. This should be made out at the end of each week and immediately forwarded to the bureau. This blank should show in appropriate places for each day during the week the number of places or buildings inspected, the number of orders issued and suggestions made, and all other duties performed by the inspectors. Detailed directions as to the use of this blank will be found on the first page of the same.

In these instructions is found what is expected of the inspectors, and this in turn certainly throws a great deal of light upon the nature of their duties or the work as a whole. The reports of the inspectors upon factories must show the number and of the buildings occupied, the number of persons employed, the number of boilers and amount and kind of power used. These facts are of value chiefly for statistical purposes. Then again, they must show the condition of the buildings, the number and
condition of the fire escapes, standpipes, stairways, elevators and hoists, signals, machinery requiring protection, polishing wheels, vats, doors, seats for women, and the sanitary condition in general. They are also inquiring about the number of children employed, the number of accidents that have occurred within a specified time, and the hours of labor. The reports must also show what action was taken when any of these things were in such condition as to render the situation unsafe or dangerous, or, when children under the legal age were found. This is only a part of what the inspectors have to look after in the factories alone but it helps to illustrate what was said in the instructions.

The facts thus reported by the inspectors were compiled in the bureau, and some of the more important results obtained from this are presented in the following pages:

The first table in order shows in detail, by cities and towns, the name, business, number of buildings occupied, number of persons employed, number of boilers, and amount of power used by each establishment inspected, outside of cigar factories and shops where garments are made. As this includes the detailed record of 3,059 establishments it must of necessity occupy a great deal of space. In fact it covers the greater proportion of this part of the report. The facts it contains, however, are of considerable value, amounting practically to a directory of the manufacturing establishments in this state. By this is not meant that it includes the name, etc., of every shop in the state where articles are made or repaired, for this it does not. But it is a fairly complete list of the more important plants, and in many cases will be found to be of great value.

The second table in order is a summary of the first, or the one that precedes it. It shows for each city or place of location the total number of establishments, buildings, persons employed, boilers, and power used. This table includes 242 places, and, by showing the relative importance of each, will be found interesting.

The third table in order shows the total by industries. The establishments included in the first table were classified by industries as well as by cities and the totals for each industry ob-
tained. These totals, as said, are given in the third table. The table includes 71 industries and is interesting from several points of view.

Besides the three tables thus described this part also includes many other facts which were compiled from the reports of the inspectors. Thus the totals for the cigar factories have been briefly analyzed. Considerable space has been given to a more complete analysis of the reports of 2,895 of the establishments which are included in the above three tables. And a few pages have been devoted to a summary of the work of the inspectors.

## ESTABLiSHMENTS INSPECTED.

| Name. | Business. |  | Buildings. |  | Employes. |  |  |  | Boilers. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\left\lvert\, \begin{gathered} \text { Under } \\ 3 \\ \text { stories. } \end{gathered}\right.$ | $\begin{gathered} 3 \text { or } \\ \text { more } \\ \text { stories. } \end{gathered}$ | Male. | Fe male. | Total. | Uuder 16 yrs. of age. | Number. | Total horse power. |
| APPLETON. |  |  |  |  |  |  |  |  |  |  |
| Appleton Brewing \& Malting Co. | Brewery |  |  |  |  |  |  |  |  |  |
| Appleton Chair Co. ................. | Chairs . |  |  | 1 | 14 |  | 14 |  | 2 | 100 |
| Appleton Crescent ........... | Publisher |  | 1 | 1 | 80 | 3 | 83 | 18 | 2 | 135 $*$ |
| Appleton Electric Laundry | Laundry . |  | 1 |  | 8 | 3 | 11 | 1 |  | * |
| Appleton Electric Power Co. | Light ...... |  | 1 |  | 4 | 4 | 8 |  | 1 | 5 |
| Appleton Hay Tool Co | Hay Forks |  | 1 |  | ${ }_{2}^{3}$ |  | 3 2 |  | 3 | 44 |
| Appleton Machine Co. | Machinery |  | 1 |  | 7 | $\cdots 3$ | 42 |  |  |  |
| Appleton Paper Box Factory .... | Paper Boxes |  | 2 |  | 60 | -••• | 60 |  |  | t |
| Appleton Pickle and Preserving | Pickles ..... |  | 1 | ........ | 1 | 8 | 9 | 1 |  | * |
| Appleton Paper \& Pulp Co....... | Pulp ..... |  | 1 |  | 2 |  | $\underline{2}$ |  |  | § |
| Appleton Screen Plate Co. | Screen Plates |  | 1 |  | 15 |  | 15 | 1 |  | $\dagger$ |
| Appleton Shirt \& Pants Co. | Clothing ...... |  | 1 |  | 17 | 3 13 | 20 |  | 1 | 10 $*$ |
| Appleton Steam Laundry .... | Laundry - |  | 1 |  | 5 3 | 13 | 18 |  |  | * |
| Appleton Toy \& Furniture Co | Toys, etc. |  | 1 |  | 3 45 | 3 | 6 | $\cdots . . .$. | 1 | 10 |
| Appleton Volksfreund ${ }_{\text {Appleton Water Works }}^{\text {Wo.. }}$. | Publishers |  | 4 |  | 45 | 1 | 46 | 23 | 1 | 20 |
| Appleton Water Works Co. | Water ... |  | 1 |  | 12 | . ....... | 12 |  |  | * |
| Appleton Weeker ........ | Publishers |  | 1 |  | 4 | $\cdots$ | 4 |  | 2 | 200 |
| Appleton Wire Works Appleton Woolen Mills | Wire Cloth |  | 1 |  | $\begin{array}{r}4 \\ 39 \\ \hline\end{array}$ | 1 | 5 45 |  |  | $\stackrel{*}{6}$ |
| Appleton Woolen Mills | Felt and Yarn |  | 1 | ........ | 39 27 | 6 39 | 45 | $4{ }^{\circ}$ | 2 | 60 225 |
| Atlas Paper Co... | Paper .......... |  | 1 |  | 54 | 16 | 66 70 | 4 | $\stackrel{2}{2}$ | 225 |
| Eagle Mfg. Co. | Fixtures .... |  | 1 |  | 3 |  | 3 |  | 1 | 10 |
| Fairbanks \& Timm | Machinery ... |  | 1 |  | 14 |  | 14 |  |  | $\dagger$ |
| Fox River Screen Plate Co | Screen Plates |  | 1 |  | 7 | ....... | 7 |  |  | $\stackrel{+}{+}$ |
| Fox River Paper Co........ | Screen Plates |  | 1 |  | 3 144 |  | 3 3 |  |  | - ${ }_{\text {+ }}$ |
| Inter Lake Paper \& Pulp Co | Pulp . . |  |  | 3 <br> 1 | 144 125 | 156 | 300 | 3 | 9 | 1,275 |
| Kimberly \& Clark Co. ....... | Paper . . . |  | 3 | 1 | 125 84 | . 11. | 125 | 6 | 8 | 1,125 |
| Kurz \& Root ...................... | Elect. Goods |  | $i^{*}$ | 2 | 84 | 11 1 | 95 |  | 5 | 1,009 |
| Lake Superior Knitting Works | Knit Goods . |  |  | 1 | 7 | 18 | $\stackrel{8}{25}$ | 2 |  | $\dagger$ $*$ |
| Mauser, Renner \& Graef | Hubs and Spokes |  | 2 |  | 15 |  | 15 |  |  | $\dagger$ |
| McMurry Packing Co.. | Canning... |  | $\begin{aligned} & 2 \\ & 3 \end{aligned}$ |  |  |  | 18 | 1 | 1 | 100 |
| Post Binding Co....... | Bindery |  | $\begin{aligned} & 3 \\ & \mathrm{~L} \end{aligned}$ |  | 49 3 | 26 3 | 75 6 | 40 | 4 | 400 $*$ |
| *=Electric; $\dagger=$ Water $;=$ Gas; $\S=$ Hand; **=Leased. |  |  |  |  |  |  |  |  |  |  |

ESTABLISHMENTS INSPECTED.

| Name. | Business. | Buildings. |  |  | Employes. |  |  |  | Boilers. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Under 3 stories. | $\left\|\begin{array}{c}3 \text { or } \\ \text { more } \\ \text { stories. }\end{array}\right\|$ | Male. | $\mathrm{Fe}-$ male. | Total. | Under 16 yrs. of age. | Num- | Total horse power. |
| APPLETON-Continued. |  |  |  |  | 10 |  | 10 |  |  | * |
| Post Publishing Co...................... | Publishers |  | 1 |  | 73 | 30 | 103 |  | 6 | 700 |
| Patten Paper Co.............. | Paper Pulp. |  | 2 | 1. | 120 | 30 | 120 | 1 | 7 | 1,200 |
| Riverside Fibre Co. Schroeder, Paul .... | $\mathrm{Pupp}_{\text {Marble }}$.... |  | 1 | 1 | 7 |  | 1 |  |  | 1, |
| Schroeder, Paul Speering, A. ... | Carding Wiol. |  | 1 |  | 3 |  | 3 |  | 1 | 35 |
| Speering, A. ......... | Carding Wcol |  | 3 | $i^{*}$ | 74 | $41{ }^{-}$ | 115 |  | 6 | 1,000 |
| Telulah Paper Co........... | Car Moving |  | 1 |  | 2 |  | 2 |  |  | * |
| The Standard Mfg. Co.... | Sash, etc. . |  | 2 |  | 20 |  | 20 | 1 | 1 | 120 |
| Valley Iron Works ... | Machines . |  | 1 | 1 | 16 | 1 | 65 16 |  | 2 | 160 |
| Walter, Geo., Eistate $\ldots$.. | Brewery ... |  |  | 1 | 16 3 |  | 16 3 |  | 2 | 160 |
| Webster, W. M., \& Son | Planing |  | 1 | 1 | 12 |  | 12 |  | $\ddot{2}$ | 260 |
| Wiley Co. $\ldots$ Wis........... | Malt . . |  | 12 | 1 | 25 |  | 25 |  | 2 | 285 |
| Wis. Malt \& Grain Co | Maper |  | 1 | 1 | 16 | 6 | 22 |  | 1 | 150 |
| Wis. Tissue Paper Co. | Waper |  | 1 |  | 10 | 2 | 12 |  | 1 | 150 40 |
| Wis. Wire Works ... | Wire . |  |  |  |  |  |  |  |  |  |
| tal |  |  | 60 | 16 | 1,340 | 430 | 1,770 | 102 | 76 | 9,069 |
| ASHLAND. |  |  |  |  |  | 1 | 16 |  | 2 | 85 |
| Ashland Brewing Co. ..... | Brewery |  | 12 |  | 150 | 1 | 150 | $i^{*}$ | 10 | 1,200 |
| Ashland Iron and Steel Co........... | Power and d Light |  | 1 |  | 25 |  | 25 |  | 4 | 500 |
| Ashland Light, Power \& Street Ry. | Power and Light |  | 1 |  | 125 |  | 125 |  | 5 | 300 |
| Ashland Lumber Co. ............ <br> Ashland News | Publishing |  | 1 |  | $\begin{array}{r}7 \\ \hline\end{array}$ | 3 | 10 |  |  | ** |
| Ashland News <br> Ashland Press | Publishing |  | 1 |  | 16 | ....... | 16 |  |  | * |
| Ashland Press ${ }_{\text {Ashland }}$ Steam Laundry | Publishing .... |  | 1 |  | 16 3 | $\cdots 12$ | 15 |  | 1 | 35 |
| Ashland Steam Laundry Ashland Sulphite Fibre Co. | Sulphite Fiber |  | 1 | 1 | 49 |  | 49 | .......... | 4 | 400 |
| Ashland Sulphite Fibre Co. Ashland Water Works ..... | Water ........ |  | 1 |  | 6 | ..... | 6 |  | 3 | 500 |
| Ashland Wood Working Co. | Woodwork |  | 1 |  | 5 |  | - 5 |  | 5 | 400 |
| Barker \& Stewart ............ | Lumber |  | 1 | $\cdots$ | 3 |  | - 3 |  | 5 | + |
| Bowron, A. W.. | Printing .. |  | 6 | ........ | 4 | 1 | 45 |  | 2 | 100 |
| Bretting \& Co. ${ }^{\text {chiol }}$ | Machinists |  |  | 1 | 2 | 1 | 3 |  |  | $\stackrel{+}{+}$ |
| Chequamegon Critic .......... | Wood and Coal |  | 1 |  | 40 |  | 40 | 3 |  |  |
| Crequamegon Ice Co. ............. | Ore Dock ..... |  | 2 |  | 125 |  | 125 |  |  | § |

Chicago \& N. W. Ry. Shops
Cole Bros.
Domestic Laundry
Durfee. W. R
Fast End Mill (Nestor Estate)
Fahrig. H. C...................
Jones \& Adams Co., The
$\bigcirc$ Kimble. Julius $\quad$................
Minneapolis, St. Paul \& Ashland Ry
Mowatt. D. W.
Murry Tnmber Co.
North Wis. Boiler Worlis
Pope Jumber Co.
Reis, C., Coal Co
Robbins Mfa. Co.
Scott and Taylor
Schroeder, J., Lumber Co
Standard Steam Lamndrv
Wis. Central Ry. Co. (Ore Dock)

## Total

## BELOIT.

Rarrott Mfg. Co.
Reloit Carriage Works
Reloit Creamery
Relnit Flectric Light \& Power Co
Reloit Free Pross
Reloit ras Light \& Coke Co
Reloit flove ro.
Reloit Tron Works
Reloit News, Daily and Weekly
Relnit S+eam Tanndrv
Relnit Water Works Co
Rerlin Machine Works
Reslev. C. H. \& Co.
Rlodgat+ Milling Co
ritv. Mills
cunningham Rems.
Nomd. R.J.. Knife Works
Fireka Stonm Laundry
Excelsior Starm Taprdry
Fairbanks. Morse \& Co
Ferguson Bros.

FACTORY INSPACTION,

ESTABLISHMENTS INSPECTED.


Luther, J. P., Glove Co
Metzig Bros. ${ }_{\text {Ladel }}$ St.........
Morris, C.
Morris, C. S....
Olson \& Upto
Rumsey, T. H., \& Co.
Russell, W. C.
Russell Glove Co
Safford. M.
Sears Tannery, No. i
Sears Tannery, No. ${ }^{2}$.
Stillman, Wright \& Co
Talcott, F. B., Estate
Truesdells Fur Coat Mfg.
Truesdell, H. C
Wellings,
Wright, Ch
Wright Co.
C.

Total

## CHIPPEWA FALLS.

Bigler, C. R
Bresina, John
Chpipewa Falls Elec. Light Co
Chippewa Falls Woolen Mill
Chippewa Lumber \& Boom Co
Chippewa Steam Laundry
Consolidated Milling Co.
French Lumber Co.
French Lumber Co.
Leinenkugel Rrewing Co.
McQuillan. .P L
Pannier. E. G.
Stanley
Stanley F. G \& C. A
Theriault, J. B.
Total

Gloves
Tools
Laundry
Brick
Brick ….........
Furriers
Cooper Shop
Soocker, etc
Gloves
Storage
Tannery
Tannery
Flour
Gloves.
Tannery
Agricultural Imp
Pickling Vegetables
Shoes, etc.


| $\begin{aligned} & 1 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \\ & 2 \\ & 3 \\ & 1 \\ & 1 \\ & 1 \\ & 2 \\ & 2 \\ & 2 \\ & 1 \\ & 1 \\ & 1 \\ & 4 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \end{aligned}$ |  | 5 4 2 17 12 12 8 4 9 21 8 4 24 34 5 8 17 3 4 23 |  | 17 4 6 17 12 12 14 4 11 143 18 4 24 54 39 17 17 3 4 26 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 49 | 5 | 482 | 263 | 745 | 32 | 20 | 1,007 |
| $\begin{aligned} & 1 \\ & 1 \\ & 3 \end{aligned}$ |  | 2 3 10 |  | 2 $\mathbf{3}$ 10 |  | 2 | 8 8 300 |
|  | 1 | 4 |  | 4 |  | 1 | 35 |
|  |  | 406 |  | 406 |  | 5 | 500 |
|  |  |  | 14 | 17 |  | 1 | 15 |
|  | 3 | 10 |  | 10 |  | ${ }^{-}$ | 175 |
|  | 1 | 5 12 | $\stackrel{6}{5}$ | 11 |  | 1 | * ${ }_{*}$ |
| 11 | 3 | - 21 |  | $\stackrel{1}{21}$ |  | 2 | 80 |
| ${ }_{3}^{1}$ |  | 4 |  | 4 |  |  | 8 |
|  | 1 | 32 |  | ${ }_{32}^{9}$ | 1 | 1 | 45 |
| 1 |  | 40 | 1 | 41 | 2 | 1 | 60 |
|  | $\cdots$ | 26 |  | 26 |  | 1 | 35 |
| 32 | 9 | 596 | 31 | 627 | 3 | 17 | 1,280 |

ESTABLISHMENTS INSPECTED.

| Name. | Business. | Buildings. |  | Employes. |  |  |  | Boilers. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Under 3 stories. | $\begin{array}{\|c\|} \hline 3 \text { or } \\ \text { more } \\ \text { stories. } \end{array}$ | Male. | $\begin{gathered} \text { Fe- } \\ \text { male. } \end{gathered}$ | Total. | Under 16 yrs. of age. | Number. | Total horse power. |
| EAU CLAIRE. |  |  |  |  |  |  |  |  |  |
| Bergman \& Creamer | Feed | 1 |  | 2 |  | 2 |  |  | $\ddagger$ |
| Banell, Wm., \& Son | Carriages ... | 3 | ........ | 18 | 1 | 19 |  |  | $300{ }^{\circ}$ |
| Chippewa Valley El. Ry. Co | Elec. Power | 1 |  | 18 7 |  | 35 8 |  | 1 | 300 200 |
| City Water Works ........... | Water .. | 1 |  | 7 9 | 12 | 51 |  | 1 | 200 50 |
| City Steam Laundry | Laundry | 1 |  | 65 | 15 | 80 | ........... | 1 | 30 |
| Cutter, A. A..................... | Shoed ... | 1 |  | - 5 | 15 1 | 6 |  | 1 | 30 |
| Davis, W. J., Elevators, The | Feed ... | 5 |  | 310 | 15 | 325 |  | 7 | 1,500 |
| Dells Paper \& Pulp Co........ | Paper . | 5 2 1 |  | 76 | 15 | 76 |  | 7 | 1,280 |
| Dickerson, John ............... | Brooms | 1 | $i^{*}$ | 2 |  | 2 |  |  | 50 |
| Drummond Bros. .. | Meat Packers | 1 | 1 | 35 |  | 35 |  | 1 | 50 |
| Eau Claire Boiler Works | Boilers | 1 |  | 6 | 1 | 6 3 |  |  | $\ddot{8}$ |
| Eau Claire Book Bindery ..... | Binding ..... | 1 |  | 15 | $\frac{1}{5}$ | 20 |  |  | \% |
| Eau Claire Book \& Stationery Co. | Blank Books | 1 |  | 15. | 5 | 4 |  | 1 | 50 |
| Eau Claire Gas Co. ................ | Gas .. | 1 |  | 25. |  | 25 |  | 2 | 150 |
| Eau Claire Hardwood Co. ... | Boxes ..... | 1 |  | 11 | $10 \cdot$ | 21 |  | $\ldots$ | ¢ |
| Eau Claire Leader ${ }_{\text {Eau }}$ Claire Light Power Co..... | Publishing | 2 |  | 12 | 1 | 13 |  | 4 | 700 |
| Eau Claire Light \& Power Co. | Power ... | 3 | 1 | 7 | 49 | 56 |  |  | $\dagger$ |
| Eau Claire Mattress Co . | Mattresses | 1 |  | 4 14 | ${ }^{+}$ | ${ }_{18}$ | 2 |  | $\ddagger$ |
| Eau Claire Trunk Co.... | Trunks ... | 1 |  | 14 | 4 | 18 | 2 |  | $\cdots{ }^{*}$ * |
| Fish, E. M., \& Co..... | Sash, etc. | 3 |  | 38 5 | 1 | 39 8 |  |  | * |
| Free Press . ...................... | Publishing | 1 |  | 50 | ${ }^{3}$ | 50 | 1 | 6 | 350 |
| Half Moon Lake Shingle Fuel Co | Shingles ... <br> Publishing | 1 |  | - 2 | $1{ }^{\text {] }}$ | $\stackrel{3}{3}$ |  |  | § |
| Herold, Der .............. | Publishing | 1 |  | 1 | 4 | 5 |  |  | * |
| Kurven Dress Stay Co. | Dress Stays | 1 |  | 3 | 1 | 4 |  | 1 | 40 |
| Lang Canning Co. ... | Canning | 2 | ......... | 70 | 30 | 100 | $3{ }^{1}$ | $\stackrel{1}{2}$ | 180 |
| Linderman Box \& Veneer Co. | Boxes ........ | 1 |  | 80 | $i^{\prime}$ | 81 |  |  | 1 |
| McDonagh, Frank | Mill Supplies | 4 |  | 12 | 1 | 12 |  |  | * |
| McDonagh Novelty Co. | Novelties ... | 1 |  | 20 |  | 20 |  |  | * |
| Madison St. Mfg. Co. | Sash, Etc. Brewery | 1 |  | 11 |  | 11 |  | 1 | 25 |
| Michels, Henry Northwestern Lumber Co. | Brewery <br> Lumber | 2 | 1 | 354 |  | 354 | $\cdots{ }^{\prime}$ | 6 | 240 |

Pauly Printing House
Phoenix Manfg．Co．
Phoenix Furniture Co
Phaneer Daniel Lumber
Telegram Publishing Co
Walter，John，Co．
Wis．Refrigerator Co
Total

## FOND DU LAC．

Able，T．W
American Chemical Co．
Badger Sewing Co．
Bechand Brewing Co
Central Steam
Chapman steam Laundry
Clark．Mf．g．A．W
Cox \＆Willis
Ehlers，P．J．
Engel，A．，\＆Son
Eureka Steam Laundry
Fond du Lac Awning \＆Tent Co．
Fond du Lac Canning Co．
Fond du Lac File Works
Fountain City Plow Works
Fount du City Plow works
Fond du Lac Malt \＆Grain Co．
Fond du Lac Shirt \＆Oreralls Co
Fond du Lac Steam Laundry
Fond du Lac Table Manfg．Co
Furstnow，A．H．．\＆Co．
Furstnow Ring Co．
Geddings，Lewis，Mfg．Co．
Grant．John，\＆Sons
Gurney Refrigerator Co．
Guse，H．C．
Hass，M．A．
Hammill Bedding Co
Hanson Postal Bag Rack Co．
Helmer Milling Co．
Helmer Midling Co
Huber \＆f Fuhrman Drug Mill


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ESTABLISHMENTS INSPECTED.

| Name. | Business. | Buildings. |  | Employes. |  |  |  | Boilers. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Under 3 stories. | $\begin{gathered} 3 \text { or } \\ \text { more } \\ \text { stories. } \end{gathered}$ | Male. | $\begin{gathered} \mathrm{Fe}- \\ \text { male. } \end{gathered}$ | Total | Under 16 yrs. of age. | Number. | Total horse power. |
| FOND DU LAC-Continued. |  |  |  |  |  | 5 |  |  |  |
|  | Wagons . | 1 |  | 5 4 |  | 5 4 |  |  | 8 |
| Molitor, M. \& M. . . . . . . . . . . . | Carriages ... | 1 |  | 164 |  | 4 164 |  | 1 | 150 |
| Moore \& Galloway Lumber Co. | Lumber, etc. | 1 |  | 164 |  | 164 | ${ }^{2}$ |  | § |
| Nehring, H. ....... | Pop ...... | 1 |  | 11 | $\cdots{ }^{+\cdots}$ | 12 |  |  | § |
| Odgen \& Radeloff, Gustave | Cooper . | 1 |  | 2 |  | 2 |  |  | $\pm$ |
| Rueping, F., Leather Co. | Tanning | 1 | 2 | 250 |  | 250 | 8 | 5 | 400 |
| Sanders Bros. Brewing Co. | Brewery | 2 | 1 | 45 |  | 4 3 | 2 | 1 | 30 100 |
| Steenburg, O. C., \& Co. ... | Sash, etc. | i ${ }^{-}$ | 1 | 35 3 |  | 35 3 | 2 | 1 | 100 30 |
| Stevens Table Co. ............ | Tables . | 1 |  | 3 50 |  | $5{ }^{3}$ |  | 1 | 100 |
| Sweets, B. F., \& H. L., Co. | Wagons ... | 1 |  | 3 |  | 5 |  | 1 | 130 |
| Variety Wood Works .................... | Bee nives Furniture | 1 | 2 | $\stackrel{3}{240}$ |  | 240 | $4{ }^{\prime \prime}$ | 4 | 160 |
| Winnebago Furniture s.rig. Co. .... Total .......................... | Furniture | 50 | 17 | 1,358 | 316 | 1,674 | 68 | 42 | 2,560 |
| GREEN BAY. |  | 1 |  | 4 | 4 | 8 |  | 1 | 40 |
| Allert \& McGuire | Pickies | 1 |  | 12 | $\ldots$ | 12 |  | 1 | * |
| Allouez Mineral Spring .. | Laundry | 1 |  | 3 | 4 | 7 |  | 1 | 15 |
| American Steam Laundry ... | Candy |  | 1 | 44 | 125 | 169 | 31 | 1 | 65 |
| Annen Candy \& Gazette Co. ....... | Candy. | $\cdots$ | 1 | 19 | 27 | 46 | 5 |  | $15{ }^{8}$ |
| Britton, D. W. ......... | Barrels | 2 |  | 85 19 | 1 | 85 |  | 2 | 150 55 |
| Burns Boiler Co. | Boilers | 1 | 1 | 295 | 1 | 295 |  | $\stackrel{1}{5}$ | 500 |
| Diamond Match Co. | Saw Mill | 1 | 1 | $\begin{array}{r}19 \\ 32 \\ \hline 17\end{array}$ |  | 295 32 |  | 1 | 50 |
| Dickman Schober Mfg. Co. | Sash, etc. | 1 | 1 | 17 | $\cdots$ | 18 |  | 2 | 60 |
| Ebeling, John FI. ... | Food ..... |  | $\stackrel{1}{2}$ | 33 | 2 | 35 | $\ddot{2}$ | 1 | 60 |
| Evans, R. O., \& Co. ... | Stationery Carriages | $1^{*}$ | $\ldots$ | 14 |  | 14 |  |  | 8 |
| Green Bay Carriage Co. .... | Carriages . | 1 | 1 | 33 |  | 33 |  | 1 | 125 |
| Green Bay Planiŭg Mill Co. | Soap ... | 1 | 1 | 7 | 1 | 8 | $\cdots$ | 1 | 20 |
| Green Bay Soap Co. ..... | Sreap .... | 5 |  | 22 |  | 22 | ........ | 2 | 150 |
| Hagemeister Brewing Co. | Wreter . | 1 |  | 4 4 11 |  | 4 |  |  | ${ }^{8}$ |
| Hanler, J. J., Co. | Flour |  | . 1 | 11 | 1 11 | 12 |  | 1 | 120 380 |
| Ifobert, John, Paper Co. | Paper | 3 |  | 38 | 11 | 49 | 3 | 3 | 380 |



| Name. | Business. | Buildings. |  | Employes. |  |  |  | Boilers. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { Under } \\ 3 \\ \text { stories. } \end{gathered}$ | $\left\lvert\, \begin{gathered} 3 \text { or } \\ \text { more } \\ \text { stories. } \end{gathered}\right.$ | Male. | $\begin{gathered} \text { Fe- } \\ \text { male. } \end{gathered}$ | Total. | Under 16 yrs . of age | $\begin{gathered} \text { Num- } \\ \text { ber. } \end{gathered}$ | Total horse power. |
| JANESVILLE-Continued. |  |  |  |  |  |  |  |  |  |
| Janesville Daily Recorder | Printing |  | 1 | 8 | 2 | 10 |  |  | * |
| Janesville Electric Co. .... | Light ... | 1 | 1 | 7 | 2 | 10 7 |  | 2 | 160 |
| Janesville Hay Tool Co. | Tools ... | 1 |  | 5 |  | 5 |  | 2 | * |
| Janesville Journal ©.... | Printing ............ |  | 1 | 3 3 |  | - 3 |  |  | * |
| Janesville Pearl Button Co. | Agricultural Implem Buttons ............. | 8 | 1 | 210 |  | 210 |  | 4 | 270 |
| Janesville Steam Laundry . | Laundry | 1 | 1 | 15 | - 8 | 35 12 | 1 |  |  |
| Janesville Street Ry. ...... | Street Car | 1 | 1 | 4 12 | - 8 | 12 |  | 1 | 20 180 |
| Jeftris Co., The . | Sash, etc. | $\frac{1}{5}$ | 1 | 65 |  | 12 | ....... | 2 | 180 125 |
| Krupp, F. .......... | Brewery. | 3 | 1. | 60 6 |  | 65 |  | 1 | 125 50 |
| Lowell Hardware Co. | Shop ... |  | $\ddot{\square}$ | 5 |  | 5 |  | 2 | 50 |
| Marzluft \& Co. ......... | Shoes ... |  | 1 | 50 | 60 | 110 | 4 |  | $\stackrel{+}{+}$ |
| New Doty Mfg. Co. | Elevator |  | 1 | 2 |  | 2 |  |  | * |
| New Gas Light Co. . | Gachinery | 3 4 |  | 10 |  | 23 | ... |  | $\dagger$ |
| Northern Grain Co. | Elevator | 4 | 1 | 10 |  | 10 4 4 |  | 2 | 80 |
| Norcross \& Doty . . | Mill .... | 1 | 1 | 4 |  | 2 |  |  |  |
| Northwestern Novelty Co. | Novelics | 1 | 1 | 11 | 1 | 12 | 5 | 1 | 45 |
| Parker Pen Co. . ${ }^{\text {P }}$. | Pens .... |  | 1 | 28 | 16 | 44 | 5 | 1 | 45 $*$ |
| Riverside Steam Laundry | Laundry | 1 | 1 | 2 | 16 | 10 |  | 1 | 50 |
| Robinson Brewing Co. ... | Brewery ....... | 1 |  | 4 | .... | 4 |  | 1 | 30 |
| Rock River Cotton Mill Co. Rock River Machine Co. | Cotton Batting |  | 3 \| | 20 | 25 | 45 | $\ddot{2}$ | 1 | 180 |
| Rock River Machine Co. Rock River Woolen Mills | Machinery ... | 1 | 1 | 15 |  | 15 |  | 1 | 30 |
| Shurtleff \& Co. ........... | Creamery | 1 |  | 45 | 35 | 80 | 3 | 2 | 150 |
| South Side Brewery | Brewery | ${ }_{3}^{1}$ |  | 6 | 2 | 7 |  | 1 | 15 |
| Tailor, M. D. ........ | Machinery | 3 | 1 | 6 |  | 6 |  | 2 | 60 |
| Thoroughgood \& Co. | Boxes, etc. |  | 1 | 35 | 20 | 65 | 5 | 1 | *** |
| Troy Steam Laundry | Laundry .. |  | 1 | - 1 | + 4 | 5 | 5 | 1 | 125 |
| Williamson Pen Co. .... | Pens' . . | 1 | 1 | 2 | 4 | 5 <br> 2 |  | 1 | * |
| Wisconsin Carriage Co. | Carriages | 2 | 1 | 49 | 3 | 52 |  | 1 | 60 |
| Bennett, Doran \& Burdick B. | Marble ... | 1 |  | 2 |  | 2 |  |  | § |
| Fifield Bros ...... | Carriages. | 1 |  | 3 |  | 3 |  |  | § |
| Fitchett \& Grove | Printing . | 1 | ........... | 4 | ........... | 4 |  |  | * |



ESTABLISHMENTS INSPECTED.

| Name. | Business. | Buildings. |  | Employes. |  |  |  | Boilmers. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { Under } \\ 3 \\ \text { stories. } \end{gathered}$ | $\left\lvert\, \begin{gathered} 3 \mathrm{or} \\ \text { more } \\ \text { stories. } \end{gathered}\right.$ | Male. | Female. | Total. | Under 16 yrs. of age. | Number. | Total horse power: |
| KAUKAUNA-Continued. |  |  |  |  | 3 | 3 |  | 1 | 10 |
| Kaukauna Steam Laundry ............... | Laundry | 1 |  | 3 | 3 | 3 3 | $\cdots \cdots{ }^{\prime}$ | 1 | 10 |
| Kaukauna Times ........... | Printing | 1 |  | 1 |  | 1 |  | 2 | 320 |
| Kaukauna Water Works | Water . Pu . | 1 |  | 22 |  | 22 |  |  | $\dagger$ |
| Lindauer Pulp Co. .. | Pupper ... | 1 | 1 | 78 | 27 | 105 | 5 | 2 | 160 |
| Outagamie Paper Co. . | Paper | 1 |  | 1 | - | 3 108 |  |  | 558 |
| Star Hand Laundry .......... | Paper .... | 4 |  | 95 | 13 | 108 |  | 3 3 | 550 $* * 408$ |
| Union Paper Bag Co. ........... | Bags, etc. | 1 | 1 | 101 | 51 | 152 |  | 3 | * 1408 |
| Ota |  | 23 | 2 | 619 | 99 | 718 | 9 | 22 | 2,453 |
| LA CROSSE. |  | 3 |  | 80 |  | 80 | 6 | 1 | 25 |
| American Can Co. .............. | Tin Pails | 3 | 1 | 33 | $77^{\circ}$ | 107 | 11 | 1 | 80 |
| Anderson, Mons, .......... | Crooms. | 1 |  | 15 |  | 15 |  |  | § |
| Andust, Miner Broom Mrg. | Machinery | 1 |  | 3 |  | 3 |  | ‥ | 50 |
| Bartt, Franz ...... | Brewery .. | 1 | 1 | 8 28 8 |  | $\stackrel{8}{88}$ |  | 1 | * |
| Benton, Thos. B., \& Son | Machinery ... | 1. | 1 | 28 | ${ }^{\circ}$ | 28 | 1 |  | * |
|  | Printing (......... | $1{ }^{*}$ |  | 6 |  | 6 |  | 3 | 240 |
| Brush Elec. Light \& Power Co. | Light and Power | 1 |  | 152 |  | 152 |  | 2 | 150 |
| Burlington Round House ...... | Machinery Elevator . | 1 | 1 | - 4 |  | 1 |  | 1 | 80 |
| Cargill, B. W. W., \& Co. | Elevator . | $1{ }^{-}$ |  | 4 |  | 4 | 1 | $\ldots$ | 衰 |
| Class, Chas. 'I. .............. | Pumping . | 1 |  | 6 | 91 | ${ }_{6}^{6}$ |  | 4 | 440 |
| City Water Works ............ | Pumping | 4 |  | 325 | 21 | 346 |  | 6 | 620 |
| Coleman, C. L., Lumber Co. | Tannery | 1 |  | 100 |  | 100 | 3 | 5 | 275 |
| Davis Mediary \& Platz | Cooper . . . . . . . | 1 |  | 8 |  | 8 | $\ldots$ | 4 | 400 |
| Edison Light \& Power Co. | Light and Power | 1 | ...... 1 | 6 8 | 17 | 25 | 4 | 4 | * |
| Fish Bros. ......... | Cigar Boxes | 3 | 1 | 7 | 1 | 8 |  | 1 | 80 |
| Fountain City Drill Co. | Drills .... | 1 |  | 9 |  | 9 |  | 1 | 15 |
| Franklin Iron Works | Machinery | 1 |  | 8 |  | 8 |  |  | * |
| Funk, M. ........... | Candy | 1 | $\cdots$ | 15 | …75 | 90 150 | 9 | 1 | 75 590 |
| Funk, J. B., \& Co. | Brewery | 2 | 3 | 121 | 29 | 150 | 3 | 4 | 590 |
| Gund, John | Furniture | 1 |  | 50 |  | 50 |  | ......... |  |
| Hackner, E. | Furniture |  |  |  |  |  |  |  |  |

Haerter, Nic.
Heilman Brewing Co.
Herken, Geo.
Holway, N. B., Estate
Imperial Cameravat
mperial Can Mfg. Co
James, John,
Kratchwiel, M
Kuhn, R. C. \&
La Crosse Wagon Stock Mfa. Co
La Crosse Boot \& Shoe Mfo
La Crosse Box Co.
La Crosse Carriage ©o
La Crosse City Ry. Co
La Crosse Cracker \& Candy Mfg
La Crosse Gas Co
Coley Carpet, Rug Co
Garder \& Liesenfeld
Weekly Argus
La Crosse Knitting Works
La Crosse Leather Co.
La Crosse Morning Chronicle
La Crosse Paper Box Co.
La Crosse Printing Co.
La Crosse Rubber Mill Co.
La Crosse Rubber Mug Mill
La Crosse Soap Works
La Crosse Soap Works ...

Langdon \& Boyd
Listman Mill Co
Momeny, J. M.
Medary, J. S., Sädilery Co.
Michel, C. \&'J.
Milwaukee Round House
Monitor Brewery
Müller, August
Modern Steam Laundry
Mahlun, M. P
North Side Bottling Works
Novelty Wood Works
Ott, B., \& Son
Reliance Steam Boiler Works
Reliable Steam Laundry Co. Seidenzol, Theo



 $\stackrel{\vdots}{\vdots}$
$\qquad$

*出旃 * ㅇㅇ엉 *
*=Electric; $\uparrow=$ Water; $\ddagger=$ Gas; $\delta=$ Hand; **=Leased.

ESTABLISHMENTS INSPECTED.

| NAME. | Business. | Buildings. |  | Employes. |  |  |  | Boilmers. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { Under } \\ 3 \\ \text { stories. } \end{gathered}$ | $\left\|\begin{array}{c}3 \text { or } \\ \text { more } \\ \text { stories. }\end{array}\right\|$ | Male. | $\begin{gathered} \mathrm{Fe}- \\ \text { male. } \end{gathered}$ | Total. | Under 16 yrs. of age. | $\begin{gathered} \text { Num- } \\ \text { ber. } \end{gathered}$ | Total horse power. |
| LA CROSSE-Continued. |  |  |  |  |  |  |  |  |  |
| The City Steam Laundry ............. | Laundry | 1 |  | 5 | 10 | 15 |  | 1 | 20 |
| The Art Glass Co. ....... | Windows | 1 |  | 3 |  | 3 |  |  | § |
| The La Crosse Press Co. ... | Publishers |  | 1 | 16 |  | 16 |  | 1 | 30 |
| The North Side Lumber Co. | Lumber ... | 1 |  | 24 |  | 24 |  | 2 | 100 |
| Tomasck \& Nekala .......... | Publishers | 1 |  | 9 | 1 | 10 |  |  | * |
| Trow, A. S., \& Co. | Lumber, etc. | 2 |  | 71 | $4{ }^{*}$ | 75 |  | 4 | 200 |
| Torrance, J., \& Son | Foundry .... | 1 |  | 9 | 1 | 10 |  | 4 | § |
| Salzer, John A., Seed Co. | Seeds ... | ... | 1 | 15 | 7 | 12 |  |  | § |
| Segelka-\& Kohlhaus | Sash, etc. | 1 | 4 | 145 | - 1 | 146 | 12 | 4 | 200 |
| Schorna, Chas. | Furrier . | 1 |  | 1 | 3 | 4 | 1 |  | § |
| Smith Mfg. Co. | Wagons | 1 |  | 57 |  | 57 |  | 2 | 120 |
| Sorrenson, O. J. . | Furniture | 1 |  | 40 | 1 | 41 |  | 1 | 70 |
| Spicer \& Bushman | Printers . | 1 |  | 9 |  | 9 |  | 1 | *20 |
| Star Knitting Co. . | Knitting |  | 1 | 1 | 22 | 23 | 2 |  | § |
| Vlastence Bohemian | Newspaper | 1 | ........ | $\stackrel{1}{2}$ | 2 | 4 |  |  | § |
| Volkfreund Printing Co. | Publishers | 1 |  | 5 |  | 5 |  |  | * |
| Voight \& Ritter | Wagons | 1 |  | 25 |  | 25 |  | 1 | 25 |
| Warninger \& Houthmaker | Soda Water | 1 |  | 5 |  | 5 |  | 1 | 10 |
| Wisconsin Pearl Button Co. | Buttons ... | 1 |  | 70 | 45 | 115 | 15 | 1 | 150 |
| Yeo \& Clark ............... | Flour . | 1 |  | 5 |  | 5 |  | 1 | 60 |
| Zeisler, Geo., \& Son | Brewery |  | 1 | 6 |  | 6 |  | 2 | 50 |
| Total |  | 88 | 44 | 2,787 | 696 | 3,483 | 130 | 107 | 7,491 |
| MADISON. |  |  |  |  |  |  |  |  |  |
| Alford Bros. | Laundry | 1 |  | 6 | 21 | 27 |  | 1 | 40 |
| Amerika Pub. Co. | Printing |  | 1 | 6 | 2 | 8 |  |  | § |
| Badger State Shoe Co. | Shoes .. | 1 |  | 26 | 10 | 36 |  |  | $\stackrel{*}{*}$ |
| Breckheimer Brewing: Co. | Brewery | 1 |  | 10 |  | 10 | 1 | 1 | 40 |
| Campbell, Alex. | Feed ... | 1 |  | ${ }_{2}^{2}$ |  | 2 |  | 1 | 14 |
| Cantwell. M. J. .. | Printing |  | 1 | 15 | 5 | 20 |  |  | * |
| Capital City Milling Co. | Flour . |  | 1 | 4 |  | 4 |  | 1 | 150 |
| Chi., Mil. \& St. P. Ry. Co. | Round House | 1 |  | 29 |  | 29 |  | 1 | 150 |
| Chi. \& N. W. Ry. Co. .... | Shops ... | 11 | \|........| | 30 | ......\| | 30 | ........\| | 1 | 60 |

Curtis, Dexter, Co
Fauerbach Brewing Co.
Fredrickson $A$ Laundry
Fuller \& Johnson Mfo J. V.
Gisholt Machine Mig. Co
Grimm, G., \& Son
Hart-Parr Co.
Hausman Brewing Co.
Howard, H. S.
King \& Walker
Ledwith, James
Madison Candy $\stackrel{\text { Co. }}{ }$
Madison City Water Works
Madison Democrat
Madison Electric Ry...
Madison Gas \& Electric Co
Madison Steam Laundry
Madison Saddlery Co.
Malec Bros.
Northern Electric Co
Parr \& Kroncke
Payton, Martin
Silbernagel, J. J.
Standard Telephone \& Elec. Co.
Stark Mfg. Co.
State, The
State Journal Printing Co
swenson, J. A
Taylor \& Gleason
Teckmever Candy Co.
Wracy, Gibbs \& Co
Wis. Botschafter
Wis. Staats Zeitung
Wis. Wagon Co.
Total

## MANITOWOC.

American School Co
Biegul \& Guse
Bradl. I
Brandt Printing \& Binding
Buerger, H. B. \& G. B
Burger, H. B
Citizen Publishing Co .

Saddlery
Brewery
Laundry
Contractors
Agricultural Impl....................
Tools
Bindery
Engines
Brewery
Agricultural Implements Machinery
Carriages
Candy
Water
Street Car Line
Light and Power
Laundry
Shoes
Dynamos
Machinery
Soundry
Sash, etc.
Relephone
Building Materials
Printing
Sash, etc
Printing
Confectionery
Printing
Printing
Printing
Carriages



| Name. | Business. | Bulidings. |  | Employes. |  |  |  | Boilers. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { Under } \\ \text { Storios } \\ \text { a } \end{gathered}$ | $\begin{gathered} \mathbf{3} \text { mor } \\ \text { stores.es. } \end{gathered}$ | Male. | ${ }_{\text {Fer }}^{\text {Fer }}$ male. | Tot | $\left\|\begin{array}{l} \text { Under } \\ \begin{array}{l} \text { nof } \\ \text { of fage } \end{array} \\ \hline \text { age. } \end{array}\right\|$ | $\underset{\substack{\text { Num- } \\ \text { ber. }}}{ }$ | $\begin{aligned} & \text { Total } \\ & \text { horse } \\ & \text { power. } \end{aligned}$ |
| MANITOWOC-Continued. |  |  |  |  |  | $\left.\begin{array}{r} 15 \\ 10 \\ 15 \end{array}\right):$ | . ${ }^{2}$ | 1$\frac{1}{2}$311111$\cdots$ | $\begin{array}{r}25 \\ 200 \\ 300 \\ 200 \\ 100 \\ \text { 20 } \\ 20 \\ 20 \\ \hline\end{array}$ |
|  |  |  |  |  |  |  |  |  |
| GGeoctrich Lepair sious |  |  |  | 250141514 |  |  | cor 15 |  |  |  |
| Gunz \& ${ }^{\text {Hanson }}$ Wleser Waon Woris |  |  |  |  |  |  |  |  |  |
| Heyroth, Side Laundry |  |  |  |  | 56 |  |  |  |  |
| Madison, M. G. Seed ${ }^{\text {G. }}$ So. |  |  |  |  |  | 84 85 25 | ${ }_{1}^{10}$ |  | ${ }_{8}^{130}$ |
| Manitowoc ${ }^{\text {Building Supply }}$ |  |  |  | $\begin{aligned} & 2_{4}^{4} \\ & 20 \end{aligned}$ | $\frac{1}{2}$ | - 22 |  |  | ${ }^{160}$ |
| Manitowoc Glue co. |  |  |  |  |  |  |  | 4 | 700 |
| Manitowoc Maltino Co. |  |  |  |  |  |  |  |  | 170 |
| Manitowoc Pear Pecking C. |  |  |  | ${ }^{12}$ |  | ${ }^{20}$ | 4 | 1 |  |
| Manitowoc Perkims ioiler |  |  |  | ${ }^{4}$ |  |  |  |  |  |
| Manitowo ( |  |  |  |  |  |  |  | ${ }_{2}^{3}$ | - |
| Northern Grain Co., Elevat |  | $\frac{1}{3}$ |  |  |  | ${ }_{7}^{2}$ |  |  |  |
| Oriental Mills Maud |  |  |  |  |  |  |  |  | ${ }_{*}^{12}$ |
| Pauli $\mathcal{E}^{\text {G Green }}$ |  |  |  | 4 | 1 |  |  |  |  |
| Procharza ${ }^{\text {P }}$ Smaily |  |  |  |  | 1 |  |  |  | - $\begin{gathered}300 \\ 300 \\ 240\end{gathered}$ |
| Rahr, Wm. ${ }^{\text {Reis, }}$ C., Coal Coin Com |  |  |  | ${ }_{28}^{80}$ |  | ${ }^{88}$ |  |  | ${ }^{50}$ |
|  |  |  |  | ${ }_{13}^{6}$ |  |  |  |  | 70 180 180 |
| Schreihard Brewing Co |  |  |  |  |  |  |  |  | ${ }^{160}$ |

Smally Mfg：Co
Snow Flake Steam Laundry
The Landreth Co．
The Jones \＆Adams Co．
Willett，J．，\＆Sons
Total


## Agricultural Implements


＊＝Electric；$\dagger=$ Water；$\ddagger=$ Gas；$\delta=$ Hand；${ }^{* *}=$ Leased．

| 出 |  | ¢ | －werrer |
| :---: | :---: | :---: | :---: |
| － |  | ® | $\vdots$ $\vdots$ $\vdots$ $\vdots$ $\vdots$ |
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| 苞 |  | Н | A $0^{\circ}$ |
| \％ | N： <br> $\mapsto: \infty: \not \mapsto^{\prime}: \mapsto \infty$ <br> N： | 閏 | N： |
| ¢ |  | ＇ 8 | ーrnorn |
| ¢ |  | － |  |

ESTABLISHMENTS INSPECTED.


Snyder, John, Planing Mill
Whalter Bros. Brewing Co.
Whiting, Geo. W., Haper Co

## Total

## MENOMONIE.

$\checkmark$ Bradlow, L. E.
Buckhardt \& Son
Dunn Co. Iron Works
Dunn Co. New
Excelsior Brick ${ }^{\text {En }}$ Co.
German Printing Co
Herren, C. L.
Kemke \& Anderson
Knapp, Stout \& Co
Menomonie Elec. Light \& Power Co
Menomonie Hydraulic Pressed Brick Co.
Menomonie Steam Laundry
Menomonie Times
Menomonie Wather Works Co
Submerged Elec. Motor Co.
Wisconsin Red Pressed Brick Co.
Heintz Bros.
Total
MERRILL.
Allen, W. M.
American Hide \& Leather Co.
City Water Works
Curtis, A. T.
Foster Lumber Co
Foster Lumber Co.
Gilkey
\& Anson
Gilkey \& Anson Co.
Hixon-Anson Sash \& Door Co
Home Steam Laundry
Johnson, C. N
Merrill Excelsing Co
Merrill Excelsior Co
Merrill Iron Works \& roundry
Lumber Co
Merrill St. Ry., Light \& Power

Planing Mill
Brewery
Paper


Stone Cutter
Brewers
Publishers
Sash, etc.
Bricks'
Printing
$\xrightarrow{\text { Printing }}$ Miil
Foundry, etc
Lumber
Light
Lrick ...
Laundry
Printin.
Mators
Motors
Bricks
Wagons

Publisher
Tannery
Publisher
Saw Mill
Planing Mili
Planing Mil
Sash, etc.
Laundry.
Publisher
Brewery
Excelsior
Machines
Saw
Light



American Malting Co.
American Monolith
American Sal soda Works
American School Board Journal
American Steam Laundry
Anchor I, ine
Andrae, Julius, \& Sons' Co
Andres.- Fred, Co.
Anstadt, C., Leather Co.
Atlas Bread Factory
Automobile Cycle Co
Automobile \& Cycle Parts Co
Badger Candv Co.
Badger Candv. Co.
Badger Dye Works
Badger Laundry
Badger Nail Co.
Badger State Furniture Co
Badger Wire \& Iron Works
Baird Press. The
Banker, C. J.
Barber Asphalt Paving Co., The
Barkweise Bros.
Barth Mfg. Co
Bauer, Hyman \& Newman
Bayley Heating Co
Raylev. Wm., \& Sons Co.
Ray View Steam Laundry
Beach * Tonnsen
Beck, C. A.. \& Sons
Belden, H. W. ......
Rellack, Chas. H........ Sr
Benesch Bros
Renjamin. H. M., Coal Co.
Bergenthal, Wm., Co., The
Rerger Bedतing Co
Berthelet, H., Sower Pipe Co.........................
Rew Dental Mfg. Co.
Rever, T. B., \& Rerner co.
Bever. John, \& Son
Ridtel Chemical Works
Berkenwald, L., \& Co






ESTABLISHMENTS INSPECTED.

| Name. | Business. | Buildings. |  | Employes. |  |  |  | Boillers. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Under 3 stories. | 3 or more sturies. | Male. | $\begin{gathered} \mathbf{F e} \\ \text { male. } \end{gathered}$ | Total. | Under 16 yrs . of age. | Number. | Total horse powe. |
| MILWAUKEE-Continued. |  |  |  |  |  |  |  |  |  |
| Biersach \& Niedermeyer | Iron | 1 |  | 25 |  | 25 |  |  |  |
| Blatz Brewing Co. ...... | Brewing | 8 | 11 | 639 | 72 | 711 | 115 | 14 | 1,825 |
| Bletcher, J. S., \& Co. .. | Printing |  | 1 | 3 |  | 3 |  |  |  |
| Blumenfeld, Locher \& Brown Co. | Millinery |  | 1 | 20 | 3 | 23 | 2 |  | § |
| Bodden Packing Co. ............... | Packing | 1 | 2 | 100 | ... | 100 | 2 | 3 | 250 |
| Boerth \& Porth Co. | Bakery | 1 |  | 5 |  | 5 |  |  | $\ddagger$ |
| Bogenberger, F., \& Bro. | Iron .... | 1 |  | 2 |  | 2 |  |  |  |
| Bond Lime \& Cement Co., The | Lime . | 2 |  | 8 |  | 8 |  |  |  |
| Bowen Mfg. Co. ................... | Drills .. | 1 |  | 2 |  | 2 |  |  | + |
| B. \& P. Co. ........ | Engines | 1 |  | 25 |  | 25 |  | 1 | 6 160 |
| Bradley \& Metcalf ............ | Shoes ....... |  | 1 | 184 | 77 | 261 | 16 | 2 | 160 |
| Brand, Decker Chemical Co. | Stove Polish | 1 |  | 6 |  | ${ }_{6}^{6}$ |  |  |  |
| Brand Stove Co. ......... | Stoves ${ }_{\text {amm }}$ | 3 | 2 | 194 3 | 2 | 196 3 | 3 | 1 | 80 |
| Brandt, C. B., Mfg. Co. . | Ammonia, etc. | 2 | $\cdots \cdots{ }^{\prime} \cdot \cdots$ | 3 11 | $1{ }^{-}$ | 13 | 3 | ....... | $\cdots{ }^{* *}$ ** |
| Breithaupt, L., Printing Co. | Printing |  | 1 | 11 29 | 1 | 12 |  |  | ** |
| Brink Bros. .... | Tailors |  | 1 | 29 | 2 | 31 |  |  | + |
| Bremer Cycle Mfg. Co. ......... | Bicycles |  | 1 | 7 5 |  | 7 |  |  | + |
| Brill, A. Q., Mirror Plate Co. ... | Mirrors <br> Elevators | 1 3 |  | 5 35 |  | 5 35 |  | 1 | 80 |
| Brodesser Elevator Mfg. Co., The | Clevators ...... | 3 1 |  | 35 5 |  | 35 5 |  | 1 | 80 |
| Broenen, John ${ }_{\text {Brown, }}^{\text {H. }}$ H.... | Carriages, etc. | 1 | $i^{*}$ | 5 |  | - |  |  | .......... |
| Brown, I. H.. ${ }_{\text {Brown Bouton }}^{\text {G Co. Cove Co. }}$ | Carriages, etc. | 1 | 1 | 28 | 75 | 100 | $\cdots$ |  | $\pm$ |
| Brown Corliss Engine Co. | Patterns .... | 1 |  | 14 |  | 14 |  |  | * |
| Browning Mfg. Co. ....... | Electrical Goods |  | 1 | 24 | 1 | 24 |  |  | ** |
| Bruce, Wm. Geo. . | Publisher .... |  | 1 | 4 | 1 | 5 |  |  | ......... |
| Bub, Jos., Co. ... | Upholstering ... |  | 1 | 25 | 1 | 26 |  |  | $8_{8}^{8}$ |
| Bucyrus Co., The | Steam Dredges | 7 |  | 500 |  | 500 | 4 | 4 | 320 |
| Buehler, Andrew | Printing ... |  | 1 | 2 |  | 2 | 1 |  | ......... |
| Buestrin, H., \& Son | Contracting | 1 |  | ${ }_{6}^{6}$ |  | ${ }^{6}$ | 1 |  |  |
| Burdick \& Allen .. | Printing |  | 1 | 18 | 2 | 20 | 1 | 1 |  |
| Burnham, Clinton | Foundry | 3 |  | 52 |  | 52 |  | 1 | 75 |
| Burnham John L. . | Brickyard | 1 |  |  |  |  |  | 3 | 180 |
| Burnham Bros. \& Surroughs, | Trick | 1 | $\cdots{ }^{1} \cdot$ | 14 |  | ${ }^{89}$ | 1 | 3 | 180 |
| Buttles, F. S. ........ | Galv. Iron | 1 |  | 4 |  | 4 |  |  |  |


*=Electric ; $\dagger=$ Water $; \ddagger=$ Gas: $\S=$ Hand $; * *=$ Leased.



ESTABLISHMENTS INSPECTED.

| N ame. | Business. | Buildings. |  | Employes. |  |  |  | Boilers. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { Under } \\ 3 \\ \text { stories. } \end{gathered}$ | 3 or more stories. | Male. | $\mathrm{Fe}-$ mate. | Total. | Under 16 yrs. of age | Number. | Total horse power. |
| MILWAUKEE-Continued. |  |  |  |  |  |  |  |  |  |
| Cream City Soap Co. | Soap ........ | 1 |  | 1 |  | 1 | 1 | 1 | 12 |
| Cream City Woven Wire Works | Bed Springs ... |  | 1 | 65 | . | 65 | 10 | 2 | 160 $*$ |
| Crescent Printing Co. ............ | Printing ....... | 1 | 1. | 5 | ...... | 5 | 1 |  |  |
| Crow Stove Polish Co. . | Stove Polish |  | 1 | 13 | ...... | 13 | 4 | . | ......... |
| Crucible Steel Casting Co. | Steel . . | 1 | $i^{*}$ | 18 | . . . ${ }^{\text {a }}$ | 18 |  |  | * |
| Currie Bros. ................... | Seeds ..... |  | 1 | 5 | 2 | 7 | .... | - | ...... |
| Curtis \& Yale ....... |  | 6 | i* | 13 | $\cdots{ }^{\text {. }}$. | 13 |  | 1 | 80 |
| Cutler-Hammer Co. | Electrical Machinery | 1 | 1 | 161 | 4 | 165. | 5 | 1 | 80 |
| Crystal Soap Co. .... | Soap .... | 1 | 1 | 10 | 15 | 25 | 4 | 1 | 40 100 |
| Dahinden \& Gallasch | Vinegar . |  | 1 | 63 |  |  |  | 2 4 | 100 600 |
| Daisy Roller Flour Mill | Flour ${ }^{\text {Statuary }}$ | 3  <br> 1  <br> 1  | 2 | 63 7 |  | 63 7 |  | 4 | 600 |
| Daprato, S. ${ }_{\text {Davis }}$ Bros. ${ }^{\text {Mfg. }}$ Co.... | Statuary | 1 |  | 54 |  | 54 |  | $i$ |  |
| Davis Bros, Mfg. Co. Davis, H. N. | Boilers .. Plating . | 1 | 1 | 54 8 14 |  | $\begin{array}{r}54 \\ 8 \\ \hline\end{array}$ | ........ | 1 | ** |
| Dawe Bros. Printing Co. | Printing ... | i ${ }^{\text {a }}$ | 1 | 14 |  | 14 |  |  | $\stackrel{*}{*}$ |
| De Both, F. J. ............... | Cooperage | 1 |  | 6 |  | ${ }^{6}$ |  | 1 | 25 |
| Deguenther Laundry Co., The | Laundry . | 1 | 1 | 7 | 21 | 28 | 2 | 1 | 50 |
| Delaney Oil \& Lubricant Co. | Oils ...... | 1 |  | 3 | 1 | 4 | i. | 1 | 20 |
| Deuster, P. W., Co., The ... | - Newspaper |  | 1 | 10 |  | 10 | 1 | ......... | ... |
| Devere \& Schloegel ..... | Lumber | 4 |  | 62 |  | 62 | ........ | ....... | .... |
| Draheim \& Krahn . | Wagons, etc. | 1 |  | 8 | 11 | 17 |  |  | $\cdots$ |
| Diamond Ink Co. | Ink, etc. ... | 1 | 1 | - 6 | 11 | 17 22 | 3 2 | 1 | 5 80 |
| Diamond Soda Works | Soda, etc. | 1 | 1 | 21 | 5 | 21 | 2 | 1 | 80 50 |
| Doelgert \& Kirsten .. | Machinists ..... | 1 |  | 11 | 1 | 12 |  | 1 | 50 |
| Doerflinger Artificial Limb Co., The | Artificial Limbs |  | 1 | 11 | 1 5 | 12 | $\therefore$ |  | ....... |
| Domonast Co., The ... | Publishers | 2 | 1 | 4 7 | 5 |  |  |  |  |
| Dorsch, John, \& Sons | Carriages, etc. | 2 | 1 | 8 |  |  |  |  | $\stackrel{+}{*}$ |
| Doyn, E. F. ... | Chandeliers | 1 | 1 | 8 |  | 8 4 | .......... |  | 20 |
| Dunck, H. .................... | Tanks ... <br> Castings | 1 |  | 79 |  | 49 7 | $\cdots$ | $\frac{1}{2}$ | 150 |
| Dutcher, J.-A. \& P. E., Co. | Castings . <br> Harness | 1 | 1 | 23 | $\cdots$ | 25 | $1{ }^{1}$ | ....... | - $\ddagger$ |
| Eagle Horse Shoe Co. | Bar Iron | 6 | 1 | 275 | 11 | 276 | 1 | 9 | 1,000 |
| Eagle Lye Works ...... | Lye ........ | ... | 1 | 8 | 13 |  | 3 | 1 | 40 |

Eastman, C. E.
Ellsworth \& Thayer
Egan Engineering Co
Empire Laundry
interprise Box \& Lumber Co..............
Enzel, Frank
Erie Ry. Co. \& Union Steam Boat
Uehlein Bros
Eureka Laundry Co
Evening Wisconsin, The
Everley, J. M.
Eviston, John W.,. \& Son
Falk Co The
Faust Kraus
Farmers' Lumber Co.
Farrington, G. H., Furniture Co.
Febel, L. F. Brothers \& Co.............
Fernekes, J., Co.
Filer \& Stowell
Fillmann Bros
Hixter, Jos
Fixter, Jos. . $\mathrm{G} . \mathrm{Co}$.
Fowle Printing Co., The
Franczen, $R$ \&
.
Frank, L., \& Son Packing Co.
ranke, $\mathbf{F}$. J.
reidenker Publishing Co.
Friedlander's Knitting Works
French Wax Figure Co.
Friend \& Works
Frinkner, H.
Froedlert Bros
Fuldner, Louis, $\because$ \& Co
Fuller, Warren Co., Th
...................
Galland-Henning Pneu.
Gardner, Campbell
Garvin Art Glass Co., The
$\qquad$
Gem Laundry
fem Hammock
Gemeinhardt John






ESTABLISHMENTS INSPECTED.


Haak \& Alten
Haase, Chas. F., Coal Co., The
Habhegger, Theodor
Haegele \& Altmann
Hahn \& Co.
Hammersmith Engraving Co.
Hammann, Wm.
Hann-Wongerin Co
Hansen, O. C., Mfg. Co
Hansen's Empire Fur Co
Hanser, John \& Sons
Hays, George
Hebenstreet \& Bartlet
Hecht \& Zummach
Heil Rail Joint Welding Co., The
Heinemann, Geo. H., \& Co.
Heinl, Jos.. \& Sons
Heimann, M.. \& Co.
Heinn Specialty Co., The
Heinz, H. J., Co
Hellmann. Wm., \& Co
Hendel Wire Brush Co
Hender, A. C., \& Son
Henes \& Keller Co
Hennecke, I. J.
Henning, August
Herschel, $C$ B
Hensel, Julirs
Hilbert. A. J., \& Co
Hilty, M., Lumber Co.
Hirsch Rrothers
Hock, John. \& Co.
Hoehne's New Method Laundry
Hoelzl \& Co
Hoffman \& Baner
Hoffman \& Billings
Hoffman \& Billings
Hoffman \& Lehman
Hoffmann, B., Mfg. Co
Hosch, B.
Hosch, J. A., \& Bros
Hoyt Mf Connors
Huebner, Fred

Dyeing, etc
Coal and Wood
Wagriage
Building Material
Printing
Engraving
Furniture
Furnitu
Fur
Contractin
Boxes, etc.
Furniture
Paints
Steel Tanks
Fur Coats, etc
Carriages
Millinery
Specialties
Foecialties, ....
Food Products
Furs
Brushes
Scrap Iron
Machines
Cooperage
Boxes
Barrels
Perfumes, etc
Boxes
Agri. Imp.
Plating
Printing
Copper Works, etc
Plumbers
Machinery
Furs
Rrass Goods, ete
Rrooms
Furs
Rinding
Ranges
Machinis

$\S=H a n d ; * *=$ Leased





ESTABLISHMENTS INSPECTED.


Kern \& Sons, J. B. A.

## Keogh, Ed.

Kieckhefer Elevator Co.
King-Cramer Co
Kipp Co., B.
Klenn, Geo.
Kling, Geo.
Knapp, John $\underset{\text { Kith....... }}{\text { Ko. }}$
Knebel, H. P
Cith. Co.
Kuehn Boot \& Shoe Co.
Kooa, Heer
Kopend, Andrew
Kopend, Andrew
Krausse \& Schneck
Kruecke Brothers
Krueger Mfg. Co
Kruiger \& Domann
Krus, Frank
Kuenzli, Henry
Kump, B.
Kundmann, W
Kunz Automobile $\mathbf{C o}$
Kunz, J. L., Mach. Co
Kuryer Publishing Co.
Laacke, Richard
Ladwig, Richa
L. M. \& L. F. $\underset{\text { L. }}{\text { L. }}$. ©

Lake Side Distilling Co
Lake View Laundry
Lamp \& Miller Mfg. Co
London Electrotype
Langenberger, John
Lassa, K.
Lauer, Peter
Lawson, S. P., \& Jale
Layton Co.
Leacher Bros
Leader Card Works
Lehigh Valley Trans. Co
Leidersdorf, B., \& Co.
Lercomb, C. A., Mfg.
Leverance's Laundry

Flour






| Name. |  | Business. | Buildings. |  | Employes. |  |  |  | Boilmers. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Under 3 stories. | $\left\|\begin{array}{c} 3 \text { or } \\ \text { more } \\ \text { stories. } \end{array}\right\|$ | Male. | $\begin{gathered} \mathrm{Fe}- \\ \text { male. } \end{gathered}$ | Total. | Under 16 yrs. of age. | $\begin{aligned} & \text { Num- } \\ & \text { ber. } \end{aligned}$ | Total horse power. |
| MILWAUKEE-Continued. | , |  |  |  |  |  |  |  |  |  |
| Lincoln Ave. Brick Co. |  | Brick | 7 |  | 100 |  | 100 | 4 | 3 | 160 |
| Lindemann, A. J., \& Haverson |  | Stoves, etc. | 2 | ${ }_{2}$ | 280 |  | 280 | 42 | 1 | 80 |
| Lindemann, J. P., \& Sons ...... |  | Tin, etc. ... |  | 2 | 32 | 3 | 35 37 | 5 | 1 | * 5 |
| Liquid Carbonic Acid Mfg. Co. |  | Car. Acid | 1 |  | 30 6 | 7 | 37 7 |  | i. | ** |
| Lobas, P. M |  | Coal, etc. ... | 1 | -1 | 6 26 | 1 | 7 26 |  | 1 | 45 |
| Loeffelholtz, A. L. Co. |  | Brass Works Printing ..... | 1 | 1 .. | 26 4 |  | 26 |  | 1 | 40 |
| Loemenback, A. .... Loyemann Bros. |  | Printing | 1 | 1 | 30 |  | 30 |  | $1^{-1}$ | 40 |
| Lohr \& Winfenbach |  | Marble ... | 1 |  | 8 |  | 8 |  |  | 88 |
| Lorenz Bros. Macaroni Co. |  | Maccaroni ... | 1 |  | 12 |  | 12 | 4 .1 | 1 | 60 |
| Lowe, L., Co. . . . . . . . . . . . . |  | Barbers' Sup. | 1 |  | 12 | $\cdots \cdots$ | 12 | -1 | $1^{*}$ | 28 |
| Lowenbach, B., \& Son |  | Printers .. |  | 1. | 115 | - $\begin{array}{r}4 \\ \hline\end{array}$ | 17 | 1 | 1 | ** |
| Luther Brothers ....... |  | Agri. Imp. | 1 | 1 | 121 | 2 | 17 17 | 1 | $i^{-}$ | 35 |
| Mandel Engraving Co. |  | Engraving ........... |  | 1 | 16 | 1 | 17 | 2 |  | * |
| Manville Covering Co. |  | Boiler and Pipe Co |  | 1 | 114 | 40 | 154 |  | 4 | 320 |
| Mahler Ahlbenburg Co. |  | Clothing . |  | 2 | 32 | 82 | 114 | 4 |  |  |
| Marks, Adrius \& Co. . |  | Clothing | 1 | 1 | 14 |  | 14 |  |  | § |
| Marshall, A. M. ...... |  | Brushes | 1 |  | 5 |  | 5 | 1 |  | § |
| Marshall, J. L., Co.. |  | Patterns | 1 |  | 8 17 | 1 | 8 18 |  | 1 | 40 |
| Martin, Frank ........ |  | Furs ... | $\frac{1}{5}$ | 1 | 85 | ....... | 85 | 2 | 1 | 160 |
| Martin, Geo., Tea Co. ... |  | Furniture | 5 3 | $\stackrel{1}{2}$ | 85 166 | ...... | 85 169 | 2 $\times 1$ | 2 | 160 |
| Mayer, F., Boot \& Shoe Co. |  | Shoes ..... | 1 | 2 | 350 | 250 | 600 | "90 | 2 | 250 |
| Maxim Mfg. Co. ............. |  | Picycle S. | 1 | 3 | $\stackrel{2}{2}$ | - 2 | ${ }_{265}^{2}$ |  | 3 | *** |
| Mayhew Mfg. Co. . |  | Chairs .... | 1 | 3 1 | 17 | 2 | - 17 | 41 | 3 | ${ }_{* *}^{*}$ |
| McAlpine Fing. Co. . |  | Engraving Offices ... |  | 1. | 17 | $\cdots{ }^{\text {. }}$. ${ }^{\text {a }}$ | 17 |  | ${ }^{*}$ | 160 |
| McGeogh Building |  | Offices Boilers | 1 | 1. | $\stackrel{3}{38}$ | 1 | 38 |  | 1 | 80 |
| McGregor, T. L. Mech. Appliance Co. |  | Motors .... |  |  |  |  |  |  |  |  |
| Meckelburg, A. F. |  | Sash, etc. | 1 |  | 35 145 | 20 | 35 165 | $\cdots{ }^{\prime} \cdot \ldots$ | 2 1 | 85 |
| Meinecke \& Son, A..... |  | Toys .... | 4 | 4 1 | 145 | 3 | 16 |  | 1 | * |
| Meissner Bergwall Co. Meisenheimer Printing Co. |  | Printing | i | \|....... | 14 |  | 14 | . ...... | 1 | 15 |

Mellen, Will, \& Son
${ }_{\text {Merkel }}^{\text {Mfg. }}$ Co.
Mertens \& Miller Co
Metropolitan Block
Metropolitan Mfg.
Metropolitan Mfg. Co
Meyer, L. A., Co.
Meyer, O. A., Co.
Meyer-Rotier Printing Co
Minerva Pig Iron Co
Milbrath Printing Co
Miller, H. C. \& Co.
Milwaukee Art Glass Works
Milwaukee Automatic Damper Co
Milwaukee Automatic Machine Co.
Milwaukee Automobile Co.
Milwaukee Bag Co.
Milwaukee Barrel Co
Milwaukee Bedding Co
Milwaukee Blank Book Mafg. Co
Milwaukee Boiler Works'
Milwaukee Brass Co.
Milwaukee Brass \& Copper Works
Milwaukee Brewing Co.
Milwaukee Brick Co.
Milwaukee Crick Co.
Milwankee Chair Co.
Milwaukee Coffee Roasting Co.
Milwaukee Cold Storage Co
Milwaukee Cycle Co
Milwaukee Dry Dock Co
Milwankee Dry Dock Co
Milwaukee Dustless Brush Co
Milwaukee Enamel \& Electro Plant
Milwaukee Elec. R. R. \& Light Co
Milwaukee Elec. R. R. \& Light Co.
Milwaukee Ele. . R. R. \& Light Co
Milwaukee Electric Co
Milwaukee Elevator Co
Milwaukee Elevator Co
Milwaukee Foundry \& Supply Co
Milwaukee Gas Light Co.
Milwaukee Gas Light Co.
Milwaukee Gas Light Co.



Leased.




ESTABLISHMENTS INSPECTED.

| Name. | Business. | Buildings. |  | Employss. |  |  |  | Boilers. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\overline{\text { Under }}$ $\begin{array}{\|c} 3 \\ \text { stories. } \end{array}$ | $\begin{gathered} 3 \text { are } \\ \text { mores. } \end{gathered}$ | Male. | $\underset{\text { Fe. }}{\text { Fer }}$ male | Total | $\left\|\begin{array}{c} \text { Under } \\ \begin{array}{l} \text { Hof rers } \\ \text { of age } \end{array} \end{array}\right\|$ | ${ }_{\text {Num. }}^{\text {Nir. }}$ | $\left\lvert\, \begin{gathered} \text { Total } \\ \text { horse } \\ \text { power } \end{gathered}\right.$ |
| milwaukee-Continued. |  |  |  |  |  |  |  |  |  |
| Milmaukee Gas Light Co. | Repairing |  |  |  |  |  |  |  |  |
| Milwakee Gas works Milwaukee Glove | Gas ${ }_{\text {Gloves }}$ |  |  |  | 17 |  |  |  |  |
|  |  | 19 | 7 | ${ }_{68}^{610}$ |  | ${ }_{6}^{610}$ | 13 | $\stackrel{6}{2}$ | 800 200 |
| Milwaukee Herold - $0 . .0$ | Publishers, |  |  | 118 | 5 | ${ }^{123}$ | 2 |  |  |
| Milwwaukee Litheographing \& Engraving | Linsead |  |  | $\begin{aligned} & \frac{26}{75} \\ & \hline 14 \end{aligned}$ | I | ${ }_{34}^{26}$ | ${ }_{5}^{4}$ | 2 | 15 |
| Milwaukee Lumber Co. | Lumber |  |  |  |  | 20 |  |  |  |
| Millwaukee Machinery Co. ${ }_{\text {Milwale }}$ | Machinery |  |  |  |  | $8$ |  |  | 75 |
| Milwazee M. \& G. Iron Co. | Castings |  |  |  | 2 | ${ }_{50}^{92}$ | ${ }_{3}^{3}$ | 1 |  |
| Milwaukee Matting co ..... | Matting . |  |  | $\begin{aligned} & 10 \\ & 120 \\ & 12 \end{aligned}$ | 1 |  |  | 2 | *** |
| ${ }^{\text {Milwaukee }}$ Miwaluee Metal Working Co. | Mear Wk. |  |  | 10 | 1 | ${ }^{11}$ |  |  |  |
| Milwaukee Monument ${ }^{\text {M }}$ |  |  |  |  |  |  |  | 1 |  |
| Mil wakee News...... | Publishing. |  |  |  |  | $\begin{aligned} & 48 \\ & 40 \\ & 40 \end{aligned}$ |  |  |  |
|  | Optical Goods |  |  | $\begin{array}{r} 25 \\ \hline 15 \end{array}$ |  | $\begin{aligned} & 40 \\ & { }_{3}^{8} \end{aligned}$ | 2 | 1 |  |
| Milwaukee Ornamental Carving co. | Gloves, etc. ... |  |  |  | 38 |  | 7 |  |  |
| Milwaukee Parlor Frame Co. | Frames | 1 |  |  |  |  |  |  |  |
| Milwaukee Rice Machinery Co. | $\xrightarrow{\text { Machinery, }}$ Fixtures |  |  |  | 2 |  | ...... |  |  |
| Milwaukee Sand \& Gravel Co. | Sand, etc. S. |  |  | 15 |  |  |  |  | 200 |
| Milwaukee Sote \& Vending Co. | Spokes, etc. .: |  |  | 10 |  |  |  |  | 100 |
| Milwaukee Steel Casting Co. | ...... |  |  | ${ }_{33}^{102}$ |  | ${ }_{3}^{102}$ |  | ${ }_{2}^{1}$ | $\begin{aligned} & 80 \\ & 450 \\ & 45 \end{aligned}$ |
| Stave |  |  |  |  |  |  |  |  |  |



ESTABLISHMENTS INSPECTED.

| Name. | Business. | Buildings. |  | Employes. |  |  |  | Boilers. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { Under } \\ 3 \\ \text { s } \\ \text { stories. } \end{gathered}$ | $\left\|\begin{array}{c} 3 \text { or } \\ \text { more } \\ \text { stories. } \end{array}\right\|$ | Male. | $\begin{gathered} \mathrm{Fe}- \\ \text { male. } \end{gathered}$ | Total. | Under 16 yrs. of age | Number. | Total horse power. |
| MILWAUKEE-Continued. |  |  |  |  |  |  |  |  |  |
| Naujoks, Matt. | Tools | 1 |  | 3 |  | 3 |  |  | 8 |
| Nelson, S. \& Co. | Furs | 1 |  | 10 |  | 10 | 2 | 1 |  |
| Nelson, S. \& Co. | Furs ${ }^{\text {Blank }}$ Books | 2 |  | 18 | 14 | 18 |  | 1 | $\stackrel{60}{*}$ |
| Niedermeyer, A. | Printing ... |  | 1 | - 2 |  | $\stackrel{3}{2}$ | 1 |  | § |
| North Ave. Fuel Co. | Coal and Wood | 1 |  | 5 |  | 5 |  | 1 | 5 |
| Northern Foundry Co. | Foundry | 2 |  | 27 |  | 27 |  | 1 | 80 |
| Northern Glass Works | Bottles | 9 |  | 339 |  | 339 | 100 | 2 | 200 |
| Nordberg Mfg. Co. | Engines | 2 | 1 | 281 | 1 | 282 |  | 1 | 100 |
| North Milwaukee Elec. L. Co | Brushes .......... | 1 |  | 3 |  | 3 |  |  |  |
| North Side Carriage Works | Carriages | 1 |  | 10 |  | 10 |  |  | 8 |
| North Side Coal Co. . ${ }^{\text {co..... }}$ | Coal | 3 |  | 12 |  | 12 |  | 1 | 60 |
| North Western Chemical Co. | Chemicals | 2 |  |  |  |  |  |  |  |
| North Western Fuel Co. | Coal | 4 |  | 101 |  | 101 |  | 3 | 100 |
| North Western Furniture Co. | Furniture | 2 | 1 | 71 |  | 71 | 1. | 1 | 150 |
| North Western Laundry | Lavndry ${ }^{\text {aing. }}$ | 1 |  | 5 | 12 | 17 |  | 1 | $\stackrel{30}{* *}$ |
| North Western Litho. Co. ............. | Lithographing |  | 3 | 33 | 1 | ${ }_{9}^{34}$ | 4 |  |  |
| North Western Marine Western Malleable Iron Co. Co. | Grain ${ }^{\text {Foundry }}$....... | 12 |  | 909 |  | 909 | 51 | $\stackrel{5}{5}$ | 510 |
| North Western Publishing House | Printing ...... |  | 1 |  | 1 | 10 | 1 |  |  |
| North Western Roasting Co. | Coffee Roasting |  | 1 | 3 |  | 3 |  |  |  |
| North Western Straw Works | Hats, etc. | 3 | 3 | 260 | 140 | 400 | 39 | 4 | 290 |
| Novak, Anton | Printing |  | 1 | 4 | 5 | 9 |  |  |  |
| Obenberger Forge Works Co. | Forging | 1 |  | ${ }_{8}^{6}$ |  | ${ }_{8}^{6}$ |  | 1 | 30 |
| Obenberger, Joseph | Forging | 1 |  | 8 |  | 8 |  |  |  |
| Ogden, G. W. ${ }^{\text {O }}$ \& Co. ${ }^{\text {d }}$. | Carriages O and paint |  | 1 | 8 | 1. | 9 |  |  |  |
| Ossit Brothers ........ | Furniture .... | 1 |  | 16 |  | 16 |  | 1 | 30 |
| Ouborney, Chas. \& Co. | Junk | 1 |  | 3 | 2 | 5 |  |  | 8 |
| Pabst Brewing Co. | Brewing | 13 | 15 | 1,018 | 282 | 1,300 | 81 | 24 | 3,060 |
| Pabst Brewing Co. | Warehouse | 2 | 1 | 77 |  | 77 |  |  | $\ddagger$ |
| Packages Publishing Co. | Publishers |  | 1 | 4 | 1 | 5 |  |  | * |



[^78]ESTABLISHMENTS INSPECTED.

| Name. | Business. | Buildings. |  | Employes. |  |  |  | Boilers. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \hline \text { Under } \\ 3 \\ \text { stories. } \end{gathered}$ | $\left\lvert\, \begin{gathered} 3 \text { or } \\ \text { more } \\ \text { stories } \end{gathered}\right.$ | Male. | Fe . male. | Total. | Under 16 yrs. of age. | $\begin{aligned} & \text { Num- } \\ & \text { ber. } \end{aligned}$ | Total horse power. |
| MILWAUKEE-Continued. |  |  |  |  |  |  |  |  |  |
| Raetz, Gustav | Wagons ........ | 1 |  |  |  | 5 |  |  |  |
| Raushenberger, John, \& Co. | Ropes \& Cordage | 1 |  | 34 |  | 34 | 14 | 1 | 45 |
| Razall, H. G., Mfg. Co. . | Printing .......... |  | 1 | 47 | 19 | 66 | 2 |  |  |
| Reliance Laundry ....... | Flour Laund |  | 1 | ${ }_{35}^{2}$ | 19 | 21 35 |  | 1 | 40 375 |
| Reliance Electric Co. | Elec. Mach. |  | 1 | 18 | 3 | 21 |  | 2 | 150 |
| Relling, J. E., \& Co. | Furniture |  | 1 | 22 | 2 | 24 |  |  | + |
| Rech Shoe Co., The | Shoes |  | 1 | 125 | 75 | 200 | 15 | 1 | 80 |
| Rediske Vinegar Co. | Vinegar, etc. | 2 |  | 13 |  | 13 | 1 | 1 | 45 |
| Reese, A. ${ }_{\text {Retter, }}^{\text {Louis }}$. | Bicycles | 1 |  | ${ }_{9}^{2}$ |  | ${ }_{9}^{2}$ |  |  | \% |
| Rialto Elevator Co. | Elevators | 1 | 2 | ${ }_{25}^{9}$ |  | 25 |  | 3 | 8 430 |
| Rice, J. H., \& Friedman Co. ...... | Clothing |  | 1 | 160 | 40 | 200 | 6 | 1 | 87 |
| Richmond \& Conduit Co. .. | Elec. Plat. Pipe |  | 1 | 22 | 1 | 23 |  |  | ** |
| Ricketson \& Schwartz | Paints ......... | 2 |  | 11 |  | 11 |  | 1 | 100 |
| Rickers Soap Co. | Soap .. |  | 1 | 12 | 7 | 19 |  |  |  |
| Riess, Leopold ...... | Coopers | 1 |  | 11 |  | 11 |  |  | § |
| Right Laundry, The . | $\stackrel{\text { aundry }}{ }$ | 1 |  | 1 | 14 | 15 |  | 1 | 30 |
| Riemer Bros. Shoe Co. | Shoes, etc. |  | 1 | 20 | 14 | 34 | 1 |  | \# |
| Riverside Printing Co. | Printing |  | 1 | 75 |  | 75 |  | 2 | 150 |
| Rockwell Mfg. Co. . | Sash, ete. | 5 | 1 | 272 |  | 272 | 43 | 6 | 600 |
| Rohn, Geo. E. | Elec. Const. |  | 1 | 19 | 1 | 20 |  |  | * |
| Romadke Bros. Co. | Trunks . | 1 | 5 | 300 | 24 | 324 | 16 | 2 | 130 |
| Rom, Robert \& Co. ............ | Plumbing | 1 | 1 | 28 |  | 28 |  |  | ** |
| Roscizhaver Auto. \& Power Co. | Auto. Gears | 1 |  | 6 |  | 6 |  | 1 | 12 |
| Rosenthal Husker Co. | Agri. Imp. | 3 |  | 28 |  | 28 | 1 |  | + |
| Roth Mfg. Co. ....... | Pickles, etc. | 1 |  | ${ }_{6}^{6}$ | 10 | 16 |  | 2 | 120 |
| Royal Steam Laundry | Laundry . | 1 |  | $\stackrel{2}{2}$ | 11 | 13 |  | 1 | 20 |
| Rundle \& Spence | Manufacturing | 1 | 1 | 143 | 15 | 158 |  | 1 | 80 |
| Russia Tanning \& Fur Co. | Furs |  | 1 | 125 | 25 | 150 | 12 |  | ** |
| Rutland Transit Co. | Transportation | 1 |  | 7 | 1 | 8 |  |  | § |
| Salentine, Henry | Flour | 1 | 1 | 6 |  | 6 |  | ....... | + |

Salisbury Laundry Co
Sallentine, Herbert J.
Sanderson, M., \& Co.
Sands, Louis ............
Sanger Handle Bar Co.
Sanger Hande Bar Co. …
Sanitary Enameling Co.,
The ...
Sanitary Paper Co.,
Jr...
Schaaf, Frank
Schlitz Brewing
Schlitz Brewing Co
Schlitz South Side Branch
Schlutz, H. Geo., \& Co..
Schmidt, A. R.
chmidt \& Mue
Schmidt \& Muelle
Schmidt, Peter, \& Co.
Schmitt, F., \& Sons Co
Schmitz, Henry, Bottling
Schmitz, Peter, \& Son
Schmitz, Phil

Schoenecker, V.
Scholz, Chas \&
Schroeder, Fred, \& sö
Schroeder, John,
Schroeder, John, Lumber Co
Schroeder, John, Lumber Co
Schueppert, Frank J
Chultz $A$, Frank $J$
Schwab, R. J., Sons Co.
Schwab, Stamp \& Seal Co., Th
Schwolbach, Mathias
Schwartzburg. H
Seaman, W. S., \& Co.
Seamless Structural Co.
Seeboth Bros.
Seeboth Bros. CO.
Seedenberg \& Havs
Semi-Centennial Machine \& Iron Works
Semman, H. G., Mfg. Co
Sentinel Bindery, The






## 1,365

ESTABLISHMENTS INSPECTED.


Star Tannerv
Steckel, Adrian
Stehling \& Blommer
Steinman Lumber Co
Stein \& Malischke
Stern, B. \& Sons
Stollenwerk, Weber \& Co
Stolper, Chas., Cooperage Co
Stowell Mfg. \& Foundry Co.
Straw Steel Casting Co., The
Struck, Fred
Suhm Leather Co.
Tabor Glove
Tainsh \& Co. \& $\quad$ Co.
Tate, S. E.. \& Co. ....
Teweles \& Grundmann Co.
Theobalt \& Ehlert
T. M. W. R. \& L....
T. M. E. R. \& L. Co

Toepper, W., \& Sons
Trenkamp (\& Co.), F.
Trostel, Albert, \& Sons
Wwentieth Century Press, The
Twentieth Century Press
Thing, R.. Fuel Co.
Uihlein Bros., L. S. M. House
Union Electric Mfo Cleaning
Tnion Refrigeratorg. Co.
nion Refrigerator \& Trans. Co
Unit Web \& Suspender Co.
Usinger. Fred
Vaas He Knitting Co
Vaas, Herman
Vaughan Atlantic Co
Vara Chemical Co
Viller Mfa Co
Vizar, Rornst
Vizav, Rornstein \& Co
Vigt. Frank
Wadham's Oil. Grease \& Soap
Wagner, E. R., Mi........
Wagner J. J.
Walfeck, Fid. \& Co.
Wallace, Smith \& Co.

| Tannery | 3 | 1 |
| :---: | :---: | :---: |
| Tannery |  | 1 |
| Carriages | i ${ }^{\prime}$ |  |
| Lumber . | 1 |  |
| Machines | 1 |  |
| Flour | 4 | 2 |
| Boxes |  |  |
| Cooperage | 4 |  |
| Hardware | 6. |  |
| Steel | 1 |  |
| Wood and coal | 3 |  |
| Tannery |  | 1 |
| Gloves . |  | 1 |
| Printing |  | 1 |
| Printing |  | 1 |
| Lumber | 3 |  |
| Furniture |  | 1 |
| Purses |  | 1 |
| Elec. Power | 2 | 1 |
| Power House | 1 |  |
| Tanks, Etc. | 4 |  |
| S'oap | 2 |  |
| Tanners | 9 | 5 |
| Publishers |  | 1 |
| Printing |  | 1 |
| Coal ... | 1 |  |
| Malt House | 2 | 2 |
| Carpet Cleaning | 1 |  |
| Rheostats ....... | 1 |  |
| Repairing Cars | 2 |  |
| Suspenders .... |  | $i$ |
| Sausage .. | 1 | 1 |
| Knit Goods |  | 2 |
| Binding |  | 1 |
| Taundry |  | 1 |
| Machinery |  | 1 |
| Sal Soda. | 1 |  |
| Machinery | 8 | 1 |
| Cloaks, ete. |  | 1 |
| Rrnoma . | 1 |  |
| Oil, Soap, etc. | 3 |  |
| Arch. Iron | 1 |  |
| Carriages | 1 |  |
| Foundry | 5 |  |
| Tewelers |  | 1 |
| Saddlery |  | 2 |

ESTABLISHMENTS INSPECTED.


Wiersum，Henry
Wilbur Seed Meal Co
Wiler，John
Wilken \＆Rohde
Willer Mfg．Co
Wilfanns Bros．
Winding \＆Gezelschap
Windsor Mfg．Co．
Wis．Bridge \＆Iron Co．
Wis．Broom Mfg．Co．
Wis．Central R．R．Co
Wis．Electrical Construction Co．
Wis．Furniture Co．
Wis．Iron \＆Wire Works
Wis．Knitting Works
Wis．Machinery Co．
Wis．Malleable Iron Co
Wis．Pharmacal Co．
Wis．Overall Mfg．Co
Wis．Telephone Supply Deptis
Wobszall，Fred
Wollaeger，Mfg．Co．，The
Wood，C．＇H．，\＆Co．
Worachek，Albert
Wrensch，B．F．
Wright，E．，Lumber Co
Wrought Washer Mfg．Co
Yewdale Printing Co．
Young，Benjamin
Young Churchman Co．，The
Ziegler，Geo．，Co．
Zimmerman \＆Schilling
Zimmerman＇s A．Laundry
Zohrlant，Herman
Zuoster，Martin
Zwietusch，Otto，$\because$ Co．
Total

## OCONTO

Alert \＆McGuire Pickle Co．
Citizen Elec．Light Co．
Falls Mfg．Co．
Holt Lumber Co

Hats
Seed Meal
Stone
Fuel
Wood Work
Electrographers
Church Goods，etc
Roofers，etc
Lead Pípe

## Bridges <br> Brooms

Transportation
Electrical Construction
Furniture
Builders＇Materials
Knit Goods
Machinery
Castings
Pharmacist
Clothing
Telephone Rep
Coats＇
Office Furniture
Laundry
Wagons
Shoes，etc
Planing
Wrought Washers
Printing
Saddlery
Publishing
Confectionery
Printing
Laundry
Tanner
Brass，etc．
Soda Fountains，etc．．．．．．．．．．．．．

## ．



|  | $\begin{aligned} & \text { N } \\ & 8 \\ & 8 \\ & \hline \end{aligned}$ |  |
| :---: | :---: | :---: |
|  | $\underset{\infty}{\infty}$ | \％${ }_{\text {OLO }}$ |
| $\rightarrow$ 品N上 | N | 京 |
|  | $\begin{aligned} & \text { No } \\ & \text { N } \\ & \text { N } \end{aligned}$ |  |
|  | ¢ | ： |
|  | $$ |  |

ESTABLISHMENTS INSPECTED.

| Name. | Business. | Buildings. |  | Employes. |  |  |  | Boilers. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Under 3 stories. | 3 or <br> more <br> stories. | Male. | $\begin{gathered} \mathrm{Fe}- \\ \text { male. } \end{gathered}$ | Total: | Under <br> 16 yrs . of age. | Number. | Total horse power. |
| OCONTO-Continued. |  |  |  |  |  |  |  |  |  |
| Oconto Brewing Co. | Brewery | 1 |  | 10 |  | 10 |  | 1 | 75 |
| Oconto Canning Co. ..... | Canning . | 2 |  | 4 | 16 | 20 | 6 | 2 | 80 |
| Oconto County Enterprise | Publishing | 1 |  | 3 4 | 1 | 4 |  |  | $\pm$ |
| Oconto County Reporter . | Publishing | 1 |  | 4 | 2 | 6 |  |  | + |
| Oconto Lamber Co. ..... | Planing .. | 4 | 1 | 293 |  | 293 | 5 | 7 | 890 |
| Oconto Milling Co. ........... | Flour . |  | 1 | 5 |  | 5 |  | 1 | 80 |
| Oconto City Water Supply Co. | Water .. | 1 |  | ${ }_{6} 2$ |  | ${ }_{6} 2$ |  | 3 | 180 |
| Spies, Jacob . | Planing | 2 |  | 61 |  | 61 | 2 | 4 | 155 |
| Total |  | 18 | 3 | 773 | 28 | 801 | 17 | 30 | 2,760 |
| OSHKOSH. |  |  |  |  |  |  |  |  |  |
| Adams, Mrs. A. P.. | Millinery |  | 1 |  | 7 | 7 |  |  | § |
| American Grass Twine Co. | Twine . . | 13 |  | 96 | 109 | 205 | 7 | 3 | 225 |
| Arnold Vinegar \& Yeast Co. | Vinegar | 1 |  | 2 |  | 2 | . | 1 | 36 |
| Augustine, Henry ............ | Wagons' | 3 |  | 7 |  | 7 |  |  | § |
| Badger Canning Co. | Canning | 4 |  | 15 | 60 | 75 |  | 1 | 50 |
| Badger Plating Works | Plating . | 1 |  | 2 |  | 2 |  |  | * |
| Banderof, Chase Co. . | Furniture | 3 | $\cdots 2$ | 200 | $\ddot{2}$ | 202 | 12 | $\ddot{2}$ | 200 |
| Baldauf, Loui ....... | Machinery. | 1 |  | 3 |  | 3 |  | 1 | 2 |
| Baltis Bros. . | Boiler Sup. | 1 |  | 10 |  | 10 |  |  | * |
| Bicycle Mfg. Co. | Bicycles .. | 1 |  | 6 |  | 6 |  |  | $\pm$ |
| Bock, Brown Co. | Brooms .... | 1 |  | 3 |  | 3 |  |  | § |
| Brand, Robert, \& Son | Furniture |  | 12 | 17 |  | 17 |  |  |  |
| Buckstaff Edwards Co. | Caskets .. | $1{ }^{\prime}$ | 4 | 225 | 75 | 300 | ${ }^{10}$ | 4 | 400 |
| Campbell, Cameron \& Co. | Planing ... | 7 |  | 84 | 1 | 85 | 2 | 2 | 200 |
| Challoner, Geo., \& Sons . | Machinery | 3 |  | 56 | 1 | 57 | ........ | 1 | 40 |
| Clark, J. L., Carriage Co. | Carriages | 5 |  | 121 | 4 | 125 |  | 1 | 107 |
| Clongh \& Co. ..... | Pumps . . | 1 |  | 3 |  | 3 |  |  |  |
| Cook \& Brown Co. | Brick | 3 |  | 20 |  | 20 |  |  | § |
| Cooper Shop ..... | Cooper | 1 |  | 2 | . . . . . . ${ }^{\text {a }}$ | 2 | . . . . . . . | 1 | 12 |
| Cornelious, Frank | Hot Air Heater | 1 |  | 3 |  | 3 | - | ......... | \$ |
| Davis, Hanson \& Co. | Pumps | 8 |  | 37 | 1 | 38 | 2 | 1 | 4 |


*=Electric ; $\dagger=$ Water ; $\ddagger=$ Gas; $\S=$ Hand; ${ }^{* *=\text { Leased. }}$


ESTABLISHMENTS INSPECTED．

| Name． | Business． | Buildings． |  | Employes． |  |  |  | Boilers． |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { Under } \\ 3 \\ \text { stier.es. } \end{gathered}$ | $\left\|\begin{array}{c} 3 \text { or } \\ \text { more } \\ \text { stories. } \end{array}\right\|$ | Male． | $\begin{gathered} \mathrm{Fe}- \\ \text { male. } \end{gathered}$ | Total． | Under 16 yrs ． of age | $\underset{\text { ber．}}{\text { Num－}}$ | T’otal horse power |
| OSHKKOSH－Continued． |  |  |  |  |  |  |  |  |  |
| Schlitz Brewing Co． | Bottling | 2 |  | 4 |  | 4 |  | 1 | 40 |
| Schmidt Bros．Trunk Co． | Trunks | 3 | 2 | 98 | 25 | 123 | 34 | 1 | 100 |
| Schneider，Louis ．．．．．．．． | Bottle Covers | 3 |  | 11 | 29 | 40 | 1 | 1 | 16 |
| Smith，A．P．，Co．．．．．．．．．．．．． | Flour Mill |  | 1 | ${ }_{1}^{6}$ |  | ${ }^{6}$ |  | 2 | 150 |
| Star Foundry \＆Mach．Works | Saw Mill ${ }^{\text {Int．Finishing }}$ | 1 |  | ${ }_{32}^{12}$ | 1 | ${ }_{33}^{13}$ |  | i＊ | $7{ }^{\text {a }}$ |
| Streich，Gabriel ．．．．． | Fire Supplies | 2 | 1 | 35 |  | 35 |  | 1 | 80 |
| Strick，A．，\＆Bro． | Wagons ．．．．．．． | 4 |  | 60 | 1 | 61 | 1 | 1 | 100 |
| Thilen，J．，－Distilling Co． | Distilling ． | 4 |  | 5 |  | 5 |  | 1 | 60 |
| Thompson Carriage Co． | Carriages | 2 | 1 | 50 | 4 | 54 |  | 1 | 50 |
| Troy Steam Laundry | Laundry ． | 1 |  | 3 | 12 | 15 |  | 1 | 60 |
| Thierman，Arthur ． | Plating | 1 |  | ${ }_{21}^{2}$ | 2 | $\stackrel{2}{23}$ |  |  | ＊ |
| Union Iron Works | Engines | 2 |  | 21 |  | 21 |  |  | ＊ |
| Warwick \＆Cole Co． | Coal ．．．． | 3 |  | 4 |  | 4 |  |  | \％ |
| Wenrich，H．F． | Marble | 1 |  | 10 |  | 10. |  |  | § |
| Western Mfg．Co． | Underwear | 1 |  | 3 | 19 | 22 |  |  |  |
| Williamson ${ }^{\text {d }}$ Libby ．${ }^{\text {a }}$ | Sash，etc． | 5 |  | 175 | 1 | 176 | 19 | 3 | 500 |
| Winnebago Traction Co． | Railway | 2 |  | 12 |  | 12 |  | 3 | 1，000 |
| Wis．Art Glass Co．． | Glass ．．．． | 1 |  | 13 | 1 | 14 | 1 |  |  |
| Wis．Telegraph ．．． | Publishers | 1 |  | 19 |  | 19 |  |  |  |
| Total |  | 227 | 27 | 40，373 | 685 | 5，058 | 330 | 94 |  |
| RACINE． |  |  |  |  |  |  |  |  |  |
| Adams，E．B．，\＆Son | Springs ．．． | 1 |  | 8 |  | 8 |  |  |  |
| Alshuler，Chas．，Mfg．Co． | Garments ． | 1 |  | 10 | 165 | 175 |  | 1 | 60 |
| American School Fur．Co． | Furniture | 2 | 2 | 225 |  | 225 | 20 | 4 | 500 |
| Badger Mfg．Co． | Army Supplies | 1 |  | 20 | 125 | 145 | 15 | 1 | ${ }_{*}^{32}$ |
| Bell City Basket Co．．i．．．．．．．．．． | Baskets | 1 |  | 24 |  |  | 4 |  |  |
| Be＿A Bell City | Springs | 1 |  | 11 |  | 11 |  |  |  |
| Bell City Malleable Iron Co．．．．．．． | Castings | 1 |  | 268 |  | 268 | 4 | 2 | 280 |

Bell City Mfg. Co.
Bell City Steam Dye Works
Bell City Suit \& Cloak Co.
Bell City Sash \& Door Co.
Brown, W. ${ }_{\text {Case, }}$., Mfg. Co
Case, J. I., Plow Works
Carroll, J. C.
Chalmers, Peter
Chicago Rubber Clothing Co.
Claney, J. F., \& Co.
Collier, T. \& P.
Dickey Mfg. Co. ....
Earle Shoe Co
Eisenroth, B. D., Tanning Co.
Fish Bros. Wagon Co
Fisher \& Schweitzer
Freeman, G. B., \& Co
Freeman, S., \& Sons
Gold Medal Furniture Ci.
Gochner, C., Wire Works
Graham, F . W. Milling Co
Hartman Trunk Co.
Higgins Spring \& Axle Co
Hilker-Wischers Mfg. Co.
Hilker-Wischers Mfg. Co
Hodges $\&$ Green
Hodges \& Green
Holbrood \& Armstrong Iron Co.
Horlick Food Co.
Imperial Bit \& Snap Co.
Johnson, S. C. ..............
Johnson \& Field Mfg. Co.
Journal Printing Co.
Kambach-Fiebrich Shoe Co.
Lake Side Malleable Iron Co
Lang Mfg. Co.
Medal Stamping Co
Milwer, G., Co.
Milwaukee Elec. Ry. \& Light Co.
Milwaukee E. L. \& Traction Co.
Mitchell \& Lewis Co.
Model Steam Laundry
Pelson, N
Philbrook Shoe Co.
Philbrook Tannery

|  | Agricultural Implements |
| :---: | :---: |
|  | Dyeing ....... |
|  | Cloaks .... |
|  | Sash, etc. |
|  | Saddlery |
|  | Machines |
|  | Plows |
|  | Coal |
|  | Foundry |
|  | Mackintoshes |
|  |  |
|  | Mangles |
|  | ${ }_{\text {Agricultural }} \mathrm{Imp}$. |
|  | Sash, etc. |
|  |  |
|  | Wagons ..... |
|  | Laundry |
|  | Bits |
|  | Boilers |
|  | Furniture |
|  | Fencing |
|  | Patterns |
|  | Trunks . |
|  | Springs |
|  | Clothing ..... |
|  | Machine Shop |
|  | Machinists |
|  | Malted Milk |
|  | Bits |
|  | Wood Floors |
|  | Separators |
|  | Printing |
|  | Shoes .. |
|  | Castings |
|  | Hardware |
|  | Dyeing |
|  | Boots . |
|  | Light |
|  | Light |
|  | Wagons |
|  | Laundry |
|  | Clothing |
|  | Pads |
|  | Tannery |





ESTABLISHMENTS INSPECTED.


The Times Printing Co
West Side Steam Laundry
Wisconsin


Total

## RHINELANDER.

Brown Bros. Lumber Co.
Builders' Hardware Mfg. Co.
City Pumping Station
Corn, Abner \& Son
Herald Publishing Co
Johnson \& Hinman Lumber Co
Minn., St. Paul \& Sault Ste. Marie Ry
Model Steam Laundry
New North Publishing Co.
Rice \& Thrall
Rhinelander Brewery
Rhinelander Iron Co.
Rhinelander Lighting ©
Robbins Lumber Co.
Stevens Lumber Co.
Wabash Screen Door Co .
Wisconsin Veneer Co.
Wixon \& Bronson
Total

## SHEBOYGAN.

Ackerman, Chris.
American Folding Bed Co.
American Hide \& Leather Co
Aferican Mfg. Co.
Balzer, John
Big Hat Laundiy
Columbia Shoe Co.
Crocker Chair Co.,
Drocker Chair Co., B..
Dillingham Mfg. Co.

Printing
Laundry
Pumps,
Castings
Bicycles

. | Bi |
| :---: |
| $\ldots$ |

$\qquad$
tc. .



## 'NOILDHASNI XYOLOVA

ESTABLISHMENTS INSPECTED.

| Name. | Business. | Buildings. |  | Emploves. |  |  |  | Botlers. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\underset{3}{\text { Under }}$ stories. | $\left\|\begin{array}{c} 3 \text { or } \\ \text { more } \\ \text { stories. } \end{array}\right\|$ | Male. | $\begin{gathered} \text { Fe- } \\ \text { male. } \end{gathered}$ | Total. | Under 16 yrs of age. | Number. | Total horse power. |
| SHEBOYGAN'-Continued. |  |  |  |  |  |  | , |  |  |
| Excelsior Wrapper Co. | Bottle Wrappers | 1 |  | 37 | 4 | 41 | 3 | 2 | 200 |
| Frost Veneer Seating Co. | Veneer . .......... | 1 |  | 50 |  | 50 |  | 1 | 30 |
| Frost Veneer Seating Co. | Veneer | 2 | 3 | 242 | 8 | 250 |  | ${ }_{2}^{2}$ | 200 |
| Gryberg, C. B., Lumber Co. | Planing |  | 1 | 15 |  | 15 | $\dddot{26}$ | $\stackrel{2}{2}$ | 200 160 |
| Gutsch Brewing Co. | Brewery | 1 | 1 | 27 | 8 | 35 |  | 2 | 140 |
| Hall \& Ross | Gloves . | 1 |  | 37 | 35 | 72 |  |  | 8 |
| Howe, L. K. | Printer | 1 |  | 7 | 5 | 12 |  |  |  |
| Jenkins Machine Co. | Machines | 1 |  | 50 |  | 50 |  |  | * |
| Jung, J. \& W. | Wagons | 1 |  | 50 11 |  | 150 |  |  | ${ }_{8}$ |
| Langrath, A., Co. | Canning | 2 |  | 130 | 50 | 180 |  | 2 | 75 |
| Mattoon Mfg. Co. | Furniture ......... |  | 4 | 400 |  | 400 | 30 | 8 | 800 |
| Meyer, Ph., Co. | Foundry and Mach | 2 |  | 25 |  | 25 |  |  | \% |
| Mueller, H. G., Lumber Mfg. Co. | Woodenware . |  | 1 | 16 |  | 16 |  | 1 | 100 |
| Musical Instrument Mfg. Co. .... | Instruments | 1 |  |  | 6 | 6 |  |  |  |
| Novelty Mfg. Co. ......... | Book Cases Boilers, Etc. |  | 2 |  |  | 56 18 | 2 |  | ${ }_{25}^{4}$ |
| Optenberg \& Sonnemann | Boilers, Etc. | 1 |  | 538 |  | 18 |  | $\frac{1}{3}$ | - 25 |
|  | Chairs ${ }^{\text {Bee }}$ Hives |  |  | 530 6 | 20 | 550 6 | 11 | ${ }_{1}^{3}$ | 620 16 |
| Schreier, K., \& Co. . | Brewery . |  | . 5 | 50 |  | 50 |  | 2 | 200 |
| Sheborgan Brick \& Tile Co. | Brick ... | 1 |  | 15 |  | 15 |  | 1 | 30 |
| Sheboygan Chair co. ....... | Chairs |  | $\cdots$ | 392 | 32 | 424 | 40 | 2 | 550 |
| Sheboygan Cigar Mould Co. | Moulds | 1 |  | 45 |  | 45 | 2 | 1 | 70 |
| Sheboygan Coal Co. ...... | Wood and Coal |  |  | 20 |  | 20 |  | 1 | 150 |
| Sheboygan Daily Journal | Printing ... | 1 |  | 10 10 |  | 14 101 |  |  |  |
| Sheboygan Knitting Co. ........ | Knit Goods ...... | 1 |  | 10 36 | 91 | 101 | 16 | $\stackrel{2}{3}$ | 200 |
| Sheborgan Mineral Water Co. | Bottlers ........... |  | 1 | 10 | 16 | 26 |  |  | ${ }_{8}^{8}$ |
| Sheboygan Steam Laundry | Laundry | 1 |  | 2 | 13 | 15 |  | 1 | 40 |
| Sheboygan Telegram | Printing | 1 |  | 7 |  | 12 |  |  | $\stackrel{ \pm}{\text { S }}$ |
| Sheboygan Volksblatt | Printing | 1 |  | 100 | 5 | 105 |  | . 1 | 120 |
| Soratt, G. W.. \& Co. Volbrath, Jacob, Mfg | Fhairs | 1 |  | 201 | ${ }_{106}^{5}$ | 307 | 22 | 1 | 120 80 |

Winter, M., Lumber Co.
Wolf \& Twig ............
Zimmerman, E. ${ }^{\text {F.....W }}$
Zimball, A., \& Son
Zurheide, Fred., \& Co
Total

## STEVENS POINT.

Bennett Steam Bakery
Cifiord \& Fox Lumber Co.
Cook, R. A., Central City Iron Works
Coye Furniture Co.
Gazette, The
Haller, Fred
Jackson Milling Co.
Journal, The.
Kashollek,
Kuenzel, G
Kuhl, Chas. ${ }_{\text {Git }}^{\text {W }}$
Mitchell, W. W.
Mitchell, W. W.
Pfiffner \& Rounds
Plover Paper Co.
Rice, J., \& Brother Co
Rolnik Polish Weekly
Stevens Point Box Co.
Stevens Point Light Co.
Stevens Point Water Co.
Textile Starch Co.
Vetter Mfg. Co.
Week, John, Lumber Co
Wisconsin Bedding Co
Wisconsin Best Laundry
Wisconsin River Papary ...............................................
Total

## SUPERIOR

Adamant Mfg. Co. ...
America \& Shour ....
American Barrel Co.
American Heating Co.

Int. Finish

$\ldots . . .$.
•
Bakery
Foundry, etc.
Furniture
Publishing
Wood Work
Flour Mill
Engines
Brewery
Brewery
Flour
Saw Mil
Planing
Paper
Underwear
Machines a
Machines
Boxes
Boxes
Water
Starch
Sash, etc.
 Mattresses Laundry
Paper and Pulp
....

## Plaster

Elevator
Machines
*=Electric $; \dagger=$ Water $; \ddagger=$ Gas; $\S=$ Hand $;{ }^{* *}=$ Leased.

| $\begin{aligned} & 1 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \end{aligned}$ | 1 | 55 7 5 18 15 | $\left\|\begin{array}{r}\cdots \cdots \ldots \\ 4 \\ 1\end{array}\right\|$ | 55 11 6 18 15 | . ....... | $\|$2 <br> $\ldots \ldots \ldots$ <br> $\cdots \cdots$ <br> 1 <br> 1 | 160 $*$ 8 55 45 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 48 | 41 | 4,648 | 547 | 5,195 | 252 | 71 | 7,391 |
| 2 |  | 2 | 1 |  |  |  |  |
| 1 |  | 61 | 1 | 61 |  | $\frac{1}{5}$ | 5 340 |
| 1 |  | $\begin{array}{r}7 \\ \\ \hline\end{array}$ |  | $\begin{array}{r}7 \\ \\ \hline\end{array}$ |  | 5 1 | 340 100 |
| 1 |  | 160 5 | 1 <br> 2 | 161 | $\cdots{ }^{\prime} \times \cdots$ | 2 | 170 |
| 1 |  | $\begin{array}{r}5 \\ 1 \\ \hline\end{array}$ | 2 | 7 1 1 |  | $i^{*}$ | $1 \stackrel{+}{+}$ |
|  | 1 | 13 |  | 13 | . | 1 |  |
| 1 |  | 6 | 1 | 7 | ……... |  | + |
| 1 |  | $\frac{1}{5}$ | ......... | 1 5 |  | i. | + |
|  |  | 2 | ......... | 2 |  | 1. | 80 |
| 1 |  | 2 | ........ | 2 | 1 | 1 | 08 |
| 1 | . | 9 |  | 9 |  |  | 98 |
| 1 |  | 20 |  | 20 |  | 1 | 80 |
| 1 | 1 | 108 | 82 | 190 | $1{ }^{-1}$ | 3 | 300 |
| 1. |  | $\stackrel{2}{20}$ | 4 | 6 |  |  | 衰 |
| 1 |  | 20 5 | ........ | 20 |  | 1 | 35 |
| 1 |  | 30 | 1 | 6 30 | 1 | ...... | $\ddagger$ |
| 1 |  | 12 |  | 30 12 | 1 | 1 | 100 |
| 1 |  | + |  | 12 | ........ | 3 | 240 |
|  | 1 | 11 |  | ${ }^{3}$ | .... | 2 | 160 |
| 1 |  | 18 |  | 18 | .. | 1 | 100 |
| 2 |  | 100 |  | 18 |  | - 1 | 80 |
| 1 | 1 ${ }^{\circ}$ | 18 | $\underline{2}$ | 100 | 1 | 3 | 380 |
| 1 |  | 18 3 | 23 | 20 |  | 1 | 100 |
| 2 |  | 118 | 23 12 | 26 130 |  | 1 | 40 |
| 28 | 4 | 742 | 129 | 871 | 28 | 35 | 2,760 |
| 1 |  | 15 |  |  |  | 1 |  |
| 11 | 1 | 8 |  | 8 |  | 1 | 36 +2 |
| 11 |  | 45 |  | 45 |  | $1{ }^{\prime}$ | 60 |
| 1.1 | ....] | 14 |  | 14 |  | 1 | $\stackrel{6}{*}$ |

ESTABLISHMENTS INSPECTED.

| Name. | Business. | Buildings. |  | Employes. |  |  |  | Boillers. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\left\|\begin{array}{c} \text { Under } \\ 3 \\ \text { stories } \end{array}\right\|$ | $\begin{gathered} 3 \text { or } \\ \text { more } \\ \text { stories. } \end{gathered}$ | Male. | $\begin{gathered} \mathrm{Fe}- \\ \text { male. } \end{gathered}$ | Total. | Under 16 yrs. of age. | $\begin{gathered} \text { Num- } \\ \text { ber. } \end{gathered}$ | Cotal horse power. |
|  |  |  |  |  |  |  |  |  |  |
| SUPERIOR-Continued. |  |  |  |  |  |  |  |  |  |
| American Lumber Co. | Planing . | 1 |  | 83 |  | 83 |  | 1 | 60 |
| Aaker, C. S., Estate. | Machines | 1 |  | 30 | 8 | 30 |  | 2 | 80 |
| Baldwin Laundry .. | Laundry | 1 | 2 | 4 32 | 8 | 12 |  |  | * |
| Belt Line Elevator . | Elevator |  | 2 | 32 |  | 32 |  | 3 | 300 8 |
| Bingham Hardware Co. | Roofing . | 1 |  | 14 |  | 4 |  | 2 | 708888 |
| Broadway Laundry .... | Laundry | 1 |  | 12 | 50 | 62 |  | 2 | 8 |
| Carlson Bros. ..................... | Roofing ...... | 1 |  | -5 |  | 23 |  | 3 | 225 |
| C., M., St. P. \& O. Ry. Shops | Round House Printing ...... | 1 |  | 23 |  | 23 |  | 3 | § |
| Chamber \& Johnson . . . . . . . . . . . | Printing Printing | 1 | ........ | 2 5 | 1 | 3 5 |  |  | * |
| Clarion Citizen | Printing Mill | 1 | $\cdots \cdots 1$ | +5 | 1 | 31 |  | 2 | 120 |
| Commander Mill | Dours, etc. | 4 | $\cdots$ | 18 | 1 | 18 |  | 1 | 20 |
| Cowdin, H. F. | Doors, etc. | 4 |  | 18 9 |  | 18 9 |  | 1 | 60 |
| Dam, F. H. . . | Sash, etc. | 1 |  | 6 |  | 6 |  | 1 | 65 |
| Douns, D. | Patterns | 1. |  | 2 |  | 2 | 3 |  | ¢ ${ }^{\text {+ }}$ |
| Doud, S., \& Son | Coopers ...... | 1 |  | 30 |  | 30 | 3 | 1 | 60 450 |
| Duluth-Superior Traction Co. | Power House | 1 |  | 6 |  | ${ }_{91}^{6}$ | ......... | $\stackrel{3}{2}$ | 450 130 |
| Duplex Mfg. Co. ............... | Wind Mills | 9 |  | 90 30 | 1 | 91 30 |  | $\stackrel{2}{2}$ | 150 |
| Eastern Minn. Ry. Coal Dock | Coal Dock | 2 |  | 30 7 |  | 30 20 |  | 1 | 150 35 |
| Enterprise Laundry Co. | Printing | $\frac{1}{1}$ |  | $\begin{array}{r}7 \\ \hline\end{array}$ | 13 | 38 |  | 1 | $\stackrel{*}{*}$ |
| Evening Telegram Co. | Pricycles | 1 |  | 2 |  | - 2 |  |  | § |
| Fagelquest, Frank . | Flour ... | 1 | 3 | 65 |  | 65 |  | 4 | -1,000 |
| Freeman Mill ${ }_{\text {Geyser Bottling Works }}$ | Bottling | 1 | $\stackrel{3}{*}$ | 60 3 3 |  | 60 3 3 |  | 4 | 1,008 750 |
| Geyser Elevator Co. ... | Grain ..... |  | ${ }^{\cdots} 3$ | 30 |  | 30 |  | 6 | 750 |
| Great Northern Elevator | Power House | 1 | 3 | 7 |  | 7 |  | 4 | 1,000 |
| Great Northern Bottling Works | Bottling | 1 |  | 4 116 |  | 116 |  | 3 | +300 |
| Great Northern Ry. Shops | Shops .. | 4 | 1 | 116 |  | 116 6 |  | 2 | ${ }^{160}$ |
| Hall Elevator Co. ... | Elevator <br> Printing | 1 | 1 | $\stackrel{6}{5}$ | $\cdots{ }^{1}$ | 6 |  |  | * |
| Harmon Printing Co. | Carriages | 1 |  | 2 |  | 2 |  |  | 8 |
| Henry \& Vogel ... | $\begin{aligned} & \text { Carriages } \\ & \text { Printing } . \end{aligned}$ | 1 | ${ }^{\cdots \cdots \cdots}$ | 3 |  | 3 |  |  | 8 |
| Herold, N. W. .. Hilger, | Wagons | $1{ }^{-1}$ | $\ldots$ | 3 |  | 3 |  |  | 8 |
| Holmes \& Bro. Co. | Roofing ... | 1 | . . . | 15 |  | 15 |  |  | 8 |



ESTABLISHMENTS INSPECTED.


Thenow \& Bursinger
Watertown Bottling Co.
Watertown Electric
Watertown Grain Co.
Watertown Monumental Works
Watertown Shoe Co
Watertown Steam Laundry
Watertown Table Slide Factory
Watertown Water Works
Woodard \& Stone Factory
Total

## WAUKESHA

American Mineral Water Co
Bethesda Brewery \& Bottling Works
Bethesda Mineral Spring Co.
Blair Bros.
Henk Miner. \& Son
Menk Mineral Spring Co
Ladewig. W.
Milwaukee-Waukesha Brewing C
Model Steam Laundry
Modern Steel Structural Co
Silurian Mineral Spring Co
Spring City Steam Laundry
Waukesha Arcadian Co
Waukesha Canning Co
Waukesha Despatch
Waukesha Freeman
Waukesha Malleable Iron Co
Waukesha Mfg. Co.
Waukesha Press
Waukesha Rv. \& Elec Co
Waukesha Sbeet Steel Co
Waukesha Stone \& Quarry Co.
Waukesha Water Works
White Rock Mineral Spring Co
Wilbur Lumber Co.
Total


Boilers and Foundry
Water
Light and Power
Gas
Erevator
Monument
Shoes
Launury
Table Slides
Water
Confectionery

## Water

Brewer
Water
Machinery
Flour
Wacer.
Machiner
Brinters
Lrewery
Bridges
Water
Laundry
Water
Canning
Publishers
Publishers
Foundry
Boxes, ete.
Publishers
Power
Steel
Stone
Stone
Water
Sash, etc.


ESTABLISHMENTS INSPECTED.

| Name. | Business. | Buildings. |  | Employes. |  |  |  | Boluers. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{array}{\|c} \text { Under } \\ 3 \\ \text { stories. } \end{array}$ | 3 or more stories. | Male. | Female. | Total. | Under 16 yrs. of age. | Num. ber. | Total horse power. |
| WAUSAU. |  |  |  |  |  |  |  |  |  |
| Barker \& Stewart | Planing ... | 2 |  | 36 | 1 | 37. |  | 1 | 80 |
| Central Wisconsin ......... | ${ }^{\text {P Publishing }}$ | 1 |  | 5 |  | 5 , |  | $\cdots$ | ${ }^{\dagger}$ |
| Chicago Excelsior Factory | Excelsior | 1 |  | 14 |  | 14 |  | 1 | 100 |
| Climax Laundry | Laundry ... | 1 |  | 3 | 10 | 13 | 2 | 1 | 30 |
| Curtis \& Yale Co. | Sash, Etc. . |  | 1 | 423 | 2 | 425 | 31 | 4 | 300 |
| Derham Bottling Works | Soda Water | 1 |  | 4 |  | 4 | 1 |  | § |
| Eberlin, John ................ | Soda Water ... | 1 |  | 1 |  | 1 |  |  | 8 |
| Franzel, J. R. | Machines, etc. | 1 |  | 3 |  | 3 |  | 1 | 45 |
| Goodvillie Bros. | Box́xes ....... | 1 |  | 160 | 1 | 161 | 24 | 4 | 300 |
| Kickbush, Fred. | Flour Mili |  | 1 | 7 | 1 | 8 |  | 1 | 90 |
| Mansen, M. E. ..... Mathie Brewing | Saw Mill | 1 |  | 65 12 |  | 65 13 |  | 4 2 | 200 160 |
| McEaghron Roller Mill | Flour . . | 1 | 1 | 26 | 1 | 27 |  | 2 | 160 $\dagger$ |
| Miller, J. \& A. .......... | Laundry | 1 |  | 3 | 12 | 15 |  | $1^{*}$ | 20 |
| Mortenson, J., Lumber Mill | Planing . | 2 |  | 48 |  | 48 |  | 1 | 100 |
| Murry, D. J., Mfg. Co. . | Machinery | 1 |  | 64 | 2 | 66 |  | 1 | 60 |
| North Western Sand Paper Co. | Sand Paper | 2 |  | 19 | 1 | 20 |  | 2 | 115 |
| Philosopher Press | Publishing | 1 |  | 3 | 1 | 4 |  |  | $\ddagger$ |
| Ruder Brewing Co. | Brewery .. |  | 1 | 16 |  | 16 |  | 2 | 120 |
| Schwentkofske, Aug. | Planıng | 1 | 1 | 6 | 1 | 7 |  | 1 | 60 |
| Stewart Lumber Co. | Saw Mill . | 1 |  | 234 |  | 234 | 1 | 4 | 350 |
| Stolzes Sons | Pubishing | 1 |  | 8 | 1 | 9 | 2 |  | $\ddagger$ |
| Underwood Veneer Co. | Veneer .... | 1 |  | 100 | 1 | 101 | 8 | 3 | 225 |
| Wisconsin Box Co. ... | Boxes . | 1 |  | 46 |  | 46 | 5 | 2 | 100 |
| Wausau Box \& Lumber Co. | Boxes .... | 1 |  | 96 | 2 | 98 | 13 | 2 | 150 |
| Wausau Daily Record ...... | Publishing | 1 |  | 6 | 2 | 8 |  | 1 | 04 |
| Wausau Electric Co. | Light ...... | 1 |  | 4 |  | 4 |  | 4 | 440 |
| Wausau Excelsior Co. | Excelsior | 1 |  | 14 |  | 14 |  | 1 | 150 |
| Wausau Herald | Publishing | 1 |  | 1 | 2 | 3 |  |  | + |
| Wausau Novelty Co. | Novelties | 2 |  | 72 |  | 72 | 12 | 2 | 145 |
| Wausau Quartz Co. | Quartz | 1 |  | 10 |  | 10 |  | 1 | 40 |
| Wausau Water Works | Water .. | - 1 |  | 4 |  | 4 |  | 3 | 285 |
| Wausau Wochenblatt | Publisher | 1 |  | 3 |  | 3 |  |  | + |
| Wertheim Manfg. Co. | Planing Mill | 1 |  | 86 |  | 86 |  | 2 | $12{ }^{+}$ |
| Total |  | 34 | 6 | 1,602 | 42 | 1,644 | 99 | 52 | 3.789 |

## ESTABLISHMENTS INSPECTED.



ESTABLISHMENTS INSPECTED.


ESTABLISHMENTS INSPECTED.


## ES'I'ABLISHMENTS INSPECTED.



## ESTABLISHMENTS INSPECTED.



ESTABLISHMENTS INSPECTED.


## ESTABLISHMENTS INSPECTED.



ESTABLISHMENTS INSPECTED.


# ESTABLISHMENTS INSPECTED. 



ESTABLISHMENTS INSPECTED.


## ESTABLISHMENTS INSPECTED.



# ESTABLISHMENTS INSPECTED: 



ESTABLISHMENTS INSPECTED.


## ESTABLISHMENTS INSPECTED.

| Lacation, Name and Business. |
| :---: |

## ESTABLISHMENTS INSPECTED.

| Location, Name and Business. | Buildings. | Employes. |  |  |  | Boilers. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \dot{\otimes} \\ & \stackrel{\pi}{\pi} \end{aligned}$ |  |  | $\left\lvert\, \begin{gathered} \dot{\sim} \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \end{gathered}\right.$ | 㞤 |  |
| MEDFORD TAYLOR CO.- |  |  |  |  |  |  |  |
| City Printing Office, Printing | 1 | 1 |  |  |  |  |  |
| Campbelle \& Anschutz, Foundry | 1 | 15 | 1 | 15 |  |  | 8 |
| Democrat Printing Co., Printing |  | 2 |  | 15 |  | 1 | 40 |
| Der Waldbote, Printing ....... |  | 3 |  | 5 |  |  | 8 |
| Electric Light Wks., Light and Pow |  | 3 |  | 3 |  | 1 | ${ }_{60}$ |
| Medford Brewery, Brewery |  | 10 |  | 10 |  | 1 | 45 |
| Medford Mfg. Co., Lumber |  | 65 |  | 65 |  | 5 | 360 |
| Pollard \& Son, O. D., Sash, et | 1 | 8 |  |  |  | 1 | 75 |
| Star \& News, Printing . . . . . . |  | 8 |  |  |  | 1 | 50 |
| U. S. Leather Co., Tannery | 4 | $\stackrel{3}{9}$ | 1 | 4 4 |  |  | \# |
| Wesle Bros., Carriages ...... |  | 13 |  | 13 |  |  |  |
| Zwingrebel, Wagons .. |  | 13 |  | 13 |  | 1 | 12 |
|  | 19 | 233 | 5 | 238 |  | 11 | 642 |
|  |  |  |  |  |  |  |  |
| Foster, Geo. E., Lumber Co., Saw Mill ......... | 2 | 75 |  | 75 |  |  | 450 |
| U. S. Leather Co., Tannery <br> Mullen Weekly, Publishing | 4 |  |  | 1004 |  | 6 | 450 |
| Mullen Weekly, Publishing ........................ | 1 | 11 1 1 | 1 | 109 |  | 6 | 450 |
| MERCER, IRON CO.- <br> Mercer Lumber Co., Lumber |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Meridian, DUNN CO.- |  |  |  |  |  |  |  |
| MILTON, ROCK CO.- <br> Geo. C. Mansfield \& Co., Creamery |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Milton Journal, Publishers | 1 | 1 |  | 1 |  | 1 | 15 |
| Totals . $\ldots$........................................ | 1 | 1 | $\stackrel{2}{2}$ | 3 |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Milwaukee Cement Co., Cement ........................ |  | 132 |  | 48 |  | 2 | 250 |
| Totals | 11 | 180 |  | 132 |  |  | 500 |
| MINERAL POINT, IOWA CO.- <br> Mineral Point Zinc Co.. Zinc, ete. |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| American Steam Laundry ......................... |  | 246 | 4 | 250 |  | 4 | 400 |
| Mineral Point. El. Light \& Wäter Plant, Light | 1 | $\stackrel{2}{2}$ | 2 |  |  | 1 | 12 |
| Mineral Spring Brewing Co., Brewery ........ |  | 5 |  | 2 |  | 2 | 240 |
| Union Fibre Co., Asbestos .............. |  | 5 |  | 5 |  | 1 | 80 |
| J. C. Martin, Fëed ........ |  | 7 |  | 7 |  | 1 | 60 |
| Spensley \& Hoare, rCeamery | 1 |  |  |  |  | 1 | 15 12 |
| Totals | 16 | 264 | 6 | 270 |  | 11 | 819 |
| MINOCQUA, VILAS CO.City Water Works |  |  |  |  |  |  |  |
| MONTELLO, MARQUETTE CO.- |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Montello Granite Co., Monuments |  |  |  | 130 |  | 1 | 30 |
| Totals ........................... | 10 | 130 |  | 130 |  |  | 80 |
| MONTREAL, IRON CO.- |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  | 225 |  | 225 | 4 | 5 | 600 |
| MORSE, ASHLAND CO.- |  |  |  |  |  |  |  |
| NASH, BAYFIELD CO.- <br> Ashland, Sickiwith \& Iron Ry., R. R. Shops.. |  |  |  |  | 3 | 3 | 180 |
|  | $2 \mid .$ |  |  |  | $1)$ | $1)$ | 50 |

ESTABLISHMENTS INSPECTED.


## ESTABLISHMENTS INSPECTED.

Location, Name and Rusiness.


## ESTABLISHMENTS INSPECTED.



ESTABLISHMENTS INSPECTED.


## ESTABLISHMENTS, INSPECTED.



ESTABLISHMENTS INSPECTED.


## ESTABLISHMENTS INSPECTED.



ESTABLISHMENTS INSPECTED．

| Location，Name and Business． | Build－ ings． |  | Employes． |  |  |  | Boilers． |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\left.\left\lvert\, \begin{array}{r} 2 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \end{array}\right.\right]$ | 尔 | 告 |  |  | 呂 | － |
| spring vallley，PIERCE CO．－ <br> Brown Bros．Lumber Co．，Saw Mill <br> Kahut，J．P．，Wagons <br> Lowater，Frank，Brick <br> Moffatt，Mark，Feed <br> New Richmond Roller Mill Co．，Grain． <br> Spring Valley Creamery Co． <br> Spring Valley Iron \＆Ore Co．，Iron Mine Spring Valley Sp．，St．\＆Hdg．Co．，Sp．，Etc．． Spring Valley Seen，Printing Tanberg－Sieberns Co．，Grain Totals |  |  |  |  |  |  |  |  |
|  |  |  | 10 |  | 10 | 1 | 1 |  |
|  |  |  | 4 |  |  |  |  |  |
|  | 1 |  | 25 |  | 25 |  |  |  |
|  | 1 | 1 | 1 |  | 1. |  |  |  |
|  | 1 |  | 5 |  | 5 |  |  |  |
|  | 4 | 1 | 150 |  | 150 |  | 7 | 625 |
|  |  |  | 65 |  | 65 | 1 | 3 | 22 |
|  |  |  |  |  |  |  |  |  |
|  | 1 |  | ${ }^{6}$ |  |  |  |  |  |
|  | 13 | 2 | 271 | 2 | 273 | 3 | 13 | 91 |
| STANLEY，CHIPPEWA CO．－ <br> Goshaw \＆Geogh，Furniture <br> N．W．Lumber Co．，Saw Mill <br> Stanley Creamery Co． <br> Stanley Republican，Printing <br> Stanley Roller Mills，Flour <br> Stanley Water Works <br> U．S．Leather Co．，Tannery <br> Totals |  |  |  |  |  |  |  |  |
|  | 1 |  | 10. |  | 10 | 2 |  | 65 |
|  | 6 |  |  |  | 320 | 6 |  |  |
|  | 1 |  | 2 |  | 2 |  | 1 | 25 |
|  | 1 |  | 3. |  |  |  |  | ， |
|  | 1 |  | ${ }_{2}$ |  | 2 |  | 1 | 30 |
|  | 1 |  | 2 |  | 2 |  |  |  |
|  | 7 |  |  |  | 80 |  |  | 240 |
|  | 18 |  | 415 |  | 420 | 9 | 23 | 1860 |
| STAR LAKE，VILAS CO．－ Salsich \＆Wilson，Lumber | 4 |  | 225 |  | 225 | 1 | 7 | 0 |
| STAR PRAIRIE，STC．CROIX CO．－ <br> Bixby，H．L．，Flour，etc． <br> Cedar＇Lake Milling Co．，Flour <br> Superior Creamery Co． <br> Totals＇ |  |  |  |  |  |  |  |  |
|  | 1 | 1. | 6 |  | 6 |  |  |  |
|  | 1 |  | 3 |  | 6 |  |  |  |
|  | 1 |  | 2 |  | $\stackrel{3}{2}$ |  |  |  |
|  | 3 | 1 | 11 |  | I1 |  | 1 | 15 |
| STEUBEN，CRAWFORD CO．－ <br> Beaumont，D．，Saw Mill ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． Hulbert，J．J．，Saw Mill <br> Totals |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  | 1 |  | 4. |  | 5 |  | 1 | 40 |
|  | 2 |  | 9. |  | 9 |  | 2 | 8 |
| STOUGHTON，DANE CO．－－ |  |  |  |  |  |  |  |  |
| Amundson，Peter，Machine Shop ．．．．．．．．．．．．．．．．．．． <br> City Water Works，Water | 1 |  | 3 |  |  |  |  |  |
|  | 1 |  | 2 |  | 2 |  | 2 | 160 |
| City Water Works，Water <br> Gunderson，Osmund，Tob．Warehouse | 1 | 1 | 4 |  | 36 |  |  | 160 |
| Johnson，M．B．，Wagons ．${ }_{\text {Kittleson，}}$ | 1. |  | 2 |  | 2 |  |  |  |
|  | 1. |  |  |  |  |  |  |  |
| Lee，＇O．C．，Tob．Warehouse Lee，Simon，Marble | 1 |  | 4 |  | 2 |  |  |  |
|  |  | 1 | ${ }^{2}$ |  | 2 |  |  | 300 |
| Mandt，T．G．，Vehicle Co．．Wagons，etc．．．．．．．．．． Midgard，Andrew J．，Printing | 6 | 1 |  |  |  |  |  | 0 |
|  | 1 |  | ${ }_{3}^{2}$ |  | ${ }_{3}^{2}$ |  |  |  |
| Olson，N゙．F．，Wagons | 1 |  | 6 |  | 6 |  |  |  |
| Peterson，S．A．，WagonsQuam．W．，Harness | 1 |  | 5 |  | 5 |  |  |  |
|  | 1 |  | 2 |  | 2 |  |  |  |
| Roe，O．K．，Tob．Warehouse W．．．．．．．．．． | 1. |  |  |  |  |  |  |  |
|  | 1. |  | 6 |  | ， |  |  |  |
| Stoughton Courier．Printing ．．．．．．．．．．．． | 1 |  |  |  | 4. |  |  | \＄ |
| Stoughton Hub，The，Printing ． | 1 |  | $\stackrel{3}{5}$ |  | 5 |  |  | $\pm$ |
| Stoughton Mill，Flour and Grain | 10 |  |  |  |  |  |  |  |
| Townsend \＆Hyland，Ice Houses | 21 |  |  |  |  |  |  | \＄ |
| Vinjem，I．TotalsN．，Box．．．．．． | 1 |  |  |  |  |  |  | ＋ |
|  |  |  |  |  |  |  |  | 690 |

# ESTABLISHMENTS INSPECTED. 



ESTABLISHMENTS INSPECTED.


ESTABLISHMENTS INSPECTED.

| Location, Name and Business. | Buildings. |  | Employes. |  |  |  | Boilers. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | \|c|c |  | 官 | ¢ ¢ 0 0 0 |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Prescott Steam Pump Co., Pumps | 7 |  | 50 | 1 | ${ }^{51}$ |  | 5 |  |
| Totals | 10 |  |  |  |  |  | 5 | 600 |
|  |  |  |  |  |  |  |  |  |
|  | 1 |  |  |  | 1 |  | 1 | 10 |
|  |  |  |  |  |  |  |  |  |
| Hanson, L., \& Co., Tobacco Warehouse........ 1 |  |  |  |  |  |  |  |  |
| Johnson, Andrew, 'Jobacco Warehouse | 1 |  | 25 | 35 | ${ }^{6} 0$. |  |  | 8 |
|  |  |  |  |  |  |  |  |  |
| Thoreson, Theodor, Planing Mill | 1 |  | 10. |  | 10 |  | 1 | 45 |
| Times, 'The, Printing ........................... $1\|\ldots . \quad 2\| \ldots .{ }_{1}$ |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| WESTFIELD, MARQUETTE CO.- |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Westfield Roller Mill, Flour and Feed.......... | 5 <br> 8 |  | 4 |  | 7 |  |  | , |
| WEST SALEM, LA CROSSE CO.- <br> Neshonec Electric Light Co., Light and Power <br> N'onpareil Journal, Printing <br> Totals |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Weyher \& Son, Wagons, etc. $\ldots \ldots \ldots \ldots \ldots \ldots .$. |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Whitewater Steam Laundry, Laundry ........ |  |  | $\stackrel{2}{9}$ |  |  |  | 1 | 15 |
|  |  |  |  |  |  |  |  |  |
| Znill \& Hawes, Grist Mill | 12 |  | 70 | 9 | 79 |  | 7 | 344 |
|  |  |  |  |  |  |  |  |  |
| WILD ROSE, WAUSHARA CO.- |  |  |  |  |  |  |  |  |
| Wild Rose Grist \& Feed Mill, Feed. | ${ }_{3}$ |  |  |  |  |  |  |  |
| Wild Rose Planing Mill \& Mach. Sh |  |  | 11 |  |  |  |  |  |
| Totals |  |  | 11 |  | 11. |  |  |  |
| WILSON, ST. CROIX CO.- |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Keenlyne, Albert, Feed |  |  | 2 |  |  |  |  |  |
| Keen Totals .............. | 2 |  | 4 |  |  |  | . 2 | 0 |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Sentinel, The, Printing ......................... ${ }^{1}$ |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| WOODVILLE. ST. CROIX CO.       <br> Woodville Creamery Co., Creamery $\ldots . . . . . . .$. 1 $\ldots .$. $2 \mid \ldots$. 2 $\ldots$. 1 |  |  |  |  |  |  |  |  |
| WOODBORO, ONEIDA CO.Wood, George, Lumber Co., Lumber | 4 |  | 146 |  | 150 | \| | 2 | 590 |

## SUMMARIES BY CITIES OR LOCATION

Of the number of the establishments inspected and buildings occupied by them, the number of employes classified as to sex and age, and the number of boilers used and of their horse power, also other power.


SUEMARIES BY CITIES - Continued.


## SUMMARIES BY CITIES－Continued．

|  | Place． |  |  | Employes． |  |  |  | Boilers． |  | 茄 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { 吠 } \\ & \text { 首 } \end{aligned}$ |  |  |  |  |  | $\begin{aligned} & \text { जूँ } \\ & \stackrel{y}{*} \end{aligned}$ |  | 莒 | － |  |
| 10 | Kenosha，Kenosha | 24 | 3812 |  | 650 | 3，478 | 5 | 5 |  |  |
| 107 | Kiel，Manitowoc Co． |  |  | 144 |  | 144 |  | 5 | 295 |  |
| 108 | Kilbourn，Columbia Co． | 5 |  | 14 |  |  |  | $\stackrel{3}{3}$ |  |  |
| 110 110 | Kimball，Iron Co．${ }_{\text {Kimberly，}}$ Outagamie | 1 |  | 45 |  | 45 |  | 2 | ${ }_{725}^{150}$ |  |
|  |  |  |  |  |  |  |  |  |  |  |
| $\begin{aligned} & 111 \\ & 112 \end{aligned}$ | Kingston，Green Lake | ${ }_{2}^{2}$ |  |  |  |  |  | 1 |  |  |
| 11 | Knox Mills，Price |  |  | 15 |  | 15 | 2 | 1 |  |  |
| 114 | La Crosse，La Crosse | 92 | 88.44 | 2，787 | 696 | 3，483 | 130 | 107 | 7，491 | 5 |
| 115 | Lac du Flambeau，Vilas Co． | 1 |  |  |  | 350 |  | 7 |  |  |
| 116 | Ladysmith，Gates Co． | 5 |  | 139 | 2 | 141 | 12 | 3 |  |  |
| 111 | Lake Geneva，Walworth Co． | ${ }^{6}$ |  | 16 | 3 | 19 |  | 6 | 456 |  |
| 118 | Lake Nebagemon，Doug．Co． | 1 | 5. | 230 |  | 230 | 5 | 5 | 600 |  |
| 119 | Lancaster，Grant Co． | 7 |  | 30 |  |  |  | 3 | 280 |  |
| 120 | Le Clair，Douglas Co． | 1 |  | 30 |  |  |  | 3 | 230 |  |
| 121 | Little Chute，Outagamie Co． | 2 |  |  |  | 7 |  |  |  |  |
| 122 | Little Falls，Polk Co．．． | 1 |  |  |  |  |  |  | 25 |  |
| 123 | Madison，Dane Co．．．．．． | 44 | 38.15 | 1，396 | 166 | 1，562 | 29 | 32 |  | 21 |
| 124 | Manchester，Green Lake Co． | 2 |  |  |  |  |  | 1. |  |  |
| 125 | Manitowoc，Manitowoc Co．． | 46 | 134 | 1，433 | 226 | 1，659 | 43 | 65 | 4，806 |  |
| 126 | Marinette，Marinette Co． | 36 |  | 2，086 | 61 | 2，147 | 35 | 92 | 8，233 | 13 |
| 127 | Maringo，Ashland Co． | 1 |  |  |  |  |  | 1 |  |  |
|  | Markesan，Green Lake |  |  |  |  |  |  |  |  |  |
| $\begin{aligned} & 129 \\ & 130 \end{aligned}$ | Marshfield，Wood Co． | 19 | 21 | 445 | 12 | 457 | 52 | 20 | 1，540 |  |
| 131 | Mason，Bayfield Co． | 1 |  | 176 |  | 76 | 3 | 11. | 1，100 |  |
| 132 | Mauston，Juneau Co． |  |  | 21 | ${ }_{2}^{2}$ |  |  |  | 880 |  |
|  | Mayville，Dodge | 12 |  | 55 | 9 | 64 |  |  |  |  |
| 134 135 | Medford，Taylor | 13 | 19 | 233 | 5 | 238 |  | 11. | 642 |  |
|  | Mellen， |  |  | 75 |  | 175 |  |  | 900 |  |
| 136 | Menasha，Winnebago | 13 |  | 1，412 | 36 | 1，548 | 112 | ${ }^{30}$ | 5，530 |  |
| 137 | Menomonie，Dunn | 17 | 23 | 55 | 7 | 761 | 11 | ＇26 | 1，677 |  |
|  | Mercer，Iron |  |  |  |  |  |  |  |  |  |
|  | Meridan，Dunn |  |  |  |  |  |  |  | 20 |  |
| 140 | Merrill，Lincoln Co． | 19 |  | 1，710 | 17 | 1，727 | 108 | 45 | 3，679 |  |
| 141 | Milton，Rock Co． |  | 2. |  |  |  |  |  |  |  |
| $142$ | Milwaukee，Milwaukee | 863 | 258． 577 | 362 | 8，973 | 335 | 3572 | 876 | 0，807 | 43 |
| 143 | Milwaukee Town，Mil． | 2 | 11 2 | 180 |  | 180 |  | ${ }^{6}$ | 750 |  |
|  | Mineral Point，Iowa C | 7 |  | 264 |  | 270 |  | 11 | 819 |  |
| 145 | Minocqua，Vilas Co． | 1 |  |  |  |  |  |  |  |  |
| 146 | Montello，Marquette |  | 10 | 133 |  |  |  |  | 110 |  |
|  | Montreal，Iron | 1 |  | 225 |  | 225 | 4 | 5 | 600 |  |
|  | Morse，Ashland | 1 |  | 61 |  |  |  | 3 | 180 |  |
|  | ash，Bayfield Co． |  |  |  |  | 25 |  | 1 | 50 |  |
| 150 | Neenah，Winnebago |  |  | 346 | 162 | 508 |  | 16 | 1，950 |  |
| 151 | Neillsville，Clark | 2 | $7{ }^{1}$ | 76 |  | 77 | 7 |  | 195 |  |
|  | Nekoosa | $\begin{aligned} & 1 \\ & 4 \end{aligned}$ |  | $\begin{gathered} 376 \mid \\ 20 \mid \end{gathered}$ | $12 \mid$ |  |  |  | 1，35 |  |
| 153 | Neshkora，Marguette | 4 |  | 20 |  | 28 |  |  |  |  |
| 154 | New Holstein，Calumet |  |  | 98 | 20 | 118 |  | 3 | 205 |  |
| 155 | New．Lisbon，Juneau Co．．．．． | 2 |  |  |  |  |  | 1 | 12 |  |
| 156 | New London，Waupaca Co．． | 10 | 12 | 208 | ${ }_{7}^{7}$ | 15 | 10 | 14 | 680 |  |
| $\begin{aligned} & 157 \\ & 158 \end{aligned}$ | New Richmond，St．Cr＇x ${ }^{\text {Co}}$ | 15 | 18 | 164 | 2 |  |  | ${ }^{6}$ | 5 | 1 |
| 159 | Oasis，Waushara co． |  |  |  |  |  |  |  | ${ }_{25}^{12}$ |  |
|  | to，Oconto | 12 | 18 ｜ | 773 ｜ | 28 | 801 | 17 | 30 | 760 |  |

SUMMARIES BY CITIES－Continued．

|  | Place． |  | Build－ ings． $\qquad$ <br> M <br> 号 <br> 茄 | Employes． |  |  |  | Boilers． |  | 䍚 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\stackrel{\text { • }}{\stackrel{\omega}{2}}$ |  | $\begin{gathered} \text { ت⿹\zh26灬 } \\ \text { En } \end{gathered}$ | $\left\|\begin{array}{\|c\|c} \substack{0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0} \\ \hline \end{array}\right\|$ |  | $\begin{aligned} & \dot{\oplus} \dot{\text { ì }} \\ & \stackrel{\text { O}}{0} \end{aligned}$ |  |
| 161 | hland | 2 |  |  | 7 | 4 | 16 |  |  |  |
| 162 | Ogema，Price Co．．．． | 1 |  | 20 |  |  |  |  |  |  |
| 163 | Onalaska，La Crosse Co | ${ }_{9}^{2}$ |  | 25 |  | 29 |  |  |  |  |
| 165 | Oshkosh，Winnebago | 87 | $\begin{array}{rrr}10 & 1 \\ 27\end{array}$ | 62 4,373 | 675 | 5，058 | 330 | ${ }_{94}{ }^{3}$ | ${ }^{125}$ | 36 |
| 166 | Owen，Clark Co． |  |  | 219 | 1 | 220 |  |  |  |  |
| 167 | Oxford，Marquette | 1 |  |  |  |  |  |  |  |  |
| 168 | Packwaukee，Marquett |  |  |  |  |  |  |  |  |  |
| 170 | Park Falls，Pierce |  |  | 208 | 1 | 209 | 4 | 14 | 1，105 |  |
| 170 | Pence，Iron | 1 |  | 80 |  |  |  |  | 200 |  |
| 171 | Peshtigo，Marinette | 5 |  | 165 | 1 | 166 |  |  |  |  |
| ${ }_{172}^{172}$ | Petersburg，Crawford |  |  | 13. |  | 13 |  |  |  |  |
| 174 | ${ }_{\text {Plainfield，}}$ Priceshara |  | 11. | 331 | 1 | 332 | 10 | ${ }_{2}^{23}$ | 2，390 |  |
| 175 | Plattville，Grant Co | 13 |  | 79 | 4 | 83 | 4 | 10 | 561 |  |
| 176 | umbia | 14 | 15 | 104 | 58 |  | 10 | 12 |  |  |
| 1 | Port Wdwards，Wood |  |  | 142 |  |  |  | 6 | 720 |  |
| 8 | Pt．Washington，Ozaukee | 8 | 97. | 821 | 51 | 872 | 39 | 12 | 1，060 |  |
| 179 | Port Wing．Bay field | 3 |  | 110 |  | 110 |  |  | 39 |  |
| 180 | Poysippi，Waushara C | 2 |  |  |  |  |  |  |  |  |
| 181 | Prairie du Chie | 18 |  | 203 | 41 | 244 | 10 | 13 | 588 |  |
| 182 | Pratt Junction，Onei |  |  |  |  | 10 |  | 11 | 42 |  |
|  | Prentice，Price | 9 |  | 109 |  | 9 | 7 | 11 | 672 |  |
| 185 | Princeton，Green Lake |  |  | 3 |  |  |  |  |  |  |
| 185 | Racine，Racine | 92 | 116 | 6，063 | 1，302 | 7，365 | 306 | 98 | 9，442 | 34 |
| 186 | Readstown，Verno | 3 |  | 21 | 38 | 59 |  |  |  |  |
| 187 | Red Cliff，Buffalo |  | $1 . .$. | 110 |  | 110 |  | 15 | 350 |  |
|  | Reedsburg，Sauk Co． | 18 | 24 2 <br> 26 4 | ${ }_{899}^{186}$ | －106 | ${ }_{9}^{292}$ | $\stackrel{4}{4}$ | 15 | \％88 |  |
| $\begin{aligned} & 189 \\ & 190 \end{aligned}$ | Rhinelander，Oneida | 18 | 26 | 899 | 30 | 929 | －33 |  | 2，880 |  |
|  |  |  |  |  |  | 260 |  | 19 | 1，220 |  |
| 191 | Rice Lake，Barron | 12 |  | 290 |  | ， |  | 14 | 1，028 |  |
| 192 | Ripon，Fond du Lac | 12 |  | ${ }^{139}$ | ${ }^{123}$ | 262 | 15 |  |  |  |
| 193 | River Falls，Pierce | 15. |  | 50 | 2 |  |  |  | 119 |  |
|  | Roberts，St．Crox |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| 197 | St．Croix Falls，Polk |  |  | $\begin{aligned} & 14 \\ & 76 \end{aligned}$ | ${ }_{35}^{1}$ |  |  |  | 20 |  |
| 8 | Shawano，Shaw wo Co | 9 |  | 118 | 6 | 124 | － | 5 | 220 |  |
| 199 | Saxon，Iron Co．．． |  |  | 10 |  |  |  | 2 | 200 |  |
| 200 | Saxeville，Waushara Co． | 1 |  |  |  |  |  |  |  |  |
|  | Schlesingerville，Wash．Co |  |  | 36 |  |  |  |  | 98 |  |
| ${ }_{203}^{202}$ | Sheboygan，Sheloygan | 52 | 48.41 | 4，648 | 547 | 5，195 | 252 | 14 | 7，591 |  |
| 203 | Shell Lake，WashJurn Co．．． | 7 |  | 73 | 1 | 74 |  | 14 |  |  |
| 204 | Soldier＇s Grove，Crawf＇d Co． | 4 |  | 41 | 40 | 81 | ${ }^{4}$ |  | 50 |  |
| 205 | Solon Springs，Douglas Co． | 1 |  | 11 |  |  |  |  |  |  |
|  | Somerset，St．Croix |  |  |  |  |  |  |  |  |  |
| 207 | Sparta，Monroe Co． |  | 12 | 284 | 310 | 594 | 14 |  | 105 |  |
|  | Spider Lake，Bayfield Co |  |  |  |  | 75 |  |  |  |  |
| 9 | Spring Valley，Pierce Co | 10 | 13 | 271 | 2 | 273 | 3 | ${ }^{13}$ | 919 |  |
| 0 | Stanley，Chippewa | 7 | 18 | 415 | 5 | 420 |  |  | 1，860 |  |
| 211 | Star Lake，Vilas Co． | 1 |  |  |  | 2a | 1 |  |  |  |
| ${ }_{213}^{212}$ | Star Prairie，St．Croix teuben，Crawford Co |  |  | ${ }_{9}^{11}$ |  |  |  |  | ${ }_{80}^{15}$ |  |
| 214 | Stevens Point，Portage | 27 | 28 ． | 742 |  | 871 | 28 | 35 |  |  |
| 215 | Stoughton，Dane Co．．．．． | 21］ | 34］ 5 | 404 | 38 | 442 | 7 | $6$ | 690 |  |

SUMMARIES BY CITIES - Continued.

|  | Place. |  |  |  | Employes. |  |  |  | Boilers. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | ¢ |  |
| 216 | Sturgeon Bay, Door |  |  |  | 340 |  |  |  |  | 25 |  |
| 217 | Superior, Douglas C | 98 | 125 |  | 4,249 | 165 | 4,414 | 63 | 157 | 15,707 | 48 |
|  | Thorpe, Clark co. |  |  |  |  |  |  |  |  | 442 |  |
| 220 | Tomahawk, Lincoln | 11 | 15 |  | 264 | 4 <br> 6 | 270 |  | 18 | 1,570 |  |
| 221 | Toney, Gates Co. |  |  |  | 102 |  | 102 |  | 5 | 360 |  |
| 222 | Tramway, Dunn Co. |  |  |  | 50 |  | 50 | 3 | 2 | 125 |  |
| 223 | Tripoli, Lincoln Co. | 1 |  | . | 25 |  | 25 |  | 4 | 255 |  |
| 22 | Upson, Iron Co. |  |  |  | 78 |  |  |  | 4 |  |  |
| 225 | Viroqua, Vernon Co. | 12 | 12 |  | 89 | 23 | 212 |  | 5. | 299 |  |
| 226 | Washburn, Bayfield Co. | 14 | 17 |  | 705 | 6 | 1 | 1 | 49 | 3,452 |  |
| 227 | Watertown, Jefferson and Dodge Cos. |  |  |  | 454 | 151 |  | 31 |  |  |  |
| ${ }_{229}^{228}$ | Waukesha, Waukesha Co. |  | 35 |  | 1,031 | 5 |  | 11. |  | 3,718 |  |
| ${ }_{230}^{229}$ | Waupun, Fond du Lac Co. | 144. | ${ }_{34}^{18}$ |  | ${ }_{1}^{1602}$ | ${ }_{42}^{87}$ | 1.254 | 99 | 10 | 356 3789 |  |
| 231 | Wautoma, Waushara Co. | 2 |  |  |  |  |  |  |  |  |  |
| ${ }^{23}$ | Wauwatosa, Milwaukee Co.. | 12 |  |  | 532 | 44 | 576 |  | 24 | 1,780 |  |
| ${ }_{2}^{23}$ | West Allis, Milwaukee Co.. |  |  |  | 170 | 21 | 191 |  |  | 600 |  |
| ${ }_{2}^{234}$ | Westby, Vernon Co. $\ldots$..... |  |  |  | 127 | 104 | 231 |  | 3 | 65 |  |
| 235 | Westfield, Marquette Co. .. | 2 ! |  |  |  |  |  |  |  |  |  |
| 236 | West Salem, I |  |  |  |  |  |  |  |  |  |  |
| 237 | Whitewater, Walworth Co.. | 11 | 12 |  | 70 | 9 | 79 |  |  | 344 |  |
|  | Wild Rose, Waushara |  |  |  | 11 |  | 11 |  |  |  |  |
| 229 | Wilson, St. Croix Co. | 2 | 2 |  | 4 |  |  |  |  | 40 |  |
| 240 | Withie, Clark Co. ..... |  | 3 |  | 16 |  | 16 |  | 2 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| 242 | Woodboro, Oneida | 1 | 4 |  | 146 | 4 | 150 | $\cdots$ | 7 | 590 |  |
|  |  |  |  |  |  |  |  |  |  | 307014 | 1261 |
|  |  |  |  |  |  |  |  |  |  |  | 2 |

## SUMMARIES BY INDUSTRIES．

| $\begin{aligned} & \dot{\Phi} \\ & \text { 合 } \\ & \text { 号 } \end{aligned}$ | Industries． |  | Build－ ings． |  | Employes． |  |  |  | Boilers． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | $\begin{aligned} & \dot{9} \\ & \text { 島 } \end{aligned}$ |  | $\begin{aligned} & \text { 耳⿹\zh26灬 } \\ & \text { Hi } \end{aligned}$ |  | $\begin{aligned} & \text { 送 } \\ & \text { 曾 } \\ & \text { z } \end{aligned}$ | ¢ ¢ B 0 0 |  |
| 1 | Agricultural implements | 32 | 99 | 23 | 3，685 | 12 | 3，697 | 22 | 44 | 3，923 | 10 |
| 2 | Automobiles ．．．．．．．．．．．．． | 5 | 12 | 2 | 491 | 7 | ， 498 | 291 | 11 | 762 | 1 |
| 3 | Baking and confectionery | 21 | 8 | 13 | 791 | 1，055 | 1，846 | 308 | 15 | 945 | 10 |
| 4 | Beef and pork packing ．． | 15 | 34 | 14 | 1，332 | 16 | 1，348 | 38 | 44 | 3，152 | 1 |
| 5 | Bicycles | 23 | 21 | 6 | 559 | ， | 561 | 23 | 5 | 340 | 17 |
| 6 | Boiler works | 29 | 37 | 3 | 849 | 3 | 852 | 22 | 20 | 1，162 | 14 |
| 7 | Book binding | 13 | 8 | 5 | 118 | 151 | 269 | 28 |  |  | 14 |
| 8 | Boots and shoes | 32 | $23 \mid$ | 19 | 1，803 | 1，106 | 2，909 | 234 | 22 | 1，4204 | 17 |
| 9 | Bottling works | 13 | 15 |  | 96 | 42 | 138 | 5 | 7 | 284 | 7 |
| 10 | Boxes，packing | 31 | 36 | 4 | 1，196 | 86 | 1，282 | 173 | 39 | 2，646 | 4 |
| 11 | Boxes，paper and cigar | 17 | 14 | 8 | 468 | 568 | 1，036 | 254 | 15 | 862 | 6 |
| 12 | Brass and copper good | 12 | 24 | 1 | 549 | 3 | 552 | 18 | 11 | 730 | 7 |
| 13 | Breweries | 96 | 195 | 97 | 4，053 | 559 | 4，612 | 280 | 194 | 4，776 | 4 |
| 14 | Brick | 25 | 42 |  | 1，060 | 1 | 1，061 | 32 | 35 | 2，074 | 2 |
| 15 | Brooms and brushes | 19 | 20 | 2 | 162 | 11 | 173 | 18 | 1 |  | 18 |
| 16 | Button factories | 12 | 11 | 1 | 226 | 65 | 291 | 20 | 3 | 220 | 9 |
| 17 | Canning factories | 30 | 52 | 2 | 1，320 | 755 | 2，075 | 242 | 45 | 2，650 | 3 |
| 18 | Chair factories | 15 | 33 | 32 | 3，？52 | 269 | 3，621 | 276 | 41 | 5，180 | 31 |
| 19 | Clothing | 41 | 17 | 27 | 771 | 1，828 | 2，599 | 78 | 8 | 650 | 35 |
| 20 | Coal and wood | 43 | 96 | 3 | 1，564 | 8 | 1，572 | 16 | 60 | 3，910 | 8 |
| 21 | Cooperage | 25 | ¢9 | 3 | 597 | 3 | 600 | 17 | 14 | 799 | 13 |
| 22 | Creameries | 86 | 95 |  | 270 | 25 | 295 | 2 | 88 | 1，814 | 3 |
| 23 | Distilling | 6 | 15 | 3 |  | 1 | 87 |  | 13 | 1，400 | 3 |
| 24 | Dry docks | 11 | 39 |  | 1，649 | 2 | 1，651 | 18 | 33 | 3，770 | 4 |
| 25 | Dyeing and cleaning | 10 | 8 | 2 | 76 | 93 | 169 | ｜ 2 | 8 | 249 | 3 |
| 26 | Elec．light，gas，water power | 141 | 187 |  | 2，977 | 38 | 3，015 | 20 |  | 27，871 | 22 |
| 27 | Flour and feed | 153 | 145 | 104 | 1，634 | 50 | 1，684 | 18 | 114 | 0，660 | 79 |
| 28 | Furniture and upholdstering | 72 | 105 | 35 | 4，514 | 178 | 4，692 | 373 | 99 | 7，865 | $\because 1$ |
| 29 | Furs，gloves and mittens．．．． | 33 | 24 | 17 | 902 | 1，213 | 2，115 | 167 | 11 | 477 | 24 |
| 30 | Glass works | 7 | 10 | 1 | 428 | 1 | 429 | 103 | 3 | 230 | 5 |
| 31 | Grain elevators | 71 | 31 | 63 | 455 | 5 | 460 |  | 55 | 7，172 | 44 |
| 32 | Hats and caps |  | 8 | 6 | 377 | 261 | 638 | 42 | 8 | 520 | 19 |
| 33 | Hardware specialtie | 34 | 48 | 7 | 1，291 | 26 | 1，517 | 81 | 18 | 1，350 | 19 |
| 34 | Interior finishing | 15 | 28 | 4 | 505 | 4 | 509 | 15 | 15 | 703 | 1 |
| 35 | Knit goods | 22 | 16 | 13. | 443 | 2，040 | 2，483 | 515 | 17 | 1，265 | 13 |
| 36 | Laundries | 132 | 116 | 13 | 416 | 1，247 | 1，663 | 16 | 104 | 2，583 | 19 |
| 37 | Leather | 38 | 111 | 50 | 5，589 | 39 | 6，628 | 64 | 136 | 2，234 |  |
| 38 | Lithographing | 12 | 3 | 10 | 480 | 73 | 553 | 42 | 74 | ${ }^{233}$ | ${ }^{8}$ |
| 39 | Lumber | 199 | 397 | 9 | 18，524 |  | 18，613 | 374 |  | 61，861 | 18 |
| 40 | Machine shop and foundry．． | 247 | 503 |  | 14，251 |  | 14，503 | 222 |  | 17，061 | 101 |
| 41 | Malting | 18 | 35 | 49 | 562 | 9 | 571 |  | 4 | 4.080 |  |
| 42 | Malleable iron | 14 | 67 |  | 3，048 | 2 | 3，050 | 24 | 66 | 8，910 | ${ }^{2}$ |
| 43 | Marble and stone quarri | 33 | 19 | 3 | 943 | $\stackrel{2}{2}$ | 1.945 |  | 27 |  | 13 |
| 44 | Mattresses and bedding | 23 | 191 | 15 | 1，318 | 143 | 1，461 | 80 | 20 |  | 1 |
| 45 | Mineral waters | 18 | 21 | － 5 | 310 | 21 | 331 | － 4 | 12 | 340 |  |
| 46 | Mines | 15 |  |  | 1，799 | 1 | 1，800 | 40 | $3{ }^{3}$ | 3，831 |  |
| 47 | Paints and oils | 14 | 16 | 4 | 214 | 30 | 244 | 5 | 15 | 880 |  |
| 48 | Paper and pulp | 46 |  | $2{ }^{2}$ | 4，262 | 905 | 5，167 | $1{ }^{66}$ | 170 | 24，666 |  |
| 49 | Paper goods |  |  | 7 | 122 | 168 | $290$ | 25 | 1 |  |  |
|  | Pattern shop |  |  |  |  |  |  |  |  |  |  |

## SUMMARIES BY INDUSTRIES - Continued.

|  | Industries. |  |  |  | Employes. |  |  |  | Builers, |  | 过 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | ¢ |  |  | 它 | ¢ |  |
| $\begin{aligned} & 51 \\ & 52 \\ & 53 \\ & 54 \\ & 55 \end{aligned}$ | Plumbing and gas fitting | $\begin{array}{r}24 \\ 290 \\ 21 \\ 23 \\ 118 \\ \hline\end{array}$ | $\begin{array}{\|c\|c\|} 4 & 17 \\ 0 & 213 \\ 1 & 65 \\ 18 \\ & 1840 \end{array}$ | $\begin{array}{\|c\|c\|} \hline & 14 \\ \hline & 14 \\ \hline & 2 \\ 8 & 10 \\ \hline & 31 \\ \hline \end{array}$ | $\begin{aligned} & 1,184 \\ & 2,825 \\ & 3,671 \\ & 5886 \\ & 6,772 \end{aligned}$ |  | 1,241 | 36 | 11 | 815 |  |
|  | Printing and publishing |  |  |  |  | 5306092 | 1,245 | 112 | ${ }_{15}^{11}$ | $\begin{array}{r} 810 \\ 4,735 \end{array}$ | 27531919 |
|  | Railway repair shops . |  |  |  |  |  | 3,677 |  |  |  |  |
|  | Sash, doors and blinds |  |  |  |  |  |  | 331 | 88 |  |  |
|  | Sewer pipe and c | - ${ }^{18} 8$ |  |  | $\begin{array}{r} 299 \\ 2,130 \end{array}$ | ${ }^{47}$ |  |  | 9885 |  | 12 |
|  | Sheet metal ... |  | 14 | ${ }_{6}^{11}$ |  | 52563 | 2,655237 |  | 19 | 3,985 |  |
|  | Soda preparations and co... |  |  |  |  |  |  |  |  |  |  |
| 60 | icals Starch factories |  | 28 | 50  <br> 4 8 <br> 3  | ${ }_{3}^{8}$ | 218 | 686 |  | 17. | 1,057 | 16 |
|  |  |  | 111 |  | 1. | 156 | 479 |  |  |  |  |
| 62 | Stoves, furnaces and |  |  |  | 54 |  |  | 3 | 155 |  |  |
|  | fittings ....... | $\begin{aligned} & 16 \\ & 26 \\ & 26 \\ & 24 \\ & 10 \end{aligned}$ | $\begin{array}{l\|l} 25 & 8 \\ 31 & 2 \\ 41 & 2 \\ \hline \end{array}$ |  |  | $\begin{array}{l\|l\|} 8 & 1,2122 \\ 5 & 531 \\ 3 & 1,342 \end{array}$ | $\begin{array}{r} 20 \\ 882 \\ 13 \end{array}$ | $\begin{aligned} & 1,232 \\ & 1,413 \\ & 1,355 \end{aligned}$ | $\begin{array}{r} 6 \\ 26 \\ 1 \end{array}$ | $\begin{array}{r\|r} 8 \\ 2 & \\ 13 & 2, \end{array}$ |  |  |
| 64 | Transportation |  |  |  |  |  |  |  |  |  |  |  |
| 65 | Trunks .. |  | 6 | 18 | -794 | 137 | ${ }_{931}$ | 122 |  | ${ }_{710}$ | 10 |  |
|  | Veneer <br> Wagons and carriages <br> W.nd mills <br> Woodenware <br> Wool and worsted mills | $\left.\begin{array}{r} 7 \\ 140 \\ 6 \\ 25 \\ 18 \end{array} \right\rvert\,$ |  |  |  | $\begin{aligned} & 100 \\ & 29 \end{aligned}$ |  |  | 5 |  |  |  |
| ${ }_{68}^{67}$ |  |  | $\begin{array}{rr}170 & \\ 10 & . \\ 26 \\ 24 & . \\ & .\end{array}$ |  |  |  | 3,561 | 75 31 |  | 3,988 | 65 |  |
| 69 |  |  |  |  |  |  |  | 1 | 5 |  |  |  |
| 70 |  |  |  |  | ${ }_{413}$ | 66 | 1,777 | ${ }_{25}^{160}$ | 28 | 3,025 |  |  |
| 71 | Other industries | 165 | 183 | 134 | 3,568 | 2,288 | 5,856 | 836 | 99 | 13,71 | 6 |  |
|  | Total | 3059 | 4247 | 1144 | 12502 | 1921 | 236 | 6851 | 3597 |  |  |  |

## SUMMARIES BY CITIES OR LOCATION.

The table for the summaries by location shows a variety of facts. In the first place it points out that the establishments included were located in 242 cities and towns. Then it shows for each of these the number of the establishments, the number of buildings occupied by them, the total number of persons employed at the time of the inspection, classified as to males, females, and those under 16 years of age, the number of boilers and their horse power, and the kind of power used by those who did not employ steam.

As said the establishments were distributed among 242 places. Some of these were cities, others again villages, while again others were under neither city nor village but under town government. Some places again, like Milwaukee and other places, are large and may rightly be regarded as industrial and commercial centers, while others are small, being made up of little else than a factory or mill, or those employed therein. The location of factories and mills is influenced by many causes, among which are the supply of raw material and water power. Saw mills, for instance, as well as many other factories, are often located at some convenient points in the neighborhood of their raw material, regardless of whether it is much of a place or not. Many of these plants are only of a temporary character anyway, and simple houses for the shelter of their hands can be cheaply and quickly constructed. The means of transportation is another important element that necessarily enters into the location of almost any business.

The various facts in this table can perhaps be the more readily seen when the totals for all places are taken as the basis for consideration.

The total number of establishments included is 3,059 . Divided equally among the 242 places where located there was thus an average of 12.6 plants to each. This average, however, did not represent even approximately the actual situation. Milwaukee, for instance, included 863 establishments, while many of the places show only one. The former is, of course, the largest center in the state, but there were several places with from

50 to 100 establishments and many others with from 25 to 50 establishments.

The total number of buildings occupied by the establishments included was 5,391 . Of these 4,247 , or 78.79 per cent., were one and two stories in height and 1,144 , or 21.21 per cent., were three stories or more. With 3,059 establishments there was thus an average of 1.76 buildings to each. A fairly complete analysis of the factory buildings for 2,895 of the establishments included here is presented later on in this part.

The total number of persons employed at the time of inspection by the 3,059 establishments included was 144,236 . The proportion of males and females is shown by the following figures:

|  | Number. | Per cent. |
| :---: | :---: | :---: |
| Number of male persons | 125,020 | 86.68 |
| Number of female persons | 19,216 | 13.32 |
| Total | 144,236 | 100.00 |

These figures make the situation plain. The total number was 144,236 . Of these the men constituted 125,020 , or 86.68 per cent., and the women 19,216 , or 13.32 per cent. This relation as between the men and women corresponds closely to that shown elsewhere in this report, especially under "manufacturers' returns."

The figures thus given included persons of all ages. Those under 16 years of age, however, are given separately. Classified according to age on this basis, the following results were obtained :

|  | Number. | Per cent. |
| :---: | :---: | :---: |
| Persons 16 years and over | 137,385 | 95.25 |
| Children under 16 years | 6,851 | 4.75 |
| Total | 144,236 | 100.00 |

According to these figures, those 16 years of age and over numbered 137,385 , while those under 16 years numbereá 6,951 .

Their respective proportionate relation to the total of both is therefore 95.25 and 4.75 per cent.

The federal census of 1900 showed that the total number of persons employed in the manufacturing industries in this state was 142,076 , of whom 5,679 , or 4.00 per cent., were children under 16 years of age. With regard to the proportion under 16 there is thus a close agreement in the two cases.

The total number of boilers used by the 3,059 establishments included was 3,597 . The total horse powers of these boilers was 307,014 , or 85.35 to each. A small proportion of the larger plants and a large proportion of the smaller shops employed other power than steam. As an analysis of the power employed by 2,895 of the above establishments is presented later on, only the total in each case will be given here:

|  | Horse power. | Per cent. |
| :---: | :---: | :---: |
| Steam | 307,014 | 99.59 |
| Llectricity | 235 | . 08 |
| Water | 256 | . 08 |
| Gas | 507 | . 16 |
| Other Power | 263 | . 09 |
| Total | 308,275 | 100.00 |

The power used thus amounted to 308,275 horse power. Of these 307,014 were steam, 235 electricity, 256 water, 507 gas and gasoline, and 263 other forces of various kinds.

With the establishments thus placed at 3,059 , and the power at 308,275 , the average to each establishment was 100.77 horse power.

## CIGAR FACTORIES.

In addition to the establishments included in the table for "Flaces Inspected," the inspectors also visited and inspected 491 cigar factories and over three hundred places where garments of one kind or another were made. The facts about these establishments are not presented in detail, but those for the places where garments were made were analysed in part III of this report, while a few summaries for the cigar factories are given below.

As said above, 491 places where cigars were made were inspected and reported upon. A few of these factories were large, employing a great number of persons, but most of them were small, many with only one or two persons to the shop. The inspections, however, were carefully made. Cigar factories in this state are affected by special laws, many of the provisions of which are very exacting.

The following figures show the number of persons, classified as to sex, who were employed in these 491 factories:


From this is seen that the total number of persons employed was 2,242 , and that of these, 1,822 , or 81.27 per cent., were men and 420 , or 18.73 per cent., wer women. It will be noticed that the percentage of women here is greater than for the factories already analyzed, where they constituted only a little over 13 per cent. of the total. This difference is, of course, readily explained when the nature of the business carried on is considered.

In the following table the persons employed are classified as to age:

|  | Number. | Per cent. |
| :---: | :---: | :---: |
| Under 16 years |  |  |
| Between 16 and 18 years Over 18 years | 169 209 | 7.36 9.32 |
|  | 1,868 | 83.32 |
| total | 2,242 | 100.00 |

Of the whole number employed, 165, or 7.36 per cent, were under 16 years of age, while 209 persons, or 9.32 per cent., were between 16 and 18 years, and 1,868 , or 83.32 per cent were over 18 years, or adult persons. The per cent of children in this case is somewhat greater than that for the factories in the state as a whole.

The following exhibit shows in what part of the buildings the shops were located. A few occupied a whole building, but these were not many in number. The greater proportion occupied a room or two only.


Here is shown in what part of the building the work was carried on. In 10 cases the shop was located in the basement, in 300 cases, or 61.10 per cent of the total, it was on the first floor. The second floors had 157, or 31.97 per cent. of the shops, while only a few shops were located on the third and fourth floors. In all 14 shops occupied either the whole building partly or wholly or more than one floor.

## ANALYSIS OF THE REPORTS OF THE INSPECTION OF 2,895 FÃCTORY ESTABLISHMENTS.

In order to secure further statistical data that might be of some value the reports of 2,895 establishments were compiled in detail. The facts which were thus obtained from this compilation relate to the establishments, buildings, persons employed, how paid, hours of labor, boilers, power, fire escapes, stairways, elevators, signals, emery and polishing wheels, vats, etc., doors, ventilation, seats for women, accidents, etc. These facts for all the establishments included classified as to Milwaukee, the state outside of Milwaukee and the state as a whole, are presented and analyzed in the following pages.

The first exhibit in order in this series relates to the number of establishments included.

NUMBER ESTABLISHMENTS INCLUDED.

| Classification. | Establishments. |  |  |
| :---: | :---: | :---: | :---: |
|  | Idle. | Number | Per cent. |
| Milwaukee Outside of Milwaukee | $\begin{aligned} & 11 \\ & 75 \end{aligned}$ | $\begin{array}{r} 860 \\ 2,035 \end{array}$ | $\begin{aligned} & 29.71 \\ & 70.29 \end{aligned}$ |
| Total | 86 | 2,895 | 100.00 |

In this table is presented the number of the establishments included. In making a brief survey of this table, it will be seen that of the 2,895 establishments included, 860 , or 29.71 per cent. were located in Milwaukee, while the balance. 2,085, or 70.29 per cent., were in the state at large; that 2,809 were in operation at the time of inspection, while 86 were idle; only 11 of the idle ones were found in Milwaukee.

NUMBER OF BUILDINGS INSPECTED AND AVERAGE BUILDINGS TO EACH ESTABLISHMENT.


The information obtained from the above table shows that in all 5,027 building's were inspected. Of these, 1,807 were found within the metropolis of the state and 3,220 outside of it. In other words, 35.95 per cent of the buildings were in Milwaukee.

The average number of buildings to each establishment was found to be greater in Milwaukee than in the state at large, or 2.10 as against 1.58 for the state outside. The average number of buildings to each establishment, taking the state as a whole, was 1.74.

As has been seen, 5,027 buildings were inspected in detail. Of these 85 are placed in a miscellaneous class. The buildings not in this class have been classified not only according to the material of which constructed, but also according to height.

The result of this classification is presented in the following exhibits:
nUMBer of wooden buildings.

| Classification. | Milwaukee. |  | Outside Milwaukee. |  | Total. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ivo. | Pr.ct. | No. | Pret. | No. | Pr.ct. |
| One story | 394 | 56.78 | 857 | 47.96 | 1,251 | 50.42 |
| Two stories | 2011 | 36.17 | 768 | 42.98 | 1,019 | 41.07 |
| Three stories | 41 | 5.91 | 129 | 7.22 | 170 | 6.85 |
| Four stories | 3 | . 43 | 27 | 1.51 | 30 | 1.21 |
| Five stories | 3 | . 43 | 6 | . 33 | 9 | . 37 |
| Six stories | 1 | . 14 |  |  | 1 | . 04 |
| Seven stories | 1 | . 14 |  |  | 1 | . 04 |
| Total | 694 | 100.00 | 1,787 | 100.00 | 2,481 | 100.00 |

NUMBER BRICK BUILDINGS.

| Classification. | Milwaukee. |  | Outside <br> Milwaukee. |  | Total. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Pr. ct. | No. | Pr. ct. | No. | Pr ct. |
| One story | 264 | 25.91 | 393 | 34.47 | 657 | 30.43 |
| Two stories | 255 | 25.02 | 460 | 40.35 | 715 | 33.12 |
| Three stories | 186 | 18.25 | 201 | 17.63 | 387 | 17.92 |
| Four stories | 147 | 14.43 | 65 | 5.70 | 212 | 9.82 |
| Five stories | 83 | 8.15 | 16 | 1.41 | 99 | 4.59 |
| Six stories | 38 | 3.73 | 4 | . 35 | 42 | 1.94 |
| Seven stories | 38 | 3.73 |  |  | 38 | 1.76 |
| Light stories | 5 | .49 | 1 | . 09 | 6 | . 28 |
| Nine stories . | 3 | . 29 |  |  | 3 | . 14 |
| Total | 1,019 | 100.00 | 1,140 | 100.00 | 2,159 | 100.00 |

NUMBER IRON AND iSTEEL BUILDINGS.

| Classification. | Milwaukee. |  | Outside <br> Milwaukee |  | Total. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Per ct. | No. | Per ct. | No. | Per ct. |
|  |  |  |  |  |  |  |
| One story | 33 | 42.31 | ${ }_{44} 5$ | 41.99 | 88 | 42.11 |
| Three stories | 4 | $\stackrel{1}{5.13}$ | 19 | 14.50 | 23 | 11.00 |
| Four stories | 7 | 8.97 | 5 | 3.82 | 12 | 5.74 |
| Five stories | 7 | 8.97 | 2 | 1.53 | 9 | 4.31 |
| Six stories | 2 | 2.57 | 4 | 3.05 | 6 | 2.87 |
| Seven stories | 7 | 8.97 | 1 | . 76 | 8 | 3.83 |
| Eight stories . | 1 | 1.28 | 1 | . 76 | 2 | . 96 |
| Total | 78 | 100.00 | 131 | 100.00 . | 209 | 100.00 |

NUMBER STONE BUILDINGS INSPECTED.

| Classification | Milwaukee. |  | Outside Milwaukee. |  | Total. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No | Perct | No. | Per ct. | No. | Per ct. |
| One story | 2 | 100.00 | 36 | 39.56 | 38 |  |
| Two stories |  |  | ${ }_{33}$ | ${ }_{36.23}^{39.56}$ | $\stackrel{38}{38}$ | ${ }_{35.48}^{40}$ |
| Three stories |  |  | 19 | 20.88 | 19 | 20.43 |
| Four stories |  |  | 3 | 3.30 | 3 | 3.23 |
| Total | 2 | 100.00 | 91 | 100.00 | 93 | 100.00 |

In the four preceding tables is shown in order for Milwaukee, outside of Milwaukee, and the state, the respective number of buildings, together with their height, that were constructed of wood, brick, iron and stone.

The first in order of the four tables gives the wooden buildings. It shows a total of 2,481 such buildings, of which 694 were located in Milwaukee and 1,787 outside of that city.

In this table the wooden structures are also classified as to height. Thus for the state, as a whole, it is seen that 1,251 , or 50.42 per cent of the total, were one story structures; that 1,019 , or 41.07 per cent of the whole, were two story structures; that 170 were three stories; that 30 were four stories, 9 five stories, and 1 six and seven stories, respectively. These facts, as said, are for the state. Similar classifications for Milwaukee and the state outside of Milwaukee are also given in the table, thus enabling many comparisons on this point to those who may desire to make them.

The second in order of the preceding four tables relate to the brick buildings. For the state these structures number 2,159, of which 1,019 were in Milwaukee and 1,140 outside of that city. These facts may be seen from the footings of the table. The table further shows, with regard to the height of these structures, that 657 , or 30.43 per cent of the total, were one story high; that 715 , or 33.12 per cent of the total, were two stories in height; that 387 , or 17.92 per cent of the total were three stories high ; and that 212 , or nearly 10 per cent, were four story buildings. The remaining buildings run from 5 up to 9 stories, but they constitute a comparatively small proportion of the whole. The table also gives similar comparisons for Milwaukee and the state outside,

The iron structures are shown in the third of the four tables. This shows a total of 209 such buildings. Of these 78 are in Milwaukee and 131 outside of it. Taking the state as a whole and comparing these buildings as to height, and it is found that the greater proportion are only one story structures. In fact, this class includes 42.11 per cent of the total. The two story structures have less than one-third of the total in its class, while 11.00 per cent only were three story buildings. The other classes include only a few buildings each. The relation for Milwaukee and the state outside of it, when considered separately, show a proporton in each class that does not vary greatly from the figures given here.

Stone buildings-by this is meant buildings constructed of granite or any other stone outside of bricks-were scarce. They were even fewer in number than those erected of iron, etc. Evidently stone is not a favorite material for factory structures. The last table of the foregoing four shows that only 93 factory buildings in the whole state were of stone. Of these 2 were in Milwaukee and 91 outside.

In height these buildings varied from one to four stories. The one story class for the state includes 38 buildings, the two story 33 , the three story 19 , and the four story 3 buildings.

The following is a sort of a summary of the buildings thus presented in the four preceding tables:

TOTAL NUMBER OF BUILDINGS.

| Classification. | Milwaukee. |  | Outside Milwaukee. |  | Total. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Per ct. | No. | Perct. | No. | Per ct. |
| One story | 693 | 38.65 | 1,341 | 42.59 | 2,034 | 41.16 |
| Two stories | 523 | 29.17 | 1,305 | 41.44 | 1,828 | 36.99 |
| Three stories | 231 | 12.88 | 368 | 11.69 | 599 | 12.12 |
| Four stories . | 157 | 8.76 | 100 | 3.18 | 257 | $\stackrel{5.20}{ }$ |
| Five stories | 93 | 5.19 29 | 24 | . 76 | 119 | 2.37 .99 |
| Six stories | 41 | ${ }_{2}^{2.29}$ | 1 |  | 47 | .95 |
|  | 46 6 | 2.56 .33 | 12 | . .06 | 8 | . 16 |
| Nine stories | 3 | . 17 |  |  | 3 | . 06 |
| Total | 1,793 | 100.00 | 3,149 | 100.00 | 49.42 | 100.00 |

$\Lambda$ s will be seen by reference to the above table, there were in all 4,942 buildings inspected. Of these, 1,793 were in Mil-
waukee. In point of number the one story structures stand at the head of the list, with the two story buildings a close second. The aggregate number of one story buildings is 2,034 , or 41.16 per cent of the total. Of these 693 were found in Milwaukee, while 1,341 were distributed throughout the state. The two story structures number 1,828 , or 36.99 per cent of the total. The total number of buildings three stories and over numbered 1,080, with a combined percentage of 21.85 per cent.

The buildings presented in the above five tables do not constitute all the buildings inspected or used by the 2,895 establishments. To these we must add a table of miscellaneous structures, which could not very well be classified with the above.

TOTAL NUMBER MISCELLANEOUS STRUCTURES.


The miscellaneous structures number 85 . Of these 59 , or 69.42 per cent, are used as elevators, while the remaining 26 buildings are used for various other purposes.

By adding the 85 constituting the total number under this head, to the 4,942 buildings given in the foregoing tables, we arrive at the total 5,027 , which is the sum total of buldings inspected.

CLASSIFICATION AS TO KIND OF BUILDINGS.

| Classification. | Milwaukee. |  | Outside. Milwaukee. |  | Total. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Perct. | No. | Perct. | No. | Perct. |
| Frame, wood | 694 | 38.71 | 1,787 | 56.75 | 2,481 | 50.20 |
| Brick ... | 1,019 | 56.83 | 1,140 | 36.20 | 2,159 | 43.69 |
| Stone | 78 2 | 4.35 | 131. | 4.16 | 209 | 4.23 |
| Ntone | 2 | . 11 | 91 | 2.89 | 93 | 1.88 |
| Total | 1,793 | 100.00 | 3,149 | 100.00 | 4,942 | 100.00 |

The above table shows for Milwaukee, the state outside, and for the state as a whole the total number of buildings, together with the proportion of each kind when the buildings are classified according to the material of which they were constructed. In this classification the 85 miscellaneous buildings were not included.

The total buildings for the state were 4,942. Of these 2,481, or 50.20 per cent, were constructed of wood, 2,159 , or 43.69 per cent, of brick, 209 , or 4.23 per cent, of iron, and 93 , or 1.88 per cent, of wood.

Between Milwaukee and the state at large the relations differ somewhat from those given. In the former place the wooden structures made up 38.71 per cent of the total, and in the state outside, 56.75 per cent of the total. The brick structures again constituted 56.85 per cent of the buildings in Milwaukee and 36.20 per cent of those outside. The iron and stone structures were not very numerous in any part of the state.

RESPECTIVE PROPORTION OF THE DIFFERENT KINDS OF BUILDINGS in milwaukee and state outside.

| Classification. | Number of Buildings. |  |  | Per Cent. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Milw'kee | Outside. | Stats. | Milw'kee | Outside. | State. |
| Frame or wood | 694 | 1,787 | 2,481 | 27.97 | 72.03 | 100.00 |
| Brick ............ | 1,019 | 1,140 | 2,159 | 47.19 | 52.81 | 100.00 |
| Iron | 78 | 131 | 209 | 37.32 | 62.68 | 100.60 |
| Stone | 2 | 91 | 93 | 2.15 | 97.85 | 100.00 |
| Total | 1,793 | 3,149 | 4,942 | 36.28 | 63.72 | 100.00 |

Here are found the respective shares of Milwaukee and the rest of the state in the different kinds of buildings included. Of the wooden buldings Milwaukee had 27.97 per cent, of the brick 47.19 per cent, of the iron 37.32 per cent, of the stone buildings 2.15 per cent, while of the total buildings included Milwaukee had 36.28 per cent.

RESPECTIVE PROPORTION OF THE BUILDINGS IN MILWAUKEE AND OUTSIDE OF THAT CITY WHEN' CLASSIFIED AS TO HEIGHT.

| Classification. | Number. |  |  | Per Cent. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Milw'kee | Outside. | Total. | Milw'kee | Out:ile | Total. |
| One story | 693 | 1,341 | 2,304 | 34.02 | 65.98 | 100.00 |
| Two stories | 523 | 1,305 | 1,828 | 28.61 | 71.39 | 100.00 |
| Three stories | 231 | 368 | 599 | 38.56 | 61.44 | 100.00 |
| Four stories | 157 | 100 | 257 | 61.69 | 38.91 | 100.00 |
| Five stories | 93 | 24 | 117 | 79.49 | 20.50 | 100.00 |
| Six stories | 41 | 8 | 49 | 83.67 | 16.33 | 100.00 |
| Seven stories | 46 | 1 | 47 | 97.87 | 2.13 | 100.00 |
| Eight stories | 6 | , | 8 | 75.00 | 25.00 | 100.00 |
| Nine stories | 3 |  | 3 | 100.00 |  | 100.00 |
| Total | 1,793 | 3,149 | 4,942 | 36.28 | 63.72 | 100.00 |

This table is a comparison between Milwaukee and the rest of the state. It shows how the two compare with reference to the height of buildings. Of the one and two story structures Milwaukee had proportionally less than what would seem to be its share, this from the fact that it had over 36 per cent of the total buildings included. Of all the other classes of buildings, even the three story ones, Milwaukee evidently had more than its share. The reason why the buildings are relatively higher in Milwaukee than in the state at large is probably due to the higher price of land in that city.

NUMBER PERSONS EMPLOYED.

| Classification. | Male. |  | Female. |  | Total. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number. | Per cent. | Number. | Per cent | Number | Per cent. |
| Milwaukee | 48,276 | 40.61 | 8,959 | 47.19 | 57,235 | 41.52 |
| Outside of Milwaukee | 70,611 | 59.39 | 10,022 | 52.81 | 80,633 | 58.48 |
| Total | 118,887 | 100.00 | 18,981 | 100.00 | 137,868 | 100.00 |

The preceding table deals with the number of persons employed in the establishments included. The total persons for all establishments is 137,868 , and of these 118,887 were men and 18,981 were women.

Of the total number of men employed Milwaukee shows 48,276 , or 40.61 per cent, and the state outside 18,981 persons,
of the women Milwaukee had 8,959 , or 47.19 per cent, and the rest of the state 10,022 , or 52.81 per cent.

Of the total number of persons, when both sexes are included, Milwaukee shows 57,235 persons, or 41.52 per cent, and the rest of the state 80,633 persons, or 58.48 per cent of the total.

In the following exhibit the persons employed in Milwaukee and outside, as well as for the state as a whole, are classified as to sex:

CLASSIFICATION AS TO SEX.

| Classification. | Number. |  |  | Per Cent. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female. | Total. | Male | Female. | Total. |
| MilwaukeeOutside of | 48,276 | 8,959 | 57,235 | 84.37 | 15.63 | 100.00 |
|  | 70,611 | 10,022 | 80,633 | 87.57 | 12.43 | 100.00 |
| Total | 118,887 | 18,981 | 137,868 | 86.23 | 13.77 | 100.00 |

NUMBER OF CHILDREN.

| Classification. | Between 14-16Years. |  | Affidavits. |  | Under 14 Yrs. |  | Permits. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Pr. ct. | No. | Pr, ct. | No. | Pr. ct. | No. | Pr.ct. |
| Milwaukee ${ }_{\text {Outside }}$ Milwaukee | 3,396 2,570 | 56.92 43.08 | 2,768 1,748 | 61.29 38.71 | 167 353 | 32.12 67.88 | 128 259 | 33.07 66.93 |
| Outside Milwaukee | 2,570 | 43.08 | 1,748 | 38.71 | 353 |  | 259 |  |
| Total | 5,966 | 100.00 | 4,516 | 100.00 | 520 | 100.00 | 387 | 100.00 |

During the past year the inspectors found 6,486 children under the age of 16 employed in the factories throughout the state. Of this total, 5,966 were between 14 and 16 , and 3,396 , or 56.92 per cent of these, were found in Milwaukee. Those having affidavits numbered 2,768 . Of the 520 under 14, 167, or only 32.12 per cent, were in Milwaukee, and 128 of these had the required permit.

In comparing this year's report with that of previous years, it is conclusively shown that through rigid enforcement of the child labor laws, the employment of children has ceased to increase at such a rapid rate. Instead, children have been taken out of the factories and workshops and placed in the schools of the state.

The table also shows that those between, 14 and 16 years of age numbered 5,966 , of whom 3,396 , or 56.92 per cent, were in Milwaukee, and 2,570 , or 43.08 per cent, were in the state outside. From a comparisn between these figures and those for the state as a whole, it will be found that the proportion of children to the whole number employed was considerably greater for Milwaukee than for the state outside.

The next space in the table relates to affidavits as to age. It shows that of the 5,966 children between 14 and 16 years, 4,516 , or 5.7 had the affidavits as provided by law. Of those who thus had affidavits 2,768 , or 61.29 per cent, were in Milwraukee, and 1,748 , or 38.71 per cent, outside. As only 4,516 out of the 5,966 had affidavits, and as such affidavits are required by law it necessarily follows that 1,450 children in this class alone were employed in violation of the factory laws.

The table further shows 520 children under 14 years of age of whom 167, or 32.12 per cent, were for Milwaukee and 353 , or 67.88 per cent, were for the state outside. Of the whole number only 387 , or 74.4 per cent, had the requisite permit, leaving 133, or 25.6 per cent, who were employed in violation of the law.

At one inspection of the factories in the state it was thus found that 1,450 children between 14 and 16 years and 133 under 14 years of age were illegally employed. At each of the subsequent inspections many violations of this kind were also met with, which all goes to show how readily the child labor laws are violated.

The following four tables relate to monthly and weekly payment of wages, and to whether wages were paid in cash or checks.
NUMBER OF ESTABLISHMENTS PAYING WAGES WEEKLY, MONTHLY, ETC.

| Classification. | Milivaukee. |  | Outside <br> Milwaukee. |  | Total. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Per cent. | Number. | Per cent. | Number. | Per cent. |
| Weekly ... | 535 | 62.21 | 999 | 49.09 | 1,534 | 52.99 |
| Semi-monthly | 175 | 20.35 | 268 | 13.16 | 443 | 15.30 |
| Monthly ..... | 49 | 5.70 | 645 | - 31.70 | 694 | 23.97 |
| Not reporting | 101 | 11.74 | 123 | 6.05 | 224 | 7.74 |
| Total ......... | 860 | 100.00 | 2,035 | 100.00 | 2,895 | 100.00 |

NUMBER OF PERSONS RECEIVING THEIR WAGES WEEKLY, MONTHLY, ETC.

| Classification. | Milwaukee. |  | Outside <br> Milwaukee. |  | Total. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number. | Per cent. | Number. | Per cent | Number. | Per cent. |
| Weekly | 27,492 | 48.03 | 22,128 | 27.44 | 49,620 | 35.99 |
| Semi-monthly | 19,320 | 33.76 | 24,366 | 30.21 | 43,686 | 31.69 |
| Monthly | 5,460 | 9.54 | 30,780 | 38.18 | 36,240 | 26.28 |
| Not reporting | 4,963 | 8.67 | 3,359 | 4.17 | 8,322 | 6.04 |
| Total | 57,235 | 100.00 | 80,633 | 100.00 | 137,868 | 100.00 |

NUMBER AND PER CENT. OF ESTABLISHMENTS REPORTING AS TO WHETHER THEY PAID WAGES IN CASH OR CHECKS.

| Classification. | Milwaukee. |  | Outside <br> Milwaukee. |  | Total. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number. | Per cent. | Number. | Per cent. | Number. | Per cent. |
| Cash | 624 | 72.56 | 1,410 | 69.29 | 2,034 | 70.26 |
| Checks | 134 | 15.58 | 183 | 23.73 | 617 | 21.31 |
| Both | 1 | . 12 | 11 | . 54 | 12 | . 42 |
| Not reporting | 101 | 11.74 | 131 | 6.44 | 232 | 8.01 |
| Total | 860 | 100.00 | 2,035 | 100.00 | 2,895 | 100.00 |

NUMBER AND PER CENT. OF THE PERSONS WHO WERE REPURTED UPON AS TO WHETHER THEY WERE PAID IN CASH OR CHECKS.

| Classification. | Milwaukee. |  | Outside <br> Milwaukee. |  | Total. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number. | Per cent. | Number. | Per cent. | Number | Per cent |
| Cash | 36,994 | 64.64 | 47,210 | 58.55 | 84,204 | 61:08 |
| Checks | 15,248 | 26.64 | 28,700 | 35.59 | 43,948 | 31.87 |
| Both | 30 | . 05 | 306 | . 38 | 336 | . 25 |
| Not reporting | 4,963 | 8.67 | 4,417 | 5.48 | 9,380 | 6.80 |
| Total | 57,235 | 100.00 | 80,633 | 100.00 | 137,868 | 100.00 |

Of the four preceding tables the first in order shows the respective number of establishments in Milwaukee, outside of Milwaukee, and for the state as a whole, that paid the wages weekly and monthly, etc.

Taking the state as a whole it is found that of the 2,895 es-
tablishments included, 1,534, or 52.99 per cent., paid their employes their wages weekly; that 443 establishments, or 15.30 per cent, paid semi-monthly; that 694 establishments, or 23.97 per cent, paid monthly, and that 224 establishments did not report regarding this matter.

In considering Milwaukee and the rest of the state separately, some interesting facts may be noticed. In the former place a much greater proportion of the plants paid their hands weekly and semi-monthly. The figures on these points show that for Milwaukee, 62.21 and 20.35 per cent of the establishments paid weekly and semi-monthly, respectively, while for the rest of the state the corresponding relations were 49.09 and 13.16 per cent. When it comes to those paying monthly, on the other hand, Milwaukee falls behïnd, with only 5.70 per cent of its plants in this class, as against 31.70 per cent for the state at large outside of Milwaukee.

The second in order of the four preceding tables shows the respective number of the employes who received their wages weekly, semi-monthly, and monthly. In this case also these facts are shown for Milwaukee, the state outside of that city, and the state as a whole.

In this case also the figures for the state as a whole will be considered first. Of the total, or 137,868 persons included, 49,620 , being 35.99 per cent of the former, were paid weekly, while 43,686 persons, or 31.69 per cent of these, were paid semimonthly, and 36,240 , or 26.28 per cent, were paid monthly. Those for whom the pay day was not reported numbered 8,322 , or 6.04 per cent of the total. From these figures it thus appears that 36 per cent of the factory employes in this state are paid off weekly, and that nearly 32 per cent are paid off twice a month, while only a little over one-fourth have to go a whole month between pay days.

In comparing Milwaukee and the rest of the state, the following results appear: In Milwaukee 48.03 per cent of the factory hands were paid weekly, 33.76 per cent semi-monthly, and 9.54 per cent monthly. In the state outside of Milwaukee 27.44 per cent were paid weekly, 30.21 per cent semi-monthly, and 38.18
per cent monthly. These figures certainly place Milawukee in a very favorable light.

The third table relates to the establishments that paid the wages in cash and checks, respectively. Of the 2,895 establishments included for the state as a whole, 2,034 , or 70.26 per cent, paid the wages in cash, while 617 , or 21.31 per cent paid in checks, and 12 , or .42 per cent, paid in both ways as things happened to come.

In Milwaukee 72.56 per cent of the establishments paid in cash and 15.58 per cent in checks. Outside of that city 69.29 per cent paid cash and 23.73 per cent in checks. Cash payments are undoubtedly the mostly desirable from the employe's point of view. From the employers standpoint there would seem to be little or no choice between the two methods.

In the last of the four preceding tables is shown the number* and proportion of the employes who were paid in cash and checks. As shown before, 137,868 persons are included for the state. Of these 84,204 , being 61.08 per cent of the total, were paid in cash, 43,948 , or 31.87 per cent in checks, 336 persons, or .25 per cent both ways, while for 9,380 persons no reports were made. Those paid in cash thus numbered nearly twice as many as those paid in checks.

In Milwaukee 64.64 per cent were paid in cash and 26.64 per cent of the total were paid in checks. In the state outside, this relation stood 58.55 and 35.59 per cent, respectively.

Milwauke thus leads the rest of the state, not only in weekly payment, but in cash payment of wages.

CLASSIFICATION OF THE HOURS OF LABOR DAILY AND THE, NUMBER OF ESTABLISHMENTS IN EACH CLASS.

| Classification. | Milwaukee. |  | Outside Milwaukee. |  | Total. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number. | Per cent. | Number. | Per cent. | Number. | Per cent. |
| 8hours or less | 65 | 7.56 | 39 | 1.92 | 104 | 3.59 |
| 9 hours | 160 | 18.60 | 80 | 3.93 | 240 | 8.29 |
| $91 / 2$ hours | 18 | 2.09 | $1{ }^{1} 7$ | . 34 | 25 | . 86 |
| 10 hours .. | 580 | 67.44 | 1,638 | 80.43 | 2,218 | 76.62 |
| 11 hours' | 4 | . 47 | 56 | 2.75 | ${ }^{60}$ | 2.07 |
| 12 hours and over | 25 | 2.91 | 143 | 7.03 | 168 80 | 5.80 2.77 |
| Irregular ....... | 8 | . 93 | 72 | 3.54 | 80 | 2.77 |
| Total | 860 | 100.00 II | 2,085 | 100.00 | 2,895 | 100.00 |

Here the establishments are classified according to their hours of labor daily. Those, for instance, who run their factories eight hours per day are combined in one class, and those who run nine hours in another, and so on. The classifications on this basis run from eight hours or less to nine, nine and onehalf, ten, eleven and twelve hours per day and over.

Those running eight hours per day are not as yet very numerous. At the time of this inspection they only constituted 104, or 3.59 per cent of the total number. The nine hour class was about twice as large, including 240 establishments, or 8.29 per cent of the total. The nine and one-half hour class had only 25 establishments, but the ten hour one had 2,218 , or 76.62 per cent of the total. In the eleven hour class 60 establishments were discovered and in the twelve hour and over, 168, or 5.80 per cent of the total, were found. The proportion in the last two cases is comparatively small. Considering everything, however, it is big enough. The tendency, as well as a good part of the industrial struggle of today, is for shorter working hours, and it is almost surprising that as many as the number given should have been able to resist this pressure up to the present time.

The shortest hours were found for those located in Milwaukee. This is natural as manufacturing always reaches its most advanced point in industrial centers. In Milwaukee only 4.31 per cent of the establishments had a working day of over 10 hours, while for the state the working hours exceeded 10 in 13.32 per cent of the plants. The greatest number of the plants in both cases had a 10 hour working day, and this can perhaps be regarded as the standard for this state.

CL_-~NFICATION OF THE HOURS OF LABOR DAILY AND THE NUMBER PERSONS IN EACH CLASS.

| Classification. | Milwaukee. |  | Outside Milwadkee. |  | Total. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number. | Per cent. | Number. | Per cent. | Number. | Per cent. |
| 8 hours or less | 4,271 | 7.46 | 377 | . 47 | 4,648 | 3.37 |
| ${ }_{911}^{9}$ hours hours ...... | ${ }_{1}^{6,629}$ |  | 1,941 | 2.41 |  | 6.22 |
| 10 hours ... | 39,517 | 69.04 | 68,230 | 84.62 | 177,747 | 78.15 |
| 11 hours. | 224 | . 39 | 3,336 | 4.14 | 3,560 | 2.58 |
| 12 hours and over | 5,484 | 9.58 | 5,369 | ${ }^{6.66}$ | 10,853 | 7.87 |
| Irregular hours | 77 | . 14 | 1,310 | 1.62 | 1,387 | 1.01 |
| Total | 57,235 | 100.00 | 80,633 | 100.00 | 137,868 | 100.00 |

Th daily hours of labor for those who are employed in the factories in this state are well shown in the preceding table. This table resembles closely the one which precedes it. The classifications are the same. It covers the şame field. In fact the two tables differ only in this, that the former was devoted to the establishments or employers, while the latter deals with the employes.

The eight hour class included 4,271 persons, or 7.46 per cent of the total for Milwaukee, and 377 persons, or .47 per cent of the total for the state outside, while for the state as a whole it included 4,648 persons, or 3.37 per cent of the total.

The nine hour class included 8,570 persons, for the state as a whole, or 6.22 per cent of the total. For Milwaukee and the rest of the proportion in this class was 11.58 and 2.41 per cent, respectively.

The nine and one-half hour class has $a^{\prime}$ small number of persens only. For the state as a whole they constitute less than one per cent of the total.

The ten hour class was the heaviest. For Milwaukee it included 39,517 persons, or 69.04 per cent of the total; for the state outside it had 68,230 persons, or 84.62 per cent of the total; and for the state as a whole, 107,747 persons, or 78.15 per cent of the total.

The eleven hour class was small. It had a little over onethird of one per cent of the persons in Milwaukee, and 4.14 per cent of those outside, while for the state as a whole the figure was 2.58 per cent.

The twelve hour and over class was larger. In fact it had nearly 8 per cent of the persons for the state as a whole, and 9.58 per cent of those in Milwaukee and 6.66 per cent for the state outside.

Those working irregular hours amounted to only about 1 per cent of the total for the state.

The facts shown in the above two tables are important and deserve close attention.

TOTAL NUMBER OF BOILERS, NUMBER IN'SURED, NUMBER INSPECTED THOUGII NUT INSURED, AND NUMBER NOT INSPECTED.

| Classification. | Milwaukee. |  | Outside <br> Milwaukee. |  | Total. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number. | Per cent. | Number. | Per cent. | Number. | Per cent. |
| Insured ............ | 643 | 73.40 | 1,528 | 61.76 | 2,171 |  |
| Other boilers inspect | 19 | 2.17 | - 229 | 9.26 | , 248 | 7.40 |
| Not inspected | 214 | 24.43 | 717 | 28,98 | 931 | 27.79 |
| Total | 876 | 100.00 | 2,474 | 100.00 | 3,350 | 100.00 |

In the above table for the state as a whole, it is seen that the establishments included made use of 3,350 steam boilers. Of these boilers 2,171 , or 64.81 per cent of the total, were insured in some insurance company. As the insurance companies usually make it a practice to regularly inspect the boilers on which insurance is carried, it can perhaps be taken for granted that the boilers in this case were under more or less strict supervision of inspectors. In addition to this, 248 boilers, or 7.40 per cent of the total, were inspected now and then by the direction of the proprietors. This left 931 boilers, or 27.79 per cent, that were not inspected or under any other supervision than that of the fireman or engineer in charge.

As between Milwaukee and the state outside the former had a larger proportion of insured boilers and a slightly smaller proportion of those that were not inspected at all.

Of the 3,350 boilers for the state, 876 , or 26.15 per cent, were in Milwaukee, and 2,474, or 73.85 per cent, outside in the state.

BOILERS INSPECTED AND NOT INSPECTED.

| Classification. | Milwaukee. |  | Outside Milwaukee. |  | Total. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number. | Per cent. | Number. | Per cent. | Number. | Per cent. |
| Inspected ...... <br> Not inspected | 662 214 | 75.57 24.43 | 1,757 | 71.02 28.98 | 2,419 | 72.21 27.79 |
| Total | 876 | 100.00 | 2,474 | 100.00 | 3,350 | 100.00 |

The respective number of boilers that thus received some attention in the way of inspection, and those that did not; are shown in the above table. Of the total for the state, 2,419 , or 72.21 per cent, were inspected and 931 , or 27.79 per cent, were not inspected. As was pointed out above, Milwaukee leads the rest of the state in the proportion of the boilers inspected.

HORSE POWER.

| Classification. | Number boilers. | Average puwer to each boiler | Horse Power. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Number. | Per cent. |
| Milwaukee | 876 | 110.5 | 96,837 | ${ }_{67} 32.27$ |
| Outside of Milwaukee | 2,474 | 82.1 | 203,266 | 67.73 |
| Total | 3,350 | 89.6 | 300,103 | 100.00 |

This table shows that the total horse power of all the boilers in the state was 300,103 , of which 96,837 , or 32.27 per cent, was for the 876 boilers in Milwaukee, and 203,266 horse power, or 67.73 per cent, were for the 2,474 boilers located in factories outside of Milwaukee. The average number of horse power to each boiler was 110.5 in Milwaukee, 82.1 outside and 89.6 for the state as a whole.

NUMBER OF ESTABLISHMEN'S USING STEAM FOR POWER, AVERAGE NUMBER OF BOILERS AND HORSE POWER TO EACH ESTABLISH. MEN'T.

| Classification. | Number of establishments using steam power. | Average number of boilers to each establishment. | Averáge number of horse power to each establishment. |
| :---: | :---: | :---: | :---: |
| Milwaukee Outside of Milwaukee | 489 $-\quad 1,269$ | 1.79 1.95 | $\begin{aligned} & 198 \\ & 160 \end{aligned}$ |
| Total | 1,758 | 1.91 | 171 |

The establishments using steam power, as is seen in above table numbered 1,758 , of which 489 , or 27.24 per cent, were in Milwaukee, and 1,269 , or 72.76 per cent outside.

The average number of boilers and horse power to each establishment was 1.79 and 198, respectively, for Milwaukee, and
1.95 and 160 , respectively, for the state outside, while for the state as a whole the numbers were 1.91 and 171, respectively.

NUMBER OF PERSONS EMPLOYED IN PLACES WHERE THE BOILERS WERE INSPECTED AND WHERE THEY WERE NOT INSPECTED, IEESPECTIVELY.

| Classification. | Milwaukee. |  | Outside <br> Milwaukee. |  | Total. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number. | Per cent | Number. | Per cent. | Number. | Per cent. |
| No. employed where inspected | 42,141 | 87.06 | 59,994 | 83.77 | 102,135 | 85.10 |
| No. employed where not inspected ................ | 6,265 | 12.94 | 11,620 | 16.23 | ${ }^{\text {¢ }} 17,885$ | 14.90 |
| Total | 48,406 | 100.00 | 71,614 | 100.00 | 120,020 | 100.00 |

This table shows that the total number of persons employed in the 1,758 establishments in the state which used steam for power was 120,020 . Of this number, 102,135 , or 85.10 per cent, were employed in places where the boilers were inspected and 17,885 persons, or 14.90 per cent, were employed in places where the boilers were not regularly inspected.

As compared with the outside, Milwaukee leads in the proportion of the persons who were employed where the safety of the boilers were looked after.

CLASSIFICATION OF THE ESTABLISHMENTS ACCORDING TO KIND OF POWER USED.

| Classification. | Milwaukee. |  | Outside <br> Milwaukee. |  | Total. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number. | Per cent. | Number. | Per cent. | Number. | Per cent. |
| Fst. using steam | 489 | 56.86 | 1,269 | 62.36 | 1,758 | 60.72 |
| Vst. using gas ....... | 102 | 11.86 | 241 | 11.84 | 1,343 | 11.85 |
| Est. using electricity | 87 | 10.12 | 137 | 6.73 | 224 | 7.74 |
| Est. using water |  |  | 125 | 6.14 | 125 | 4.32 |
| Est. using hand | 8 | ${ }^{.} 93$ | 148 | 7.28 | 156 | 5.39 |
| Est. using no power | 174 | 20.23 | 115 | 5.65 | 289 | 9.98 |
| Total | 860 | 100.00 | 2,035 | 100.00 | 2,895 | 100.00 |

Here the establishments are classified according to the power used. As has been pointed out already, 1,758 used steam. This is 60.72 per cent of the total for the state. Gas was used by 343 establishments and electricity by 222 . Those using water
power numbered 125, constituting 4.32 per cent of the total. Comparisons are also made between Milwaukee and the state outside.

KIND OF POWER USED AND NUMBER OF PERSONS EMPLOYED.


Tn the above table the persons employed have been classified according to the kind of power used in the establishments where employed. Without going into details it can perhaps be said that 87.05 per cent of the 137,868 persons included were employed in establishments using steam; that 3.67 per cent were employed in places using gas; that 4.05 per cent were èmployed in places with electric power. These figures are for the state as a whole. The relations for Milwaukee do not vary materially from those given above.

FIRE ESCAPES.

| Classification. | Fire Escapes. |  | Balconies Attached. |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Number. | Per cent. | Number | Per cent. |
| Milwaukee | 569 | 61.58 | 450 | 66.86 |
| Outside of Milwaukee | 355 | 38.42 | 223 | 33.14 |
| Total | 924 | 100.00 | 673 | 100.00 |

This table is devoted to the interesting subject of fire escapes. The law requires that each establishment that is 3 or more stories in height, and employing 25 men or more, be provided with the necessary escape for protection in case of fire.

After all, the story of this table is not so very interesting. It simply shows that placed in order or ready for use in case of
emergency there were in the state as a whole, 924 places equipped with fire escapes and that of these Milwaukee had 61.58 per cent and the outside 38.42 per cent. The table also shows the places which in addition to the fire escape had balconies attached so as to facilitate descent. In themselves these figures throw but little light on the situation. When it is added, however, that by a construction of the law, about 995 factory buildings might be said to come within the provision requiring escapes, the figures assume a more important aspect. They then show what the condition in the state really was. They point out that 71 places were lacking escapes and were thus in violation of the law. It is needless to say these escapes were. ordered. In addition to this, many of those already erected were also ordered repaired, and in some cases it was even found necessary to order a second or a third escape.

NUMBER OF BUILDINGS HAVING STANDPIPES, HOSE CONNECTIONS, AND AUTOMATIC SPRINKLERS.

| Classification. | Outside. |  | Inside. |  | Hose <br> Connections. |  | Automatic Sprinkler. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Pr. ct. | No. | Pr. ct. | No. | Pr.ct. | No. | Pr.ct. |
| Milwaukee Outside Milwaukee | 293 188 | 60.91 <br> 39.09 | 115 534 | 17.72 82.28 | 292 738 | 28.35 71.65 | 150 305 | 32.97 67.03 |
| Total | 481 | 100.00 | 649 | 100.00 | 1,030 | 100.00 | 455 | 100.00 |

NUMBER STANDPIPES, HYDRANTS, PUMPS, ETC.

| Classification. | Outside. |  | Inside. |  | Hydrants. |  | Automatic Sprinikler. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Pr.ct. | No. | Pr.ct. | No. | Pr.ct. | No. | Pr.ct. |
| Mìlwaukee Outside Milw...... | 470 | 54.21 |  | 16.60 | 14 | 24.56 | 5 |  |
| Outside. Milwaukee | 397 | 45.79 | 1,321 | 83.40 | 43 | 75.44 | 16 | 76.19 |
| Total $\ldots$....... | 867 | 100.00 | 1,584 | 100.00 | 57 | 100.00 | 21 | 100.00 |

The above tables relate to standpipes, hose connections, automatic sprinklers, hydrants, pumps, etc.

All in all the number of buildings having outside standpipes numbered 481, inside, 649 ; hose connections, 1,030; automatic sprinklers, 455.

Of this number 60.91 per cent of the outside standpipes, 17.72 inside, 28.35 hose connections and 32.97 per cent. of the automatic sprinklers were found to be in Milwaukee:
In addition to the number of buildings having standpipes, etc., we have a table showing the number of each kind. In the 1,130 buildings having these standpipes, 867 were outside and 1,584 inside standpipes. 470 , or 54.21 per cent of the outside standpipes and 263 , or 16.60 per cent, of the inside standpipes were in Milwaukee. Besides this, the table shows that there were 57 hydrants and 21 pumps inspected.

NUMBER OF STAIRWAYS AND OTHER MEANS OF GETTING DOWN FROM STORIES ABOVE GROUND FLOOR.

| Classification. | Milwaukee. |  | Outsine Milwaukee. |  | Total. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number. | Per cént. | Number. | Per cent. | Number. | Per cent. |
|  | 1,386 | 80.54 | 2,425 | 75.64 | 38.11 | 77.35 |
| Outside stairways | $\begin{array}{r}1,386 \\ \hline 23 \\ \hline\end{array}$ | 13.77 | 603 | 18.81 | 840 | 17.05 |
| 'Tramways'......... | 78 20 | 4.53 1.16 | 43 185 | 1.34 4.21 | 155 | 3.15 |
| Other means |  |  |  |  |  |  |
| ( Total | 1,721 | 100.00 | 3,206 | 100.00 | 4,927 | 100.00 |

Stairways also came within the inspection laws and were examined. From the information gathered from the above figures we notice that the majority of stairways are inside and enclosed. Of the total 4,927 making up the stairways and other means of escape, 3,811 , or 77.35 per cent, are on the inside of the buildings ; 1,386, or 80.54 per cent, of the 1,721 different means of descent are in Milwaukee, leaving the balance to be found in buildings scattered throughout the state.
Under the head of "Other means of escape" is included runways, ladders, etc., and these only numbered 155 , or 3.15 per cent of the total number inspected. Those being in poor condition were ordered repaired.

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NUMBER OF BUILDINGS HAVING ELEVATORS, AND NUMBER OF
ELEVATORS USED.
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| Classification. | Buildings. |  | Elevators. |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Number. | Per cent | Number | Per cent. |
| Milwaukee ........ | 485 | 50.21 | 615 | 52.56 |
| Outside Milwaukee | 481 | 49.79 | 555 | 47.44 |
| Total | 966 | 100.00 | 1,170 | 100.00 |

KIND OF DOORS USED ON ELEVATORS.

| Classification. | Milwaukee. |  | Outside Milwaukee. |  | Total. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Per cent. | Number. | Per cent. | Number | Per cent. |
| Automatic doors | 105 | 17.07 | 152 | 27.39 | 257 | 21.97 |
| Bars | 186 | 30.24 | 193 | 34.78 | 379 | 32.39 |
| Lift gates ...... | 130 | 21.14 | 79 | 14.23 | 209 | 17.86 |
| Swinging doors | 54 | 8.78 | 52 | 9.37 | 106 | 9.06 |
| Sliding doors | 140 | 22.77 | 79 | 14.23 | 219 | 18.72 |
| Total | 615 | 100.00 | 555 | 100.00 | 1,170 | 100.00 |

NUMBER OF HOISTS.

| Classification. | Hoists. |  |
| :---: | :---: | :---: |
|  | Number. | Per cent. |
| Milwaukee ..... |  |  |
| Outside Milwaukee | 199 | 65.09 34.91 |
| Total | 570 | 100.00 |

The above tables are devoted to showing the number of buildings having elevators and hoists, the total number of each and the kind of doors used by the same. In looking over the figures we see that in all there were 1,170 elevators used in 966 buildings and 52.56 per cent of these were in Milwaukee.

As to the kind of doors used on the elevators it was found that bars were used in the largest number of cases, with a number of 379 , or 32.39 per cent of total. Next in order came automatic
doors with 257 , or 21.97 per cent; sliding doors, 219 ; lift gates, 209, and swinging doors, 106.

Of the 570 hoists inspected, 65.09 per cent were in Milwaukee.
Those not up to the standard were ordered repaired.

NUMBER OF BUILDIN゙GS HAVING COMMUNICATIONS BETWEEN WORK ROOMS AND ENGINE ROOH.


KIND OF COMMUNICATION.

| Classtification. | Milwaukee. |  | Outside Milwaukee. |  | Total. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number. | Per cent. | Number. | Per cent. | Number. | Per cent. |
|  | 235 | 65.46 | 285 | 40.89 | 520 | 49.24 |
| Phones ........ | 55 | 15.32 | 31 | 4.45 | 86 | 8.14 |
| Speaking Tubes | 14 | 3.90 | 45 | 6.45 | 59 291 | 5.59 57.03 |
| Whistles ....... | 55 | 15.32 | 386 | 48.21 |  |  |
| Total | 359 | 100.00 | 697 | 100.00 | 1,056 | 100.00 |

In establishments having machinery of any kind, some sort of signal service is required by law for the protection of employes. An investigation was made in regard to this and as a result we find that of the total 5,027 buildings, 1,056 had the required communication, while the remaining 3,971 had not.

As to kind of communication, bells seem to be most in use, and next in order came whistles.

In Milwaukee out of the 359 having the required communication, 235 , or 65.46 per cent, were bells. Of the 697 places outside the city, 285 , or 40.89 per cent, were bells also; while of the total, 520 , or 49.24 per cent, were bells.

Of the remaining 536 signals in use, 391 consisted of whistles, 86 of 'phones, and 59 of speaking tubes. Clutch pulleys were also used to stop machinery, but of these no recorld was kept.

NUMBER OF EMERY AND POLISHING WHEELS AND NUMBER OF SUCH WHEELS HAVING SUCTION DEVICES AND GUARDS.


The inspection of emery wheels came under this head. The law requires that all wheels used in establishments and located at such places as to be dangerous to the employes when engaged in doing their duties, are to be guarded. An inspection of these was, therefore, necessary, and as a result we found that out of 3,248 inspected, 559 had guards añd 649 suction devices. Of the total number of wheels inspected, 1,107 were found in Milwaukee. Of these 155 were guarded and 205 had necessary suction devices.

Number of vatis, Pans and number of such having guards.

| Classification. | Kats, Pans, Etc. |  | Not fuabded. |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Number. | Per cent. | Number. | Per cent. |
| Milwaukee | 595 |  |  |  |
| Outside Milwaukee | 5,290 | ع9.89 | 2,021 | 18.51 81.49 |
| Total | 5,885 | 160.00 | -2,480 | 100.00 |

Vats and pans containing any molten metal or hot liquid were also inspected and seen to, so that they had the proper safeguards for preventing accidents. Some are so constructed or situated that no safety appliance would offer effective protection. In all casēs where needed, and appliances could be added, the law was enforced. The total number of vats and pans in.
spected was 5,885 , of which number 2,480 had the required guards, while the remaining did not need them or could not be protected. Only 3 needed guards and these were ordered.

NUMBER OF DOORS OR EXITS FROM FIRST FLOOR AND BASEMENT.

|  |  | , | First Floor. |  | Basement. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Number. | Per cent. | Number. | Fer cent. |
| MilwaukeeOutside of |  |  | 6,917 | 36.10 | 627 | 50.08 |
|  | Milwaukee |  | 12,242 | 63.90 | 625 | 49.92 |
| Total |  |  | 19,159 | 100.00 | 1,252 | 100.00 |

HOW DOORS OPEN OR SWING.

| Classification. | Milwaukee. |  | Outside Milwaukee. |  | Total. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number. | Per cent. | Number. | Per cent. | Number | Per cent. |
| Doors swinging in | 3,522 | 46.68 | 7,022 | 54.57 | 10,544 | 51.66 |
| Doors swinging out .... | 1,206 | 15.99 | 2,582 | 20.07 | 3,788 | 18.56 |
| Doors ways swinging both | 31 | . 41 | 35 | . 27 | 66 | . 32 |
| Doors sliding . | 2,392 | 31.71 | 3,114 | 24.20 | 5,506 | 26.98 |
| Doors lifting | 338 | 4.48 | 41 | . 32 | $\begin{array}{r}379 \\ 128 \\ \hline\end{array}$ | 1.86 .62 |
| Doors open .............. | 55 | . 73 | 73 | . 57 | 128 | . 62 |
| Total | 7,544 | 100.00 | 12,867 | 100.00 | 20,411 | 100.00 |

There is a law which provides that in all factories, workshops, etc., the doors or exits should be so placed as to swing out, or both in and out.

In accordance with this law the Bureau has endeavored to enforce it wherever found violated.

By making a close study of the preceding tables, much light will be thrown upon the condition of the establishments in this respect. Altogether 20,411 doors or exits were inspected, of which 1,252 were exits from the basement and 19,159 were from the main floor. In Milwaukee, 3,522 , or 46.6 per cent, of the 7,544 inspected, and in the state outside, 7,022 , or 54.57 per cent of those inspected swung inward. Taking the state as a whole, 10,544 , or 51.66 per cent of the total num-
ber inspected, swing in, which is more than half. The remaining 9,867 either opened outward, or were left open entirely. Where it was necessary for the safety of the people to have the doors swing out, orders were issued to that effect.

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NUMBER OF BUILDINGS HAVING MECHANICAL VENTILATION, NUM- BER AND CONDITION OF WATER CLOSETS.
```

| Classification. | Mechanical Ventilation. |  | Closets. |  | Closets in Bad Condition. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Per cent. | Number. | Per cent. | Number. | Per cent. |
| Milwaukee Outside Milwaukee | 289 548 | 34.53 65.47 | 3,153 3,898 | 44.72 55.28 | 227 127 | 64.12 35.88 |
| Total | 837 | 100.00 | 7,051 | 100.00 | 354 | 100.00 |

The above table is devoted to the sanitary conditions of different establishments. What constitutes the sanitary condition is difficult to decide, but to make some sort of a definition, we would say that it has reference to over-crowding, poor ventilation, bad condition of water closets, etc.

Reports under this head can be summed up as in the above table. It shows the number of buildings having ventilation devices and also gives the number and per cent of the closets inspected and those being in bad condition.

From this we notice that 837 buildings had mechanical devices for ventilation. Of the 1,807 buildings in Milwaukee only 289 had devices. The balance either did not need them, or if they did, were ordered to put them in; 7,051 closets were also inspected, of which number 354 were in bad condition and needed to be replaced.

## NUMBER OF BUILDINGS PROVIDED WITH SEATS FOR FEMALE EMPLOYES.

|  | Buildings. |  |
| :---: | :---: | :---: |
|  | Number. | Pericont. |
| MilwaukeeOutside Milwaukee | 174755 | $\begin{aligned} & 33.13 \\ & 66.87 \end{aligned}$ |
|  |  |  |
| Total | 1,129 | 100.00 |

Where female help is used, seats for these should be installed, as the law requires it.

The number of buildings found having the required seats numbered 1,129 , of which 374 were in Milwaukee. Establishments employing female help and not having seats numbered 7, and these were ordered to procure same.

NUMBER OF ESTABLISHMENTS IN WHICH ACCIDENTS, RESULTING IN
INJURIES TO EMPLOYES, OCCURRED, AND THE NUMBER OF SUCH ACCIDEN'TS.

| Classification. | Establishments. |  | Accidents. |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Number. | Per cent. | Number. | Per cent. |
| Milwaukee | 80 | 28.07 | ${ }^{868}$ | 42.49 |
| Outside Milwaukee | 205 | 71.93 | 1,175 |  |
| Total | 285 | 100.00 | 2,043 | 100.00 |

CLASSIFICATION OF ACCIDENTS.

| Clatsification. | Milwaukee. |  | Outside Milwauree. |  | Total. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number. | Per cent. | Number. | Per cent | Number. | Percent. |
| Fatal | 9 | 1.04 | 39 | 3.32 | 48 | - 2.35 |
| Temporary injury | 835 | 96.20 | 1,090 | 92.77 3.91 | 1,925 70 | 94.22 3.43 |
| Permanent injury | 24 | 2.76 | 46 | 3.91 | 70 | 3.43 |
| Total | 863 | 100.00 | 1,175 | 100.00 | 20.43 | 100.00 |

For knowing the numbers, cause, character and result of accidents one can readily see in what industry and around what kind of machinery they mostly occur. This being the case, one would know where to make a rigid enforcement of the law and what machinery needed protective measures most.

But in Wisconsin, as well as in many other states, there is no law whereby the operators of factories and workshops are required to furnish a report of the number and the particulars of each accident.

We do not, therefore, claim that the data here collected regarding accidents is as complete as it might be, but under the circumstances a more complete list could not be had,

The reported number of accidents during the year is 2,043 . These took place in 285 establishments, or on an average there were 7 accidents to an establishment. Of the 2,043 accidents, 48 resulted fatally, 1,925 in temporary injury and 70 in permanent injury. This shows that only 2.35 per cent of accidents resulted fatally, while the largest majority, or 94.22 per cent, resulted in temporary inability. Of the total accidents, 868 were in Milwaukee, while the balance took place throughout the state.

NUMBER OF ENGINEERS AND AVERAGE YEARS OF EXPERIENCE AND TIME IN PRESEN'T SERVICE.

|  | Number. |
| :---: | :---: |
| Engineers included. |  |
| Average number of years of experience | 14 |
| Average number of years in present service | 6 |

Efforts were made to learn from the engineres in charge of engines and boilers in the factories included, first how long they had been engaged as engineers, and second, how long they had been employed in 'neir present position.

In all 1,150 engineers were thus reached. The average experience of each, when computed, was found to be nearly 14 years, and the average time of service in the position they then held was about 6 years.

> ANALYSIS OF THE WORK PERFORMED BY THE INSPECTORS FROM JUNE 22,1901 , TO AUGUST 30,1902 , or FOR 14 MONTHS.

The foregoing portion of this part, under the head of "Factory Inspection," show a record of 3,059 separate factories and workshops, together with summaries for places where the plants are located and also by industries. Statements are also included showing the location of our principal industries and the relative importance of our principal cities as industrial centers. The more important facts have also been briefly explained and in addition to this is found a fairly complete analysis of the factory inspectors' report upon 2,895 of the above factories.

The facts thus presented have been compiled from the reports of the factory inspectors. The reports thus compiled cover one inspection only of each of the places during the period, and are therefore not in any sense a complete record of the work of the inspectors since the last report of this Bureau. The greater proportion of the places in the state are not inspected once only during each year or term, but as often as it is possible to visit them. Frequent visits are absolutely necessary to even fairly complete enforcement of the law; and especially is this true of places where children are employed. This demand we have endeavored to meet. And in order to convey some idea of the amount of work performed in this respect, the following pages have been devoted to showing the number of inspections made, the number of orders issued, and the amount of other work performed during a definite period, or from June 22, 1901, to August 30, 1902.

It should perhaps be added that the period covered here was in no sense busier than any other. The inspectors simply performed about the same amount of work as is required of them at all times. The facts thus presented are typical and can safely be used as a basis upon which to compute their work for any other period.

NUMBER OF BUILDINGS OR PLACES INSPECTED FROM JUNE 22ND, 1901, TO AUGUST 30TH, 1902.

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

The preceding table shows the number of inspections that were made by the inspectors from the latter part of June, 1901, to the end of August, 1902, or during a period of 14 months.

The total number of places thus visited and inspected during the period is 11,556 . These places in the table have been classified according to kind, and the number of each kind together with its per cent of the total are shown.

Of the places inspected, factories and workshops are the first in importance. In the table these places are classified as factories, etc., cigar factories, and garment making shops. The former includes 8,989 places, or 77.79 per cent of the total; the second in order includes 663 , or 5.74 per cent of the total; and the third or garment making, includes 313 places, or 2.71 per cent of the total, taking all the factories and shops, and it is found that together they numbered 9,965 , or 86.24 per cent of the total. That the factories and workshops should thus have constituted over 86 per cent of all the places inspected is perfectly natural, for these are the places that are mostly affected by the factory laws, or the provisions in the laws of this state, which it is our duty to enforce.

Next to factories, etc., such places as mercantile establishments, hotels, churches and schools show the greatest number of inspections. Then follows a variety of places which it is not necessary to enumerate, but which are more or less affected by the provisions in the laws. In considering the table as a whole it will be noticed that it includes 18 classes of places, all of which are included in the inspection.

The next table in order exhibits the orders for improvements in the conditions which were issued by the inspectors during the period covered by the inspections in the above table.

NUMBER OF ORDERS ISSUED FROM JUNE 22ND, 1901, TO AUGUST $30 T H$, 1902.

| Classification. | Orders Issued. |  |
| :---: | :---: | :---: |
|  | Number | Per cent. |
| 1. Hours of labor for children | 79 | . 46 |
| 2. Children under 14 years of age dismissed | 688 | 3.97 |
| 3. Cniddren under 16 years of age dismissed | 1,128 | 6.51 |
| 4. Boilers ...... | ${ }_{2}^{61}$ | .35 1.16 |
| 5. Buildings .................... | $\stackrel{201}{538}$ | 1.16 3.10 |
| 6. Fire escapes and standpipes | 351 | 2.02 |
| 8. Elevators and Hoists | 405 | 2.34 |
| 9. Signals ....... | - 218 | 1.27 |
| 10. Machinery | 4,244 | 24.47 |
| 11. Polishing and emery wheels | 1,137 | 6.55 8.59 |
| 12. Doors . ...................... | 1,466 | 8.09 8.00 |
| 13. Ventilation and sanitation <br> 14. seats for women | 1,502 | 2.89 |
| 15. Registers of children employed | 123 | . 71 |
| 16. Aftidavits ................... ... | 401 | 2.32 2.49 |
| 17. Other orders | 4,424 | 25.49 |
| Total | 17,355 | 100.00 |

The above table shows the number and kind of orders issued during the period covered by these tables. In other words, it gives in a rather plain form the number of instances in which the proprietors or operators of the places inspected had neg. lected to comply with the regulations imposed upon them by the factory laws. By doing this it also shows why ${ }^{\text {º }}$ the inspections were necessary;

The first item on the table shows that 79, or less than one-half of one per cent of the orders issued related to the hours of labor for children under 16 years of age. The law prohibits the employment of any children under this age before 6 o'clock in the morning and after 9 o'clock at night. There were 79 cases where this law was violated and it was for the correction of this that the orders were issued. As this order or notice was all that was necessary in order to set things right to have the law complied with, no prosecutions were resorted to in these cases.

The second item relates to children under 14 years of age. Under the law no children under this age shall be employed in factories, etc., except in certain extreme cases where a permit to this effect has been granted to children over 12 years of age. These pr,visions are extremely difficult to enforce, and, particu-
larly in the past, have been quite extensively violated. Many parents desire the earnings of their children to help out in their otherwise often very meager income. Employers are often on the lookout for cheáp help and are glad to employ boys over 12 years of age. To both sides there is therefore a temporary advantage in such employment. This in turn causes many to try to evade this law. The incentive to do so is often so strong that they risk both prosecution before courts and the fines thus imposed. During the time covered by the table many violations of this law were discovered. The table shows that 688 children were dismissed from work because of their age. This, however, does not tell the whole story on this point. Children under 14 years, who were found at work by the inspectors, were reported to the Bureau under two heads. Those whose parents were in such circumstances that they were not under the law entitled to a permit to work were reported as dismissed. Those again who, while employed without a permit, were clearly entitled to one, at least during their school vacation, were reported under permits issued. It is true that those who had employed them before a permit had been granted were technically in violation of the law, but when the children were in needy circumstances this was not considered cause for prosecution. As will be seen later, the number of permits granted was 3,765 , and a large proportion of these were to children already employed. From this it is plain that the number of children under 14 who were employed, particularly during the summer months or school vacation, was much greater than the number reported as dismissed.

The third item shows the number of children under 16 years of age who, being employed without the required affidavit as to age, were dismissed until such affidavits had been secured. The total number reported in this case was 1,128. This number, however, does not represent all who were found without affidavits, because in a large number of cases, when conditions were such as to warrant it, the inspectors made out affidavits at the time and thus permitted the children to remain without loss of -time and also saved them the cost of having the affidavit executed before an outside notary. Just how many affidavits were
issued in this way cannot be given as they were reported in, together with those issued in the offices of this Bureau in such a way that they could not be separated, but they were quite numerous.

The purpose of requiring affidavits as to age from all children under 16 years of age is to assist in determining their ages and thus enable the inspectors to more fully enforce the provision which limits the factory age of children, except in certain cases, to 14 years.

The fourth item relates to boilers. There is no provision in the factory laws that requires or authorizes the inspectors to inspect boilers. Cases are often met with, however, where the boilers or things connected with them are so defective as to make the situation about them extremely dangerous. In such cases the inspectors often step in, and under the laws which require protection from dangerous machinery, require the proprietors to make the necessary repairs. During the period in question 61 such changes were ordered, and these changes were of such a nature as to greatly improve the situation from the point of view of safety to the employes.

The fifth item in the table relates to buildings. There are not many provisions in the factory laws that directly affect the buildings, as separated from the machinery and fixtures in them. But whenever any building of those embraced in the inspection is found to have weak floors or to be over-loaded in anyway, so as to make it dangerous to those employed therein, steps are always taken to have the defect remedied. As the table shows, 201 orders for such improvements were made.

The sixth item relates to fire escapes and standpipes. The law requires that all public or semi-public buildings of three or more stories in height, in which 25 or more persons are employed or occupied, shall be provided with fire escapes, etc. This is an important provision and everything has been done to enforce it. During the time given the inspectors issued 538 orders for new escapes, and for improvements and repairs of old ones. This number constitutes 3.10 per cent of the acts performed by the inspectors. While thus many new escapes have been erected during the year and many defective ones have been
improved, there is yet a good deal to be accomplished in this direction. New buildings are constantly going up. Old buildings are enlarged so as to come within the law. Old escapes are wearing out, or getting out of repair. There are also buildings on which escapes should have been erected long ago, but where all the pressure to that end we so far have been able to bring to bear has failed to produce the desired results. While for this reason there are thus a few places in the state without adequate protection in case of fire, the situation as a whole in this respect is not in any sense bad.

Stairways and elevators make up the seventh and eight items in the table. These means for reaching places above the first floor, or the ground, are required to be kept in a safe condition. The necessity for this requirement is easily seen. Serious accidents are often occurring to both passengers and workmen through defects and weak spots in stairways and passenger elevetors. That the inspectors met with plenty of such defects is evidenced from the fact that 351 orders were made for the fixing up of stairways and 405 for putting elevators in the proper condition. In their nature the orders varied so much that it would occupy too much space to describe them separately. But some were entirely new stairways and elevators; others, again, were for the strengthening of weak spots and for providing proper hand rails and gates.

The ninth item is for signals. The law requires some means for communication between engineer and workrooms where machinery is used, in order that the machinery may be quickly stopped in case of accidents. This is regarded as a wise provision. There are no doubt many cases where lives have been saved through such signals, as well as many where fatal accidents could have been prevented had such signals been provided. Upon examining the conditions in this respect the inspectors found it necessary to order the providing of effective systems of signals in 218 places.

Machinery is the tenth item in the table. Under the law dangerous machinery must be guarded or protected. Machinery, however, varies so much in kind that it cannot be described. Nor is this possible for the various devices that have been in-
vented for protection of dangerous parts. It is often even im. possible to determine whether a machine is dangerous or not. Nevertheless the inspectors are doing their best to get some light on these points. They carefully inspect the machinery in each place visited, and wherever they find machines that need protection and can be protected without making the machine useless for the purpose it is intended for, see to it that proper guards are provided and placed in position. That provisions for this purpose are wise need hardly be said. Where machinery is left unprotected the number of accidents or mutilations that result is simply frightful. Even when protected there are numerous accidents, because there are many machines that cannot be completely guarded and still retain their usefulness. Dangerous spots will often remain exposed even after the best has been done. Many workmen also dislike guards because they may happen to cause them some inconvenience in operating the machine, and hence often remove them after they have been placed in position. In other words, they prefer to run the risk of being injured to a little inconvenience. This is due to thoughtlessness, pure and simple. It is met with so often, however, that it has become quite a problem. Just what steps ought to be taken to prevent removals of guards may be a question. But it certainly seems that a workman who removes guards once placed in position is as guilty of neglect as the proprietor would have been had he failed to furnish them. During the inspection in question, 4,244 machines or parts of machines were ordered protected. The fact that the inspectors should have deemed so many machines as this dangerous is the best evidence of what is necessary to be done in this line.

The eleventh item is that for polishing and emery wheels. Such are not always directly dangerous or the cause of accidents, but the dust they raise is often in the long run very injurious to the health of those who have to operate them or who work in the same room. For this reason the law requires suction devices to be placed on such wheels for the purpose of carrying off the dust. This, it will thus be seen, is a very important provision and has been vigorously enforced. In all 1,137 orders relating to such wheels and devices were issued, the car-
rying out of which caused many improvements in the sanitary conditions.

Doors is the twelfth in order. It is very important, particularly in certain cases, that the doors should open outwardly. In buildings with a large number of workmen and a great deal of combustible material a fire usually causes such rush and pressure on all the avenues of escape that unless these open out, safe exit is almost impossible. There are many shops, however, where doors, both at the foot of stairways and those leading to the street, open in. In fact such places were so numerous that the inspectors found it necessary to issue 1,466 orders for a change in this respect.

Ventilation and sanitation is the thirteenth in order. Bad sanitation in a place may arise from innumerable causes. In some cases dust and smoke are of necessity emitted by the machinery and other forces. In others the shops are so constructed that bad ventilation is inevitable. There are also cases where bad ordors and air arise from bad sewerage or from the very business that is carried on. In the greater part of such instances mechanical contrivances are about the only means by which even fairly pure air can be gotten into the workrooms. Whenever needed such contrivances are also ordered. The table shows that 1,389 orders were issued for this purpose.

Seats for women occupies the fourteenth place. The law requires such seats to be provided whenever practicable. This is a necessary provision, especially in view of the fact that it is conductive to health. In most cases the duties of women in factories and stores are also such that they in many cases can be performed fully as well when sitting down as when standing. In all 502 orders for such seats were issued during the period.

Registers for children under 16 years of age are needed in order to help in detecting violation of the law. Many placer where children are employed neglected to keep such records and were therefore ordered to keep them in the future. Item fif. teen shows that 123 orders were made for such registers.

Item sixteen relates to affidavits. - It shows that 401 orders were issued on this point. Orders in this respect were issued when the conditions were such that affidavits could not be issued
at the time. In Milwaukee the greater proportion of children obtain their affidavits in the factory inspector's office, where they are issued free of charge.

Item seventeen shows all other orders and acts than those otherwise enumerated in the table. These acts are quitè numerous, making a total of 4,424 , or 25.49 per cent, of all the acts performed during the period. They consist of suggestions and acts of almost every kind. The inspectors are often consulted on all sorts of matters relating to factories and buildings and always render any assistance they are capable of. Such acts are reported, but they are too varied for enumeration and hence included under one head.

The preceding table thus shows that the orders of the inspectors were classified into 17 classes and that the number of orders in each class varies from 61 in the case of boilers to 4,424 in the case of "Other orders," or the unclassified acts. Outside of "Other orders" machinery shows the greatest proportion ; in fact the orders in this case constituted almost 25 per cent of the total. The orders relating to children is next in number. Then comes those which relate to the safety in case of fire and to sanitation. The table certainly indicates that a great deal of valuable work was performed during the period.

The following table is an exhibit of such acts as could not be classed as orders, but which were performed during the period in question.

NUMBER OF OTHER ACTS PERFORMED BY THE INSPECTORS FROM JUNE 22ND, 1901, TO AUGUST 30TH, 1902.

| Classification. |
| :--- | :--- | ---: | ---: |

Here is a list of "Other acts" performed by the inspectors. Besides visiting and inspecting certain places and issuing orders for the compliance with the law and seeing to it that these orders were carried out, the inspectors performed a great deal of work that cannot properly be classed under either of these heads. These acts, as far as they could be gotten at, are exhibited in the above table.

The total number of such acts, so far as they could be enumerated, was 9,834 . Of these 3,765 , or 38.29 per cent, consisted of making out permits to work for a limited period, to children between 12 and 14 years of age; and 4,716 , or 47.95 per cent, consisted of making out that many affidavits as to age of children under 16 years. The table also shows that 280 licenses to carry on their work were issued to places where garments were made, and that 37 cigar factories were given a similar license. It further shows that six of the licenses given to garment-making shops were revoked because they did not comply with rules; that 632 .places were visited for special data; that there were 376 acts of various kinds that are not described in detail; and 22 parties were prosecuted for violating the child labor and other laws.

The work thus performed by the 8 inspectors during the period of 14 months may be summarized as follows:

| , | - Classification. | Total number. | Av. to each inspector. |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| Orders issued ... |  | 11, 1755 | 1.445 2,170 |
| Other ${ }^{\text {acts }}$ |  | 11,585 9,834 | 1,170 1,230 |
| Total |  | 38,745 | 4,845 |

From this summary it is found that the total number of acts performed by the inspectors during the time in question was 38,745 , or an average of 4,845 to each inspector. As this period covered about 350 working days this average is equal to about 14 inspections and acts daily to each inspector. • But this is not all. The inspectors must report in full upon each place inspected and forward the report to this Bureau. They must
also make weekly reports showing in detail the amount of work performed during the week. They also have many things to look after that cannot possibly be shown in a report like this. Considering everything, therefore, it is plain that the inspectors after properly performing these duties could not have had a great deal of surplus time on their hands.


[^0]:    1 establishment did not report as to kind of management and No. of partners.

[^1]:    2 establishments did not report as to kind of mangement and No. of partners.

[^2]:    4 establishments did not report as to kind of mänagement and number of partners and stockholders.

[^3]:    ${ }^{1}$ Parts taken to form part of Sawyer in 1883 and part of lron in 1893.
    ${ }^{2}$ Name changed from Dallas in 1869.
    ${ }^{3}$ Name changed from La Pointe in 1866.
    ${ }^{4}$ Part of Burnett taken to form Washburn in 1883.
    ${ }^{5}$ Part taken to form part of Sawyer in 1883.
    ${ }^{6}$ Organized from parts of Marinette and Oconto in 1882.
    ${ }^{7}$ Organized from parts of Langlade and Oconto in 1885; part annexed to Oneida since 1890 .
    ${ }^{s}$ Organized from parts' of Ashland and Oneida in 1893.
    ${ }^{9}$ Name changed from New in 1880; part taken to form part of Forest in 1885, and part of Lincoln annexed between 1880 and 1890.
    ${ }^{10}$ part taken to form Oneida in 1885, and part annexed to Langlade between 1880 and 1890.

[^4]:    ${ }^{1}$ Colburn town was organized from parts of Leola and Richfield towns since 1890; the population of Leola and Richfield towns in 1890 was 575, and in 1900, including Colburn town, 1,193, an increase of 618 , or 107.65 per cent.
    ${ }^{2}$ Knight and Vaughn towns taken to form part of Iron county in 1893.
    ${ }^{3}$ Includes population $(6,113)$ of Knight and Vaughn towns.
    ${ }^{4}$ La Pointe and Sanborn towns organized from parts of Ashland town since 1890. Population of Ashland town in 1890 was 1,507, and for Ashland, La Pointe and Sanborn towns in 1900, 2,271, an increase of 764 , or 50.6 per cent.
    ${ }^{5}$ Organized from part of Morse town since 1890.
    ${ }^{6}$ Part taken to form part of Morse town since 1890
    ${ }^{7}$ Organized from parts of Jacobs town since 1890; part subsequently taken to form Gordon town. Gordon town, 231; Jacobs town, 1,270; Morse town, 1,023; total, 2,524 in 1900. Jacobs town in 1890, 1,277; increase of 1,247 , or 97.6 per cent.

[^5]:    ${ }^{1}$ Fort Howard city annexed since 1890.
    ${ }^{2}$ In 1900 Wrightstown town had 1,575, Wrightstown village 420, total 1.995 ; in 1890 Wrightstown, excluding village, had 1,693, Wrightstown village 476 ; decrease 174 or 8 per cent
    ${ }^{3}$ Exclusive of Wrightstown village.
    ${ }^{4}$ Includes population $(4,754)$ of Howard city.

[^6]:    ${ }^{1}$ Meenon town organized from nart of Marshland town since 1890: in 1890 Marshland town har 678; in 1900 Marshland had 708 and Meenon 1,252, total 1960 ; incroase 1.28 or or 1891 per cent.
    ${ }^{2}$ Hilhert villoge nrganized from part of Rantoul town since 1890: in 1900 Hilbert village had 497 and Rantoul 1,299, total 1,796; in 1890 Rantoul had 1,686; increase 110 or 6.5 per cent.
    ${ }^{3}$ Parts taken to form Strickland and part of Sampson town since 1890.
    ${ }^{4}$ Formerly in Edison town, now independent.
    ${ }^{5}$ Cadott village formerly in Sigel town, now independent. In 1900 Sigel town had 911. Cadott village 840. total 1,751; in 1890 Cadott village had 889 and Sigel town 698; increase 164 or 10.3 per cent.

[^7]:    ${ }^{1}$ Part taken to form Sampson town since 1890. Organized from part of Bloomer and Cleveland towns since 1890. In 1900 Cleveland town had 577, Bloomer town had 1,470, Sampson town 626; in 1890 Cleveland 395, Bloomer town 1,720, total 2,115 ; increase 558 or 26.3 ner cent.
    ${ }^{2}$ Dewey town organized from parts of Colburn and Lawrence since 1890. In 1900 Dewey town had 683, Colburn 513, and Lawrence 793. total 1.989; in 1890 Colburn town had 347, Lawrence 272, total 619 ; increase 1.370 or 221.3 per cent.
    ${ }^{3}$ Included in Boyd village in' 1890; part taken to form Stanley city s'nce 1890.
    ${ }^{4}$ Exclusive of Boyd village, in 1900 Boyd village had 674 , Edson town 1,986 , Stanley city 2,387, total 5,047: in 1890 Boyd village had 845, Edson town 1,619, total 2,164 ; increase 2,883 or 123.2 per cent.
    ${ }^{5}$ Organized from parts of Bloomer and Cleveland towns since 1890. Jn 1890 Bloomer town 1,720: Cleveland 395, total 2.115: in 1900 Bloomer 1.470, Clereland 577. Sampson town 626. Strickland 288. total 2,961 ; increase 846 or 4 per cent.
    ${ }_{7}^{6}$ Exclusive of population of Cadott village.
    TOrganized from part of Edson town since 1890. In 1890 Edson torn hat 1.619 ; in 1900 Edson had 1,986. Stanley city 2,387 , total $4, £ 93$; increase 2,724 or 170 per cent.
    ${ }^{8} \mathrm{Organized}$ from parts of Bloomer town s'nce 1890 . In $189 n$ Rloomer town har
    1,720; in 1900 Rloomer had 1,470. Strickland town 288; increase 38 or 2.2 per cent.
    ${ }^{\circ}$ Organized from parts' of Colinv and Mavville towns since 1890.
    ${ }^{10}$ Organized from parts of Colby town since 1890.
    ${ }^{11}$ Cadott village was formerly in Sigel town, now independent.

[^8]:    ${ }^{1}$ Soldiers Grove village, formerly Clayton town, now independent.
    ${ }^{2}$ Includes population of Soldiers Grove village, not separately returned in 1890.
    In 1900 Clayton town had 2,080, Soldiers Grove village 680, total 2,760; in 1890 Clayton town had 2,050 ; increase 710 or 34.63 per cent.
    ${ }_{4}^{3} \mathrm{De}$ Soto village, formerly in Freeman town, now independent.
    ${ }^{4}$ Exclusive of population of De Soto village. In 1890 De Soto village (part of) had 79, Freeman town 1,417; total 1,496; in 1900 De Soto village had 87, Freeman town 1,533. total 1,620; increase 124 or 8.28 per cent.
    ${ }^{-W a u z e k a}$ village organized from part of Wauzeka town since 1890. In 1890 Wauzeka town had 576, Wauzeka village 471, total 1.047; in 1890 Wauzeka town had 916 ; increase 131 or 14.3 per cent.
    ${ }^{6}$ Belleville village, formerly in Montrose town, now fndependent.
    ${ }^{7}$ Exclusive, of population of Belleville village. In 1890 Relleville village had 319, Montrose town 932, total 1,251; in 1900 Belleville village 385, Montrose town 997, total 1,382; increase 131 or 10.47 per cent.
    ${ }^{8} \mathrm{Mt}$. Horeb village organtzed from part of Blue Mounds town since 1890 In 1900 Blue Mounds town 1,048, Mt. Horeb village 864, total 1,912; in 1890 Blue Mounds town 1,449; increase 463 or 31.9 per cent.
    ${ }^{9}$ Dane village organized from Dane town since 1890. In 1900 Dane town had 933. Dane village 280 ; in 1890 Dane town had 1,161 ; increase 52 or 4.47 per cent.
    ${ }^{10}$ Deerfield village, formerly in Deerfield town, now independent.
    ${ }^{11}$ Exclusive of population of Deerfield village; 1890 Deerfield town had 1,235 , Deerfield village 338, total 1.273 ; in 1900 Deerfield town 1,104 , Deerfield village 515 , total 1,619; increase 46 or 2.9 per cent.

[^9]:    ${ }^{1}$ Gagen town and part of Pelican Lake town annexed to Oneida county since

[^10]:    ${ }^{1}$ Montfort villoge, formerly in Wingville town, now independent.
    ${ }^{2}$ Exclusive of population of Montfort village. In 1890 Montfort village had 467 , Wingville town 913, total 1,380; in 1900 Montfort had 627 , Wingville town 854 , total 1,481; increase 101 or 7.3 per cent:
    ${ }^{3}$ Muscoda village, formerly in Muscoda town, now independent.
    ${ }^{4}$ Exclusive of population of Muscoda village. In 1890 Muscoda town had 555 , Muscoda village 605 , total 1,160; in 1900 Muscoda town had 454, Muscoda village 743 . total 1,197 ; increase 37 or 3.2 per cent.
    ${ }^{5}$ Potosi village, formerly in Potosi town, now independent.
    ${ }^{6}$ Includes nopulation of Potosi village, not separately returned in 1890. In 1900 Potosi town had 1.568. Potosi village 434, total 2,002; in 1890 Potosi town had 2,110 ; decrease 108 or 5.1 per cent.
    ${ }^{7}$ Albany village, formerly in Albany town, now independent.
    ${ }^{8}$ Exclusive of population of Albany village. In 1890 Alhany town had 682, Atbany village 698, total 1,380; in 1900 Albany town had 699, Albany village 797, total 1.496; increase 116 or 8.4 per cent.
    ${ }^{10}$ Brodhead village formerly in Decatur town, incorporated as a city and made independent since 1890 .
    ${ }^{11}$ Exclusive of population of Brodhead village. In 1890 Brodhead city had 1.461 Decatur town 685, total 2,146; in 1900 Brodhead city had 1,584. Decatur town 650 , total 2,234: increase 88 or 4.1 ner cent.
    ${ }^{12}$ Browntown village organized from part of Cadiz town since 1890. In 1900 Browntown village had 246. Cadiz town 1,240, total 1,486; in 1890 Cadiz town had 1,507 ; a decrease of 21 or 1.39 per cent.

[^11]:    Monticello village, formerly in Mt. Pleasant town, now independent
    ${ }^{2}$ Exclusive of population of Monticello village. In 1890 Monticello village had 407, Mt. Pleasant town 841. total 1,248; in 1900 Monticello village had 559, Mt. Pleasant town 761, total 1,320 ; increase 72 or 5.76 per cent.
    ${ }^{3}$ Markesan village, formerly in Mackford town, now independent.
    ${ }^{4}$ Exclusive of population of Markesan village. In 1890 Mackford town had 1,039, Markesan village 475, total 1.514; in 1900 . Mackford town had 912, Markesan village 706, total 1,618: increase 104 or 6.86 per cent.
    ${ }_{5}$ Princeton village, formerly in Princeton town, now independent.
    ${ }^{6}$ Princetusive of population of Princeton village. In 1890 Princeton town had 1,167 Princeton village 986. total 2,153 ; in 1900 Prinseton town had 1,123; Princeton village 1,202, total 2,325 ; an increase of 172 or 7.98 per cent.

[^12]:    ${ }^{1} \mathrm{Highland}$ village, formerly in Highland town, now independent.
    ${ }^{2}$ Exclusive of population of Highland village. In 1890 Highland town had 1,577, Highland village 751, total 2,328 ; in 1900 Highland town had 1,642, Highland village 913 , total 2,555 : increase 227 or 9.75 per cent.
    ${ }^{3}$ Linden village, formerly in Linden town, now independent.
    ${ }^{4}$ Exclusive of population of Linden village. In 1890 Linden town had 1,399, Linden village 462 , total 1,861 ; in 1900 Linden town had 1,353, Linden village 543 , total 1,896: increase 35 or 1.88 per cent.
    ${ }^{5}$ Organized from parts of Ashland and Oneida counties in 1893.
    ${ }^{6}$ Brockway town organized from part of Albion town since 1890. In 1890 Albion town had 1.717. in 1900 Albion town had 1,732, Brockway town 812, total 2,535 ; increase 818 or 47.6 per cent.
    ${ }^{7}$ Bear Bluff town organized from part of City Point town (formierly Sullivan) since 1890 . In 1900 Bear Bluff town had 151, City Point town 323, total 474; in 1890 City Point town had 329 ; increase 145 or 44.07 per cent.

[^13]:    ${ }^{1} \mathrm{Ft}$. Atkinson city. formerly in Koshkonong town. now independent.
    ${ }^{2}$ Exclusive of popalation of Fort Atkinson city. In 1890 Ft . Atkinson citv had 2.283, Koshkonone 1.499, total 3.782; in 1900 Ft . Atkinson city had 3,043, Koshkonong town 1.475. total 4,518; increase 736 or 19.46 per cent.
    8. Tefferson citv, formerly in Jeffersion town, now indenendent.
    4Exclusive of ponulation of Jeffer:mon citv. In 1890 Jefferson citv had 2.287 Fficlusive of in 100 Jefferson city had 2.584. Jefferson town Jefferson town total 4,313 : increase 260 or 6.4 per cent.
    , ake Mills village, formerly in Lake Mills town now independent.
    ${ }^{6}$ Exclusive of ponnlation of Lake Mirls village. In 1890 Lake Mills town had 1.054, Lake Mills village 1.053, total 2.107: in 1900 , ake Mills town had 1,331, Lake Mills village 1.387, total 2.718; increase 654 or 28.99 per cent.

    TPalmyra village, formerly in Palmyra town, now independent.
    ${ }^{8}$ Exclusive of ponulation of Palmvra village. In 1890 Palmvra town hat 790. Palmyra village 567, total 1,357: in 1900 Pslmyra town had 789, Palmyra village 716 , total 1,505 ; increase 148 or 10.9 per cent.

[^14]:    ${ }^{1}$ Formerly Ahnapee.
    ${ }^{2}$ Bangor village, formerly in Bangor town, made independent since 1890.
    ${ }^{3}$ Exclusive of population of Bangor village. In 1890 Bangor town had 639, Bangor village 499, total 1,138; in 1900 Bangor town had 659, Bangor village 633, total 1,292 ; increase 154 or 13.53 per cent.
    ${ }^{4}$ Part of Campbell town annexed to La Crosse city since 1890. In 1890 Campbell town had 955 , La Crosse c.ty 25,090 , total 26,045 ; in 1900 Campbell town 1,078 , La Crosse city 28,895 , total 29,97 ; increase 3,928 or 15.08 per cent.
    ${ }^{5}$ Included West salem village in 1890.
    ${ }^{6}$ Exclusive of population of West Salem village. In 1890 Hamilton town had 1,400, West Salem village 542 , total 1,442 ; in 1900 Hamilton town had 1,427 , West -Salem village 725 , total 2,152 ; increase 210 or 10.8 per cent.

[^15]:    ${ }^{1}$ Evergreen town organized from part of Elton town since 1890. In 1900 Elton town had 144, Evergreen town 117, total 261 ; in 1890 Elton town had 191; increase 70 or 36.64 per cent.
    ${ }^{2}$ Part taken to form part of Upham town since 1890.
    ${ }^{3}$ Organized from parts of Neva and Summit towns since 1890.
    ${ }^{4}$ Part taken to form part of Upham town, and Parrish town annexer since 1890. In 1900 . Neva town had 789, Upham town 198, Summit town 361, Parrish town 392. total 1,739; in 1890 Neva town had 502, Summit town .270, total 772; increase 967 or 125.25 per cent.
    ${ }^{5}$ Peck town organ:zed from part of Vilas town since 1890. In 1900 Peck town had 248, Vilas 161, total 409; in 1890 Vilas had 316 ; increase 93 or 429.4 per cent. ${ }^{6}$ Includes population (392) of Parrish town, annexed to Summit town since 1890.

[^16]:    ${ }^{1}$ Included Tomahawk city in 1890; part taken to form Tomahawk town since 1890.
    ${ }^{2}$ Exclusive of population of Tomahawk city.
    ${ }^{3}$ Formerly in Rock Falls town, now independent.
    ${ }^{4}$ Organized from part of Rock Falls town since 1890. In 1900 Rock Folls town had 414, Tomahawk city 2,291. Tomahawk town 620, total 3.325: in 1890 Rock Falls town had 322 , Tomahawk city 1,816, total 2,148 ; increase 1,177 or 54.79 per cent.
    ${ }^{5}$ Kiel village. formerly in Schleswig town, now independent.
    ${ }^{6}$ Exclusive of population of Kiel village. In 1890 Kiel village had 697 , Schleswig town 1,556, total 2,053; in 1900 Kiel village had 924, Schleswig town 1,385 , total 2,309 ; increase 256 or 12.46 per cent.
    ${ }^{7}$ Part of Manitowoc town annexed to Manitowoc city 1890. In 1890 Manitowoc city had 7,710, Manitowoc town 1,275, total 8,985; in 1900 Manitowoc city had 11,786, Manitowoc town 762, total 12,548; increase 3,563 or 39.65 per cent.

[^17]:    ${ }^{1}$ Cassel town organized from part of Marathon town since 1890. In 1900 Cassel town had 1,034, Marathon 678, total 1,712; in 1890 Marathon increase 532 or 45.08 per cent.
    ${ }^{2}$ Colby city, "east ward,", organized from part of Hull town since 1890 . In
     town had 893 ; inicrease 116 or 12.98 per cent.
    ${ }^{3}$ Plover town organized from parts of Easton and Norrie towns since 1890. In 1900 Easton town had 987, Norrie town 770 , Plover town 302, total 2.059 ; in 1890 Easton town had 240, Norrie town 353, total 593; increase 1,466 or 247.2 per cent.
    ${ }^{4}$ Organized from part of Wein town since 1890 . In 1900 Edgar village had 478, Wein town 965 , total 1,443 ; in 1890 Wein town had 444 ; increase 999 or 225 per cent.
    ${ }^{5}$ Hewitt town organized from parts of Harrison and Texas towns since 1890. In 1900 Harrison town had 211, Hewitt tơwn 287, Texas town 1,081, total 1,579; in 1890 Harrison town had 926, Texas town 220, total 1,146 ; increase 433 or 37.78 per cent.
    ${ }^{6}$ McMillan village organized from part of McMillan town since 1890. In 1900 McMillan town had 852, McMillan village 200, total 1,052; in 1890 McMillan town had 439; increase 613 or 139.6 per cent.

[^18]:    ${ }^{4}$ Part taken to form Edgar village since 1890.
    ${ }^{1}$ Amberg, Coleman, Crivitz, Dunbar and Grover towns organized from parts of Peshtigo town since 1890. In 1900 Amberg town had 1,375, Coleman town 2,545, Crivitz town 842, Dunbar town 1,136, Grover town 1,860, Peshtigo town 4,228, total 11,986; in 1090 Peshtigo town had 7,202 ; increase 4,784 or 66.42 per cent.

[^19]:    ${ }^{1}$ Scott town organized from part of Byron town since 1890 . In 1900 Byron town had 825, Scott town 258, total 1,083; in 1890 Byron town had 458; increase per cent
    ${ }^{2}$ Lashton village organized from part of Jefferson town since 1890. In 1900 Cashton viliage had 510, Jefferson town 1,223, total 1,733; in (1890 Jefferson town had 1,315 ; increase 418 or 31.78 per cent.
    ${ }^{3}$ Kendall village, formerly in Glendale town, now independent.
    ${ }^{5}$ Exclusive of population of Kendall village. In 1890 Glendale town had 1,020, Kendall village 304, total 1.324; in 1900 Glendale town had 1,051, Kendall village 460 , total 1,511 ; increase 187 or 14.12 per cent.
    ${ }^{6}$ Grant town organized from part of Lincoln town since 1890. In 1900 Grant town had 499, Lincoln town 863; total 1,362; in 1890 Lincoln town had 1,065; increase 297 or 27.88 per cent.
    ${ }^{\text {Norwalk }}$ village organized from part of Ridgeville town since 1890. In 1900 Norwalk village had 557 , Ridgeville town 924, total 1,281; in 1890 Ridgeville town had 1,292; decrease 11 or' 85 per cent.
    ${ }^{9}$ Ontario village organized from part of Sheldon town since 1890. In 1900 Ontario village had 91 , Sheldon town 821 , total ' 912 ; in 1890 Sheldon town had 813 ;
    increase 99 or 12.17 per cent.

[^20]:    ${ }^{1}$ Hortonville village, formerly in Hortonia town, made independent since 1890. ${ }^{2}$ Lixclusive of population of Hortonville village. In 1890 Hortonia town had 867. Hortonville village 440, total 1,307; in 1900 Hortonia town had 654 , Hortonville village 913 , total 1,567 ; increase 260 or 19.89 per cent. ${ }^{1890}$. .
    ${ }^{4}$ Cxclusive of population of Little Chute village. In 1890 Kaukauna town had 1,348, Little Chute village 380, total 1,728; in 1900 Kaukauna town had 1,479, Little Chute village 944, total' 2,423 ; increase 695 or 40.21 per cent.

[^21]:    ${ }^{1}$ Cedarburg city, formerly in Cedarburg town. now independent.
    ${ }^{2}$ Exclusive of population of Cedarburg city. In 1890 Cedarburg city had 1,361 , Ceaarburg town 1,507, total 2,868: in 1900 Cedarburg city had 1,626, Cedarburg town 1,450 , total 3,076 ; increase 208 or 7.25 per cent.
    ${ }^{3}$ Grafton village, formerly in Grafton town, now independent.
    ${ }^{4}$ Exclusive of population of Grafton village. In 1890 Grafton town had 1.010, Grafton village 434, total 1,444; in 1900 Grafton town had 1,060, Grafton village 478 , total 1,538; increase 94 or 6.50 per cent.
    ${ }^{5}$ Port Washington city, formerly in Port Washington town, now independent.
    ${ }^{6}$ Exclusive of population of Port Washington city. In 1890 Port Washington city had 1,659, Port Washington town 1,067, total 2,726; in 1900 Port Washington city had 3,010 , Port Washington 1,081 , total 4,091 ; increase 1,365 or 50 per cent.
    ${ }^{7}$ Pepin village, formerly in Pepin town, now independent.
    ${ }^{8}$ Exclusive of population of Pepin village. In 1890 Pepin town had 1,122, Pepin village 369, total 1,491; in 1900 Pepin town had 1,142 , Pepin village 407, total 1,549 ; increase 58 or 3.89 per cent.

[^22]:    ${ }^{1}$ Spring Valley village organized from part of Spring Lake town sinice 1890. In 1900 Spring Lake town had 1,200 , Spring Valley viliage 1,021 , total 2,221 ; in 189 ) Spring Lake town had 998; increase 1.223'or 122.54 per cent.
    2Amery village, formerly in Lincoln town, now independent.
    ${ }^{3}$ Exclusive of poulation of Amery village. In 1890 Amery village had 451, Lincoln town 621, total 1,072; in 1900 Amery village had 905 , inincoln tovia 1,010 , total 1,915 ; increase 843 or 78.63 per cent.
    ${ }^{4}$ Clear Lake village organized from part of Clear Lake town since 1890. In 1900 Clear Lake town had 752, Clear Lake village 527, total 1,279; in 1890 Clear Lake town had 951; increase 328 or 34.49 per cent.

[^23]:    McKinley town organized from part of Loraine town since 1890. In 1900 Loraine town had 267, McKinley town 110, total 377; in 1890 Loraine town had 210 ; increase 167 or 79.52 per cent.
    ${ }^{2}$ Osceola village, formerly in Osceola town, now independent.
    ${ }^{3}$ Exclusire of population of Osceola village. In: 1890 Osceola town had 683, Osceola village 384 , total 1,067; in 1900 Osceola town had 847, Osceola village 466 , total 1,313; increase 246 or 23.05 per cent.
    ${ }_{4}^{4}$ St. Cro:x Falls village, formerly in St. Croix Falls town, now independent.
    ${ }^{5}$ Exclusive of population of St. Croix Falls village. In 1890 St. Croix Falls town had 53 , St. Croix Falls village 745, total 798; in 1900 St. Croix Falls town had 534 , St. Croix Falls village 622 , total 1,156; increase 358 or 44.86 per cent.
    ${ }^{6}$ Includes population (895) of Stevens Point town; annexed to Carson, Eau Pleine. Hull and Linwood towns since 1890.
    ${ }_{8}^{7}$ Amherst village, formerly in Amherst town, now independent.
    ${ }^{8}$ Exclusive of population of Amherst village. In 1890 Amherst town had 1,324, Amherst village 438, total 1,762: in 1900 Amherst town had 1,425 , Amherst village 558, total 1,983; increase 221 or 12.54 per cent.

    - ${ }^{2}$ Part of Stevens Point town annexed since 1890. In 1900 Carson town had 1.505, Linwood town 677, Stevens' Point town 895, total 3,077; in 1890 Carson town had 961 , Linwood town 368 , total 1,329 ; increase 1,748 or 131.52 per cent.
    ${ }^{10}$ Organized from parts of Eau Pleine and Hull towns since 1890.
    ${ }^{1}$ Yart taken to form part of Dewey town, and part of Stevens Point town annexed since 1890 . In 1900 Dewey town had 754 , Eau Pleine town 1,086, Hull town 1,469, total 3,369 ; in 1890 Eau Pleine town had 748, Hull town 1,477, total 2,225 ; increase 1,084 or 48.71 per cent.

[^24]:    ${ }^{1}$ Hill and Knox towns organized from parts of Brannan town since 1890. In 1900 Brannan town had 523, Hill town 242, Knox town 411, total 1,176; in 1890 Brannan town had 516; increase 660 or 127.9 per cent.
    ${ }_{2}^{2}$ Philips city organized from part of Worcester town since 1890. In 1900 Philips city had 1,820, Worcester town 1,179, total 2,999; in 1890 Worcester town had 1,582 ; increase 1,417 or 89.57 per cent.
    ${ }^{3}$ Burlington village, formerly in Burlington town, incorporated as a city and made independent since 1890 .
    ${ }^{4}$ Exclusive of population of Burlington village. In 1890 Burlington city had 2,043, Burlington town 1,097, total 3,140; in 1900 Burlington city had 2,526, Burlington town 1,052. total 3,578 ; increase 438 or 13.94 per cent.
    ${ }^{5}$ Union Grove village, formerly in Yorkville town, now independent.
    ${ }^{6}$ Exclusive of population of Union Grove village. In 1890 Union Grove village had 432, Yorkville town 959, total 1,391; in 1900 Union Grove village had 520 , Yorkville town 1,047, total 1,567; increase 176 or 12.65 per cent.

[^25]:    ${ }^{1}$ Ableman village, formerly in Excelsior town, now independent.
    ${ }^{2}$ Exclusive of population of Ableman village. In 1890 Ableman village had 332, Excelsior town 967 . total 1,299; in 1900 Ableman village had 430, Excelsior town 954 . total 1,384 ; increase 85 or 6.54 per cent.
    ${ }^{3}$ Included North Freedom village in 1890.
    ${ }^{4}$ Exclusive of population of North Freedom village.
    ${ }^{5}$ Formerly in Freedom town, now independent. In 1890 Freedom town had 943, North Fireedom village 316. total 1.259; in 1900 Freedom town had 962, North Freedom village 485, total 1,447; increase 188 or 14.93 per cent.
    ${ }^{6}$ Merrimac village organized from part of Merrimac town since 1890. In 1900 Merrimac town had 615, Merrimac village 350, total 965 ; in 1890 Merrimac town had 847; increase 118 or 13.93 pen cent.
    ${ }^{7}$ Spring Green village, formerly in Spring Green town, now independent,
    ${ }^{5}$ Exclusive of population of Spring Green village. In 1890 Spring Green town had 583, Spring Green village 625, total 1,208; in 1900 Spring Green town had 656. Spring Green village 621, total 1,277 ; increase 69 or 5.71 per cent.
    ${ }^{9}$ Not returned by towns in 1890.

[^26]:    ${ }^{1}$ Birnam wood village organized from part of Birnamwood town since 1890. In 1900 Birnamwood town had 785; Birnamwood village 475, total 1,260; in 1890 Birnamwood town had 731 ; increase 529 or 72.36 per cent.
    ${ }^{2}$ Tilgerton yillage organized from part of Fairbanks town since 1890. In 1900 Fairbanks town had 923 , Tigerton village 723, total 1,646; in 1890 Fairbanks town nad 792 ; increase 854 or 107.82 per cent.
    ${ }^{3}$ Wittenberg village, formerly in Wittenberg town, now independent.
    ${ }^{4}$ Exclusive of population of Wittenberg village. In 1890 Wittenebrg town had 658, Wittenberg village 726, total 1,384; in 1900 Wittenberg town had 1,011, Wittenberg village 798 , total 1, 809 ; increase 425 or 30.7 per cent.
    ${ }^{5}$ Cedar Grove village organized from part of Holland town since 1890. In 1900 Cedar Grove village had 327, Holland town 2,551, total 2,878; in 1890 Holland town had 2,874 ; increase. 4 or . 13 per cent.
    ${ }^{6}$ Elkhart Lake village organized from part of Rhine town since 1890. Elkhart Lake village, in 1900 , ha - 464 , Rhine town 1,285, total 1,749; in 1890 Rhine town had 1,612 ; increase 137 or 8.49 per cent.

[^27]:    ${ }^{1}$ Includes population of (190) Pine Creek town, taken to form Holway town and part of Aurora town since 1890.
    ${ }^{2}$ Organized from parts of Grover and Pine Creek towns since 1890.
    ${ }^{3}$ Parts taken to form Hammel town and part of Aurora town since 1890
    4Organized from part of Grover town since 1890.
    ${ }^{5}$ Organized from part of Pine Creek town since 1890. In 1900 Aurora town had 106. Grover town 333, Pine Creek town 190, Hammel town 389, Holway 308, total 1,326; in 1890 Grover town had 296 ; increase 1.030 or 347.97 per cent.
    ${ }^{7}$ Cleveland town organized from part of Moliter town since 1890. In 1900 Cleveland town had 231. Moliter town 112, total 343; in 1890 Moliter town had 117; increase 226 or 193.16 per cent.
    ${ }^{8}$ nrcadia village, formerly in Arcadia town, now independent.
    ${ }^{9}$ Exclusive of population of Arcadia village. In 1890 Arcadia town had 2.488, Arcadia village 659 , total 3,147 ; in 1900 Arcadia town had 2,641 , Arcadia village 1,$\lrcorner 73$, total 3.914 ; increase 767 or 24.37 per cent.

[^28]:    ${ }^{1}$ Blair village organized from part of Preston town since 1890. In 1900 Blair village had 438, Preston town 1,693, total 2,131; in 1890 Preston town had 1,811; increase 320 or 17.66 per cent.
    ${ }^{2}$ Independence village, formerly in Burnside town, now independent.
    ${ }^{3}$ Exclusive of population of Independence village. In 1890 Burnside town had 825, Independence 382 . total 1,207 ; in 1900 Burnside had 938, Independence 630, total 1,568: increase 361 or 29.9 per cent.
    ${ }^{4}$ Galesville village, formerly in Gale town, now iudependent.
    ${ }^{5}$ Exclusive of population of Galesville village. In 1890 Gale town had 1,279, Galesville village 537, total 1.816: in 1900 Gale town had 1,384, Galesville village 862. total 2.246 ; increase 430 or 23.67 per cent.
    ${ }^{6}$ Whitehall village, formerly in Lincoln town, now independent.
    ${ }^{7}$ Exclusive of population of Whitehall village. In 1890 Lincoln town had 633 , Whitehall village 304, total 937; in 1900 Lincoln town had 786. Whitehall village 600 . total 1,386 ; increase 449 or 47.9 per cent.
    © Osseo village organized from part of Sumner town since 1890. In 1900 Osseo village 'had 472. Sumner town 767, total 1,239; in 1890 Sumner town had 854; increase 385 or 45.08 per cent.
    ${ }^{9}$ Trempealeau village, formerly in Trempealeau town, now independent.
    Includes population of Trempealeau village, not separately returned in 1890. In 1900 Trempealeau town had 1,152. Trempealeau village 609, total 1,761; in 1890 Trempealeau town 1,584 ; increase 177 or 11.17 per cent.
    ${ }^{11}$ Part taken to form Westby village since 1890.
    ${ }^{12}$ Organized from part of Christiana town since 1890. In 1900 Christiana town had 1,264 , Westby village 524, total 1,788; in 1900 Christiana town had 1,521; increase 267 or 17.55 per cent.
    ${ }^{-3}$ Formerly in Wheatland town, now independent.
    ${ }^{14}$ Included De Soto village in 1890 .
    ${ }^{15}$ Exclusive of population of De Soto village. In 1890 De Soto village had 276, Wheatland town 603, total 879; in 1900 De Soto village had 300; Wheatland town 668 , total 968 ; increase 89 or 10.12 per cent.

[^29]:    ${ }^{(1)}$ Hillsboro village formerly in Hillsboro town, now independent.
    $\left.{ }^{(2}\right)$ Exclusive of poulation of Hillshoro village. In 1890 Hillshoro town had 1.178, Hillsboro village 461, total 1,639: in 1900 Hillsboro town had 1,182, Hillsboro village 785. total 1,967; increase 328 or 20 per. cent.
    ${ }^{3}$ Part taken to form Readstown village since 1890.
    ${ }^{4}$ Organized from part of Kickapoo town since 1890 . In 1900 Kickanoo town had 874. Readstown village 403, total 1.277; in 1890 Kickapoo town had 1,185; increase 92 or 7.76 per cent.
    ${ }^{5}$ Organized from part of Stark town since 1890.
    ${ }^{6}$ Part taken to form La Farge village since 1890. In 1900 La Farge village had 488. Stark town 907, total 1,395 ; in 1890 Stark town had 1,033 ; increase 362 or 35.04 per cent.
    ${ }^{7}$ Part taken to form Viola village since 1890.
    ${ }^{8}$ Organized from nart of Liberty town since 1890. In 1900 liberty town had 539. Viola village 195, total 734; in 1890 Liberty town had 663 ; increase 71 or 10.7 per cent.
    ${ }^{9}$ Organized from part of Whitestown town since 1890.
    ${ }^{10} \mathrm{Part}$ taken to form Ontario village since 1890 . In 1900 Ontario village had 298 , Whitestown town 914, total 1,212 ; in 1890 Whitestown town had 863 ; increase 349 or 40.44 per cent.
    ${ }_{11}$ Organized from part of Oneida county in 1893.
    ${ }^{16}$ Delavan village, formerly in Delavan town, incorporated as a city and made independent since 1890.
    ${ }^{17}$ Exclusive of population of Delavan village. In 1890 Delavan city had 2,038, Delavan town 677, total 2,715; in 1900 Delavan city had 2,244, Delavan town 993 , total 3,237 ; increase 522 or 19.22 per cent.

[^30]:    ${ }^{1}$ Incorporated as a city since 1890.
    ${ }^{2}$ Sharon village, formerly in Sharon town, now independent.
    ${ }^{3}$ Exclusive of population of Sharon village. In 1890 Sharon town had 1,160, Sharon villace 878, total 2,038; in 1900 Sharon town had 1,127, Sharon village 945 . total 2,072 ; increase 34 or 1.66 per cent.
    ${ }_{4}$ Minong town organized from parts of Bashaw and Spooner towns since 1890. In 1900. Bashaw town had 904. Minong town 406, Spooner town 1,575, total 2,885. In 1890 Bashaw town had 394, Spooner 734, totảl 1,128; increase 1,757 or 155.76 per cent.
    ${ }_{5}$ Kewaskum village, formerly in Kewaskum town, now independent.
    ${ }^{6}$ Exclusive of population of Kewaskum village. In 1890 Kewaskum town had 1,015, Kewaskum village 557, total 1,572; in 1900 . Kewaskum town had 851, Kewaskum village 679 , total 1,530; decrease 42 or 2.67 per cent.

[^31]:    ${ }^{1}$ Schleisingerville village, formerly in Polk town, now independent

[^32]:    ${ }^{1}$ A uburndale village, formerly in Auburndale town, now independent
    ${ }^{2}$ Exclusive of population of Auburndale village. In 1890 Auburndale town had 6e6, Auburndale village 253, total 909; in 1900 Auburndale town had 959, Auburndale village 241, total 1200 ; increase ' 291 or 32 per cent.
    ${ }^{3}$ Formerly Grand Rapids; Centralia city annexed cent. 1890
    ${ }^{4}$ Nekoosa village organized from part of Port Edwards town since 1890. In 1900 Nekoosa village had 745, Port Edrards town 1,161, total 1,906; in 1890 Port Edwards town had 582 ; increa'se 1,324 or 227.49 per cent.
    ${ }^{\text {inncludes population }}(1,435)$ of Centralia city, annexed to Greater Grand Rap-

[^33]:    ${ }^{1}$ For Marquette countr, see Adams.
    ${ }^{2}$ For Sawyer and Washburn counties, see Bayfield.
    ${ }^{3}$ For Pepin county, see Buffalo.
    ${ }_{5}^{4}$ For Polk county, see Burnett.
    ${ }^{5}$ For Forest and Langlade counties, see Florence.
    ${ }^{6}$ For Oneida and Vilas counties, see Iron.
    ${ }^{7}$ For Taylor county, see Price.
    ${ }^{8}$ For Gates county, see Chippewa second.

[^34]:    ${ }^{1}$ Includes 91,219 persons in the military and naval service of the United States (incluaing cfvilian employees, etc.) stationed abroad, not credited to any state or territory.

[^35]:    ${ }^{1}$ Exclusive of Alaska and Hawaii.

[^36]:    ———. Makes coats. Has 21 people employed, some of whom work by the piece. Four girls work by the week, two of whom get $\$ 2$ and two $\$ 5$ per week. Three piece girls earned last week $\$ 6.40, \$ 8.57$ and $\$ 8.60$, respectively. Smaller girls earn from $\$ 2$ to $\$ 3$ per week. One man earns $\$ 18$ per week. The proprietor of this shop gets for the best satin-lined sack coats $\$ 1.12$ and he says it costs him $\$ 1.02$ to make the coat, aside from his own labor. For the best Prince Albert coats he gets $\$ 2.25$ apiece.

[^37]:    Penalties-
    For violating acts affecting garment making and places where garments are made. (So-called sweat-shop act.)
    Fine $\$ 20$ to $\$ 100$ each offense, or imprisonment 20 to 60 days or both.
    In prosecutions where accused is acquitted the costs shall be paid out of the county treasury.
    Unless owner, lessee or agent upon notice stops unlawful manufarture, or proceeds to oust the occupant, he shall be deemed as guilty as if he. himself manufactured illegally (Ch. 239, L. '01).
    For failing to provide seats for females employed and permit their use, $\$ 10$ to $\$ 30$ for each offense (Ch. 77, L. '99).
    For compelling a woman to work more than 8 hrs . in any one day in any place used for mfg., fine $\$ 5$ to $\$ 50$ (Sec. 1728).
    For failng to fill out, blanks required by commissioner, forfeit $\$ 10$ for each day delay after fixed return time; for failing to admit Bureau officers to suop, forfert $\$ 10$ for each offense (Sec. 1021 i).
    For neglecting for 30 days after written notice to provide suitable place for employes to work, forfeit $\$ 25$ for each offense.
    Every day's neglect or failure after conviction to constitute separate offense (Sec. 1636j).
    Fine not more than $\$ 500$ or 90 days' imprisonment for violating this section, which provides that those erecting factories shall have outer doors swing outward (Siec. 4890, amended by Ch. 380, L. '01)
    Any corporation violating this act or hindering or delaying inspectorss, subject to fine of $\$ 10$ to $\$ 100$ for each offense.
    Parent or guardian who permits child to work in violation thils act, subject to fine of $\$ 5$ to $\$ 25$ (Ch. 274, L. ' 99 ).

[^38]:    ${ }^{1}$ J. E. Thorold Rogers, Notes on Adam Smith, Book II, Chap. III.
    ${ }^{2}$ Principles of Economics, Book III, Chap. 2.

[^39]:    ${ }^{1}$ N. Y., Mass., Penn., Ill.-Article by Nat. Sec'y, Mrs. F. Kelley, in Independent, Dec., 1889.
    ${ }^{2}$ Mass., N.•Y., Penn., Ill., N. J., .Ohio, Mịch., Minn., Ky., Va., Wis.-Mrs. F. Kelley in letter of Aug. 8, 1901.

[^40]:    ${ }^{1}$ Following is the standard of a "Fair House" as set by the New York City Consumers' League:
    Wages.-A Fair House is one,in which equal pay is given for work of equal value, irrespective of sex. In the departments where women only are employed, in which the minimum wages are six dollars per week for experienced adult workers, and fall in few instances below eight dollars.
    In which wages are paid by the week.
    In which fines, if imposed, are paid into a fund for the benefit of the employees.
    In which the minimum wages of cash girls are two dollars per week, with the same conditions regarding weekly payments' and fines.

    Hours.-A Fair House is one in which the hours from 8 a: m. to 6 p . m . (with three-quarters of an hour for lunch) constitute the working day, and a general

[^41]:    half-holiday is given on one day of each week during at least two summer months.
    In which a vacation of not less than one week is given with pay during the summer season.

    In which all overtime is compensated for.
    In which wages are paid and the premises closed for the five principal legai holidays, -viz.: Thanksg'ving Day, Christmas and New Year's Day, Washington's Birthday, and the Fourth of July.
    Physical conditions.-A Fair House is one in which work-, lunch-, and retir-ing-rooms are apart from each other, ard conform in all respects to the present Sanitary Laws.
    In which the present law regarding the providing of seats for saleswomen is observed and the use of seats permitted.
    Other conditions.-A Fair House is one in which humane and considerate behavior toward employees is the rule.
    In which fidelity and length of service meet with the consideration which is their due.

[^42]:    ${ }^{1}$ Following are some of the prices paid for sweatshop work: Cambric dresses and waists, lined and trimmed, at $\$ 1.20$ per dozen; silk waists, 98 cents per dozen; women's wrappers, 49 cents per dozen; neckties, $\$ 1.25$ per gross; percentages deducted for boss sweaters and for cartage.-Maud Nathan in No. Am. Rev., 166-250.
    ${ }^{2}$ Miss McLean's pay was for the first week $\$ 2$ plus 5 per cent. commission on sales, making a total of $\$ 4.95$. Her fines and living expenses were $\$ 4.79$. The second week at another store she earned $\$ 4$ salary and 1 per cent. commission; total, $\$ 6.39$. Fines and expenses were $\$ 6.05$. In return for evening work, she was given supper. Miss McLean worked 175 hours in two weeks, earning a little over 6 cents per hour. These expenses included nothing in the line of choth. ing.-Miks Ann:e McLean in American Journal of Sociology, May, 1899.
    ${ }^{3}$ "It was an openly acknowledged fact among the girls there that the paths of dishonor were traversed to supplement their small incomes. * * * The girls themselves said that more than a third of them were leading lives of shame."-Miss McLean in same.

[^43]:    ${ }^{1}$ The modus operandi of the League is: 1. "To investIgate existing conditions of production and publish the results of its investigation. 2. To guarantee to the publite goods found to have been made vinder conditions satisfactory to it, by attaching to them its label. 3. To appeal to the conscience of the purchaser as an offset to the continual appeal of adrertisers to the credulity and cupidity of the public. 4. To co-operate with and encourage in every legitimate way those employers whose work is done under humane and enlightened conditions. 5. To procure legislation for the protection of purchasers and employes. 6. To co-operate with officials whose duty it is to investigate the con-

[^44]:    ditions of production and distribution, or to enforce laws and ordinances dealing with those conditions. 7. To form organizations of purchasers for the purposes above set forth."-Mrs. F. Kelley in Am. Journal of Socfology, Nov., 1899, on "Aims and Princ:ples of Consumers' League."
    ${ }^{1}$ Mrs. Kelley tells, for instance, of coming across a $\$ 60$ or $\$ 75$ overcoat, hanging in a Ch:cago shop recently exposed to small pox. This coat had been made to order for a Montana man, who had ordered at home a "custom made" roat -. Mrs. Kelley in same.

[^45]:    ${ }^{1}$ Mrs. Kelley stated at Madison on Dec. 6, 1901, that within a month the label had been granted and that 500 employes would not, therefore, be compelled to work evenings during winter as was customary. One exper:enced hand told Mrs. Kelley that every girl would have done as much work by Easter, anyway, because they always slacked up in the afternoon when they knew night work was ahead of them,

[^46]:    ${ }^{1}$ Mrs. Kelley states that the Massachusetts and Wisconsin factory inspocton departments are as yet the only ones that have aftorded valuable assistance to the League.-Letter, Sept. 8, 1901,

[^47]:    ${ }^{1}$ Most of the members of the Oshkosh League signed the following: "Each of the undersigned intends to purchase to the amount set opposite her name, goods bear'ng the label of the Consumers' League, during the coming year, if a reasonably large stock to select from can be found in the city."-Second Annual Report, National Consumers' League.

[^48]:    ${ }^{1}$ A thesis submitted to the faculty of the University of Wiscons: for the Baccalaureațe degree by A. W. Blackburn, 1901.
    $\mathbf{}^{2}$ First legislature of Wisconsin territory held at Belmont, Iowa county.

[^49]:    ${ }^{1}$ Act No. 28, Laws' of 1836, Sec. 2.
    ${ }^{2}$ Session Laws of Wis., 1850; Ch. 39, Sec. 1.
    ${ }^{3}$ Taken from atlas accompanying Geological Survey Wis. Plate II B.

[^50]:    ${ }^{1}$ The material on Geology and Soil was taken from Geology of Wisconsin, Vol. II (1873-1877). .
    ${ }^{2}$ Narration of these incidents in a letter of one of the missionaries is the first account of this region on record. (Hist. Racine Co., West. Hist. Co.; Chicago), p. 286.

[^51]:    ${ }^{1}$ First bona fide settler in teritory now knōwn as Rac:ne, Kenosina, Walworth and Rock counties. Hist. Racine Co., p. 289.

[^52]:    ${ }^{1}$ U. S. Census 1850 and 1860. Cop'es of the original records in the office of the Secretary of State.
    ${ }^{2}$ Şee Map I for location of townships.

[^53]:    ISee Map I for solls：

[^54]:    ${ }^{1}$ Hist. Racine and Kenosha Cos., p. 292,

[^55]:    ${ }^{1}$ The first Scandinavian newspaper in the country, called '"Nord Lyset," was established here, and a $\log$ church, built at the central point of the settlement by the colonists in 1845, was the first Norwegian Lutheran church built in the United States. Hist. Racine and Kenosha counties, p. 306. (Chicago, Western Hist. Co.)

[^56]:    ${ }^{1}$ Copies of the original Census Records, office of Secretary of State.

[^57]:    ${ }^{1}$ See Table I and Table III; also Map II.
    ${ }^{2}$ Includes Racine city, Mt. Pleasant, Caledonia, Raymond, Yorkville and Rochester in 1850; in 1860 included Mt. Pleasant, Yorkville, Waterford and Rochester.
    ${ }^{3}$ In 1850 included Norway, Dover and Burlington; in 1860 included Caledonia, Norway, Dover and Burlington.

[^58]:    ${ }^{1}$ See Map II for the central townships of the county.
    ${ }^{2}$ See Table I.

[^59]:    ${ }^{1}$ See Table IV.

[^60]:    ${ }^{1}$ A thes: s submitted to the faculty of the University of Wisconsin for the Baccalaureate degree by J. W. Johnson, 1901.
    ${ }^{2}$ This d:scussion is lased upon Chamberlain's Geology of Wisconsin and the material is drawn from his four volumes (1873-1877).

[^61]:    *The material incorporated in the tables in the appendix was taken from copies of the original records in the United States Census Reports.

[^62]:    Total New England States
    Total Western States
    441

[^63]:    ＊Specified on record as Bern in Germany．
    ＊In the records all natives of towns written＂Berne＂＂＂Burne＂and＂Bern＂ were accredited to Switzerland with the exception of those stated to have been born in＂Bern，＂Germany．

[^64]:    TYotal，British America

[^65]:    ${ }^{1}$ The reports are supposed to give the occupations of males over fifteen years of age, but they frequently give those of boys fifteen years' of age and these have been incorporated in the tables used in connection with this subject.

[^66]:    Wis. Stats., sec. 170, p. 261.

[^67]:    Per diem and expenses for year ending Sept. 30, 1900 (paid out of fund created by license fees received)

[^68]:    *This does not include payments made out of funds which have been entirely under control of the Society.

[^69]:    DISBURSEMENTS TO THE GEOLOGICAL AND NATURAL HISTORY SURVEY

    For the year ending Sept. 30, 1900.
    

    Pages 177, 178 and 488 of the report of the Secretary of State for the year ending Sept. 30, 1900.

[^70]:    DISBURSEMENTS ON ACCOUNT OF STATE FIREMEN'S ASSOCIATION
    For the year ending Sept. 30, 1900.
    Appropriation to treasurer of association $\$ 50000$

    Page 197 in the report of the Secretary of State for the year ending Sept. 30, 1900.

[^71]:    Wis. Stats., sec. 1459, p. 1089, amended by ch. 320, L. 1901.

[^72]:    ${ }^{1}$ This part has been prepared by Miss Ida M. Jackson of Milwaukee, Assistant Factory Inspector in this state.

[^73]:    CLASSIFIED WEEKLY EARNINGS RECEIVED AT THE TIME OF REPORTING.

[^74]:    *These figures relate to only 994 private agencies which reported.

[^75]:    "If there is a man on the register likely to suit, particulars of him are sent. If not, we do our best to get one. To facilitate references we have an index to names and trades."

    The methods of the Egham and Ipswich bureaus are typical of the English plan of free employment offices. The expenses are paid by private subscription. It is the policy of all the offices not to interfere in any way with strikes or lockouts and to recommend only worthy laborers to worthy employers. The record of either laborer or employer is thoroughly investigated and the officials of the bureau use their own discretion in placing candidates. The number of positions filled by these offices is comparatively small, but it is urged that their existence acts as a powerful stimulus in raising unskilled labor to the rank of skilled labor.

[^76]:    ${ }^{1}$ Engineers.
    ${ }^{2}$ Engineers, Typographical workers, Machinists, and Iron Moulders.

[^77]:    *Prepared by Eugene T. Hancock, University of Wisconsin.

[^78]:    
    
    
    
    

