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Madison Public Schools

1900-1901

ANNUAL REPORT

OF THE

PUBLIC SCHOOLS

OF THE

CITY OF MADISON, WIS.

1900-1901

MADISON, WIS.
STATE JOURNAL PRINTING CO.
1901

DIRECTORY.

BOARD MEETINGS.

Regular meeting of the Board—First Tuesday of each Month, at 7:30 P. M., Room 7, High School Building.

SUPERINTENDENT.

Office of Superintendent—Room 7, High School Building. Office Hours, from 8 to 9 A. M.

SCHOOL SESSIONS.

High School—From 8:45 A. M. to 12:15 P. M., and from 2 to 4 P. M.
Ward Schools—From 8:45 A. M. to 12:15 P. M., and from 2 to 4 P. M. Greenbush—From 9:00 A. M. to 12 M., and from 1:30 to 3:30 P. M. Northeast School—From 9:00 A. M. to 12 M., and from 1 to 3:30 P. M.

SCHOOL CALENDAR—1901-1902.

FALL TERM—

Opens Monday, September 9, and closes Friday, December 20.

WINTER TERM—

Opens Monday, January 6, and closes Friday, March 28.

SPRING TERM—

Opens Monday, April 7, and closes Friday, June 13.

BOARD OF EDUCATION.

1901.

OFFICERS.

JOHN H. CORSCOT.....	President
O. S. NORSMAN.....	Clerk
E. A. BIRGE.....	Treasurer
R. B. DUDGEON.....	Superintendent

MEMBERS.

		Term Expires.
JULIUS G. O. ZEHNTER.....	111 E. Johnson	1901
EDWIN A. BIRGE.....	744 Langdon	1901
WM. HELM	140 W. Gilman.....	1902
ANTHONY DONOVAN	430 Clymer	1902
O. S. NORSMAN.....	515 N. Henry	1903
JOHN H. CORSCOT.....	1222 E. Johnson	1903
MAYOR STORM BULL.....	141 W. Gorham	<i>Ex-officio</i>
JOHN P. BREITENBACH.....	928 Spaight	<i>Ex-officio</i>

COMMITTEES

STANDING.

Teachers	CORSCOT, ZEHNTER, DONOVAN.
Course of Study.....	BIRGE, DONOVAN, CORSCOT.
Finance	DONOVAN, HELM, BULL.
Supplies	NORSMAN, BIRGE, BREITENBACH.
Building	ZEHNTER, BULL, HELM, BREITEN- BACH, NORSMAN.

VISITING.

High School	BIRGE, CORSCOT.
First Ward	BULL, HELM.
Second Ward	HELM, DONOVAN.
Third Ward	DONOVAN, ZEHNTER.
Fourth Ward	ZEHNTER, DONOVAN.
Fifth Ward	BIRGE, NORSMAN.
Sixth Ward	BREITENBACH, BULL.
Seventh Ward	CORSCOT, HELM.
N. E. District	NORSMAN, BREITENBACH.
Greenbush	DONOVAN, NORSMAN.

CITIZENS' VISITING COMMITTEES.

PROF. E. B. SKINNER, Chairman.

HIGH SCHOOL:

PROF. E. B. SKINNER,
MR. A. P. WILDER,
MISS ELSBETH VEERHUSEN,
MRS. F. C. SHARP,
MRS. O. D. BRANDENBURG,
PROF. C. R. VAN HISE,
JUDGE J. B. WINSLOW,
REV. J. M. NAUGHTIN,
REV. A. ARENTZ.

GRAMMAR GRADES:

MR. L. B. MURPHY,
MRS. R. G. THWAITES,
MRS. W. D. PARKER,
MRS. GEO. M. NECKERMAN.
MRS. CHAS. F. LAMB,
MRS. WALKER S. LYON.

PRIMARY GRADES:

MRS. H. W. CHYNOWETH,
MRS. JOHN FREDRICKSON,
MRS. J. O. DAVIDSON,
MRS. GEO. P. MILLER,
MRS. A. R. LAW,
MRS. J. H. HUTCHINSON.

DEPARTMENT OF INSTRUCTION.

1900-1901.

R. B. DUDGEON Superintendent.

HIGH SCHOOL.

J. H. HUTCHISON, *Principal* Physics.
ANNA B. MOSELEY Latin.
SUE TULLIS Latin.
MARY MCGOVERN English Literature.
FLORA C. MOSELEY English Literature.
LAURA H. WELD English.
EDWIN A. SNOW Rhetoricals.
IRMA M. KLEINPELL German.
ALMA STOCK German.
LENORE T. O'CONNOR German.
JULIA E. MURPHY History.
FLORENCE P. ROBINSON History.
EDNA R. CHYNOWETH History.
GEO. M. LINK Mathematics.
MARY OAKLEY Mathematics.
GERTRUDE ANTHONY Science.
CHARLES G. STANGEL Science.
HERMAN CHURCHILL Science.
HARRY W. ADAMS Civics.
EDITH NELSON Greek.

ALL SCHOOLS.

IDA M. CRAVATH Drawing.
MARGARET R. SMITH Music.

FIRST WARD.

MARY L. EDGAR, *Principal* Seventh and Eighth G'ds.
EDITH B. CAREY Fifth and Sixth Grades.
ROZETTA BLAZER Fourth and Fifth Grades.
CHRISTINE B. BANDLI Third Grade.
ADELAIDE WILKE First and Second Grades.
ELLA LARKIN First and Second Grades.

SECOND WARD.

MARGARET A. FORAN, <i>Principal</i>	Seventh and Eighth G'ds.
JESSIE B. HUNT	Fifth and Sixth Grades.
ELIZABETH M. HERFURTH	Fourth Grade.
EMMA G. HYLAND	Third Grade.
EMMA SNYDER	Second Grade.
PAULINE H. SHEPARD	First Grade.

THIRD WARD.

S. MATILDA BAILEY, <i>Principal</i>	Eighth Grade.
ANNETTE B. NELSON	Seventh Grade.
ANNIE HALLIGAN	Sixth Grade.
FANNY CRAWFORD	Fifth Grade.
CAROLINE A. HARPER	Third and Fourth Grades.
LUCY R. COSGROVE	Third and Fourth Grades.
JENNIE M. WILLIAMS	First and Second Grades.
MARY E. HATCH	First and Second Grades.

FOURTH WARD.

THERESA G. COSGROVE, <i>Principal</i>	Seventh and Eighth G'ds.
MARTHA L. CHAMBERLAIN	Fifth and Sixth Grades.
MARY E. DONOVAN	Third and Fourth Grades.
ISABEL T. BYRNE	First and Second Grades.

FIFTH WARD.

ADELINE MARVIN, <i>Principal</i>	Eighth Grade.
NELLIE BLACKMAN	Seventh Grade.
MAE STARIN	Sixth Grade.
MINNIE SWETT	Fifth Grade.
MABEL PALMER	Fourth Grade.
ELLA HELLIGER	Third Grade.
ELLA F. BISSELL	Second Grade.
CLARE DENGLER	First Grade.

SIXTH WARD.

KATE H. FEENEY, <i>Principal</i>	Seventh and Eighth G'ds.
ALICE PARSONS	Sixth Grade.
ELIZABETH FULTON	Fifth Grade.
SARAH E. LOOMIS	Fourth Grade.
EMILY H. DETTLOFF	Third Grade.
MAUD PARKINSON	Third and Fourth Grades.
DOROTHY O. SHIPMAN	Second Grade.
ALICE A. DOTY	First Grade.

ADDIE I. SUTHERLAND..... First and Second Grades.
MADELINE F. SLIGHTAM Kindergarten.
EMILY McCONNELL Kind. Assistant.

SEVENTH WARD.

JESSIE L. HUNGERFORD, *Principal* Fifth and Sixth Grades.
ETHELYN COLWELL Third and Fourth Grades.
EMMA E. QUIRK..... First and Second Grades.

GREENBUSH.

SADIE E. GALLAGHER, *Principal* Third and Fourth Grades.
NORA R. CULLIGAN First and Second Grades.

NORTHEAST DISTRICT.

EMMA N. BIBBS Primary Grades.

DEPARTMENT OF INSTRUCTION.

1901-1902.

R. B. DUDGEON Superintendent.

HIGH SCHOOL.

J. H. HUTCHISON, *Principal* Physics.
ANNA B. MOSELEY Latin.
SUE TULLIS Latin.
MARY MCGOVERN English Literature.
FLORA C. MOSELEY English Literature.
GRACE MOUAT English.
MARION LAMONT Rhetoricals.
IRMA M. KLEINPELL German.
ALMA STOCK German.
LENORE T. O'CONNOR German.
JULIA E. MURPHY History.
FLORENCE P. ROBINSON History.
EDNA R. CHYNOWETH History.
MARY OAKLEY Mathematics.
EDWARD J. FILBEY Mathematics.
GERTRUDE ANTHONY Science.
RICHARD RUNKE Science.
..... Science.
WM. A. WALKER, JR. Civics.
EDITH NELSON Greek.

ALL SCHOOLS.

IDA M. CRAVATH Drawing.
MARGARET R. SMITH Music.

FIRST WARD.

MARY L. EDGAR, *Principal* Seventh and Eighth G'ds.
CAROLYN HAMILTON Fifth and Sixth Grades.
ROZETTA BLAZER Fourth and Fifth Grades.
CHRISTINE B. BANDLI Third Grade.
ADDIE I. SUTHERLAND First and Second Grades.
ELLA LARKIN First and Second Grades.

SECOND WARD.

MARGARET A. FORAN, <i>Principal</i>	Seventh and Eighth G'ds.
EMMA H. VAN BERGH	Fifth and Sixth Grades.
ELIZABETH M. HERFURTH	Fourth Grade.
EMMA G. HYLAND	Third Grade.
EMMA SNYDER	First Grade.
EDITH EVANS	Second Grade.

THIRD WARD.

S. MATILDA BAILEY, <i>Principal</i>	Eighth Grade.
ANNIE HALLIGAN	Seventh Grade.
CORA M. SCHNEIDER	Sixth Grade.
FANNY CRAWFORD	Fifth Grade.
CAROLINE A. HARPER	Fourth Grade.
EMMA N. BIBBS	Third Grade.
MARY E. HATCH	Second Grade.
JENNIE M. WILLIAMS	First Grade.

FOURTH WARD.

THERESA G. COSGROVE, <i>Principal</i>	Seventh and Eighth G'ds.
ELIZABETH FULTON	Fifth and Sixth Grades.
MARY E. DONOVAN	Third and Fourth Grades.
ISABEL T. BYRNE	First and Second Grades.

FIFTH WARD.

ADELINE MARVIN, <i>Principal</i>	Eighth Grade.
JESSIE B. HUNT	Seventh Grade.
MINNIE C. MEYER	Sixth Grade.
EMMA R. SMITH	Fifth Grade.
MILDRED McCOMB	Fourth Grade.
ELLA HEILIGER	Third Grade.
ELLA F. BISSELL	Second Grade.
CLARE DENGLER	First Grade.

SIXTH WARD.

KATE H. FEENEY, <i>Principal</i>	Seventh and Eighth G'ds.
CECELIA O. KAVANAUGH	Sixth Grade.
AGNES YOUNG	Fifth Grade.
ETHEL M. DAY	Fourth Grade.
ALTA G. LEWIS	Third Grade.
MAUD PARKINSON	Third and Fourth Grades.
DOROTHY O. SHIPMAN	Second Grade.
ALICE A. DOTY	First Grade.

AMY CHAPMAN.. First and Second Grades.
MADELINE F. SLIGHTAM Kindergarten.
EMILY MCCONNELL Kind. Assistant.

SEVENTH WARD.

JESSIE L. HUNGERFORD, *Principal*..... Seventh Grade.
MARY G. CALDWELL..... Fifth and Sixth Grades.
ETHELYN COLWELL Third and Fourth Grades.
GRACE WASHBURN First and Second Grades.
LORA E. MORLEY Kindergarten.
KATHERINE FLEMING Kindergarten Assistant.

GREENBUSH.

SADIE E. GALLAGHER, *Principal* Third and Fourth Grades.
NORA R. CULLIGAN First and Second Grades

NORTHEAST DISTRICT.

ROSE M. SMITH Primary Grades.

JANITORS.

High School	John Morris	815 E. Gorham Street.
First Ward	George Link.....	447 W. Gilman Street.
Second Ward	Martin Amundson ...	211 Blair Street.
Third Ward	John C. Butler	128 N. Franklin Street.
Fourth Ward	Matthew Culligan	314 W. Clymer Street.
Fifth Ward	W. E. Oakey	810 W. Johnson Street.
Sixth Ward.....	James Thompson	1210 Jenifer Street.
Seventh Ward	Herman H. Storck ...	1402 E. Dayton Street.
Northeast District.....	Conrad Steinmetz....	2051 Atwood Ave.
Greenbush.....	Marie Storm.....	S. Park Street.

CLERK'S STATEMENT.

Receipts and Expenditures of the Board of Education of the City of
Madison from July 1st, 1900 to June 30th, 1901:

Receipts.

Balance on hand July 1, 1900	\$9,748 67
State aid to high schools	481 40
State apportionment, school fund	5,956 08
City school tax	43,919 04
County school tax	5,940 00
Town of Madison, joint district tax, 1900.....	1,557 46
Town of Madison, city's share of state and county tax, 1899	202 48
Town of Madison, city's share of state and county tax, 1898	144 26
Town of Blooming Grove, joint district tax, 1900	684 18
Tuitions collected	1,151 70
Interests on deposits	272 42
State loan for Seventh ward building	18,000 00
Rent from Wis. Tel. Co.	6 00
	\$88,063 69

Expenditures.

Apparatus and library	\$211 32
Miscellaneous supplies	1,492 64
Repairs	2,406 13
Janitors and labor	3,688 80
Fuel for 1900-1	4,174 74
Fuel for 1901-2	2,432 45
Furniture	441 33
Clerk's salary and census.....	300 00

Printing	159 50
Free text books	359 02
Interest on overdrafts	55 39
Interest on loan from state	288 75
Cement walk and improvments Third ward grounds	204 49
Macadam and sprinkling paid (taxes)	469 79
Cement walk and improvements, Eighth ward grounds ..	251 50
Seventh ward building	17,754 56
Teachers' wages and superintendence.....	38,639 88
Balance on hand July 1, 1901	14,733 50
	<hr/>
	\$88,063 69

O. S. NORSMAN, *Clerk.*

TREASURER'S REPORT.

Receipts and Expenditures, July 1st, 1900 to June 30, 1901.

Receipts.

1900.		
July 1.	To balance on hand	\$9,748 67
" 18.	From state treasurer, loan	18,000 00
Dec. 31.	From R. B. Dudgeon, tuitions collected	449 80
" "	From Martin Finnerty, city treasurer, part school tax	20,000 00
" "	From Wis. Tel. Co., rent	6 00
1901.		
Jan. 26.	From state treasurer, state aid to high schools	481 40
" 31.	From Martin Finnerty, city treasurer, balance city school tax	29,859 04
Feb. 15.	From city treasurer, state apportionment of school fund	5,956 08
Mar. 1.	From Bank of Wisconsin, interest on deposits	70 03
" 31.	From Bank of Wisconsin, interest on deposits	66 65
Apr. 30.	From Bank of Wisconsin, interest on deposits	53 33
May 31.	From Bank of Wisconsin, interest on deposits	45 97
May 11.	From Chas. Vetter, treasurer Blooming Grove, joint district tax, 1900	684 18
" 29.	From R. B. Dudgeon, tuitions collected	580 00
June 6.	From Geo. C. Russell, treasurer town of Madison, joint district tax (town school) 1900	1,329 59
" 12.	From Geo. C. Russell, treasurer, city share of state and county	

MADISON PUBLIC SCHOOLS.

	school tax, 1898	144 26
" 12.	From Geo. C. Russell, city share of state and county school tax, 1899	202 48
" 12.	From Geo. C. Russell, city share of state and county school tax, 1900	227 87
" 28.	From R. B. Dudgeon, tuitions col- lected	121 90
" 30.	From Bank of Wisconsin, interest on deposits	36 44
		<hr/>
		\$88,063 69

Expenditures.

The amount of the certificates of appropriation paid from July 1st, 1900, to June 30, 1901 was.....	\$73,041 44
Interest on state loan, deducted by city treasurer.....	288 75
Balance on hand June 30	14,733 50
	<hr/>
	\$88,063 69

E. A. BIRGE, *Treasurer.*

SUPERINTENDENT'S REPORT.

To the Board of Education:

GENTLEMEN—I herewith submit the annual report of the public schools of the city of Madison for the year ending June 30, 1901. This will constitute the forty-sixth report of the series, and the tenth by me.

SUMMARY OF STATISTICS.

	CENSUS.	1899-1900.	1900-1901.
Population of the city of Madison		18,000	19,164
Assessed valuation		\$8,499,919	
Number of children of school age in the city:			
First Ward		358	371
Second Ward		666	670
Third Ward		308	313
Fourth Ward		915	1,001
Fifth Ward		772	848
Sixth Ward		879	959
Seventh Ward		577	610
Eighth Ward		681	697
Joint School District, N. E.		78	78
Joint School District, Wingra Park		103	121
Total		5,337	5,668

ENROLLMENT.

Number of children enrolled in the public schools:

High School	578	587
First Ward	404	321
Second Ward	270	277
Third Ward	424	406
Fourth Ward	209	216
Fifth Ward	438	424
Sixth Ward	591	491
Seventh Ward	174
Northeast School	50	62
Greenbush	91	97
Total	3,055	3,055

Number of pupils in the different grades:	1899-1900.	1900-1901.
Kindergarten	169	55
First Grade	377	451
Second Grade	341	323
Third Grade	351	354
Fourth Grade	314	323
Fifth Grade	281	304
Sixth Grade	277	279
Seventh Grade	187	210
Eighth Grade	180	169
First Year, High School.....	199	185
Second Year, High School.....	154	176
Third Year, High School.....	118	119
Fourth Year, High School	107	107
Total	3,055	3,055

ATTENDANCE.

Per cent. enrolled	57	54
Average membership	2,660	2,657
Average daily attendance.....	2,507	2,511
Per cent. of attendance.....	94	94
Total days of attendance for year.....	461,366	465,850

BUILDINGS.

Number of buildings occupied.....	9	10
Number of regular school rooms.....	49	50
Number of recitation rooms used.....	16	17
Number of sittings for pupils.....	2,762	2,864

TEACHERS.

Number in High School.....	18	20
Number in second grammar grade.....	8	8
Number in first grammar grade.....	10	11
Number in second primary grade.....	13	14
Number in first primary grade.....	13	14
Teacher of drawing	1	1
Teacher of music	1	1
Kindergarten	2	1
Kindergarten assistants	2	1
Total	68	71

TEACHERS' REPORTS.

	1899-1900.	1900-1901.
Times teachers are tardy.....	139	173
Half days' absence	217	305
Visits made to parents.....	447	344
Visits made to sick pupils.....	244	185

VISITS TO THE SCHOOLS.

Number by the superintendent.....	414	455
Number by members of the board.....	106	92
Number by parents	2,541	1,728
Number of others	2,388	1,762

AVERAGE AGE OF PUPILS.

Upon entering High School, June 15, 1901....14 yr. 7 mo. 11 days.
 Upon graduating from High School, June 14, 1901:

Boys18 yrs. 5 mo. 10 days.
 Girls18 yrs. 3 mo. 21 days.

STATISTICS.

The enumeration of children of school age in the city at the close of the school year gave 2,754 boys and 2,914 girls, making a total school population of 5,668.

The entire number of pupils enrolled for the year was 3,055, of which number 1,547 were boys and 1,508 girls. As has been the case for a number of years, the number of boys enrolled exceeded that of the girls. It will also be noticed that the enrollment for the past year was just the same as it was for the year before. It must be remembered that during the past year we had only one kindergarten in operation with an enrollment of only 55, while the year before we had two kindergartens with an enrollment of 169. This means that during the past year there was an increase of 114 in the enrollment in the regular grades over what it was the year before.

The number registered was 54 per cent of the school population of the city. The pupils were distributed among the grades as follows: Kindergarten 55, or 1.8 per cent of the whole number enrolled; primary grades 1,451, or 47.5 per cent; grammar grades 962, or 31.4 per cent; high school 587, or 19.2 per cent.

The regular work of the school was carried on by sixty-eight teachers, twenty in the high school and forty-eight in the grades. In addition to these, two special teachers were employed to supervise the work in music and drawing, and one to assist in the kindergarten.

In the grades the average number of pupils to each teacher, based on the enrollment, was fifty-one; based on the average attendance, was forty-two. In the high school the number to each teacher, based on the enrollment, was thirty-one; based on the average attendance, was twenty-seven.

COST OF SCHOOLS.

Amount paid out for the year:	1899-1900.	1900-1901.
Teachers	\$36,585 24	\$38,639 88
Incidentals	14,230 79	15,680 88
New buildings and furniture	3,565 50	18,195 89
Street macadam and interest.....	383 67	813 54
	<hr/>	<hr/>
	\$54,765 20	\$73,330 19
 Cost per pupil for tuition alone:		
Upon number enrolled.....	\$10 81	\$11 48
Upon average membership	12 42	13 19
Upon average attendance	13 18	13 96
 Cost per pupil for supervision:		
Upon number enrolled.....	1 16	1 17
Upon average membership.....	1 34	1 35
Upon average attendance.....	1 42	1 42
 Cost of pupil for incidentals:		
Upon number enrolled.....	4 66	5 13
Upon average membership.....	5 35	5 30
Upon average attendance.....	5 67	6 25

Total cost per pupil for tuition, supervision, and incidentals:

Upon number enrolled.....	16 63	17 78
Upon average membership.....	19 11	20 44
Upon average attendance.....	20 27	21 63

Total cost per day for each pupil:

Upon number enrolled.....	.089	.096
Upon average membership.....	.103	.110
Upon average attendance.....	.109	.116

Cost per pupil in the ward schools for tuition:

Upon number enrolled.....	8 66	8 99
Upon average membership.....	9 93	10 48
Upon average attendance.....	10 62	11 11

Cost per pupil in high school for tuition:

Upon number enrolled.....	\$20 03	\$21 90
Upon average membership.....	23 19	23 85
Upon average attendance.....	23 72	25 06

SCHOOL ACCOMMODATIONS.

The opening of the new seventh ward building relieved to an appreciable extent the former crowded condition of the buildings in the north and east portions of the city. The other buildings will find some relief when the proposed addition to the Greenbush school is completed. The conditions in the high school building are well known both to the Board and to all interested citizens. This matter has been given special emphasis in the report of the Citizens' Visiting Committee for the high school. We feel with the committee that this need cannot be too strongly urged. We feel like adding emphasis also to the thought that the new building, whether to be completed at once or part at a time, should be complete in plan and show unity in design and architecture. We do wish to urge the necessity of making a beginning on this building as soon as circumstances will permit. The high school is suffering seriously for lack of room and adequate facilities for doing work which is legitimately expected of it.

We are not only obliged to omit entirely instruction in lines which are of fundamental importance, such as manual training, domestic economy, and physical culture, but find great difficulty in providing accommodations for recitations in regular lines. The vital interests of the school make it imperative that steps be taken at once toward the construction of the new high school building.

SPECIAL REPORTS.

Your attention is respectfully called to the special reports of the principal of the high school and the supervisors of music and drawing. Your attention is also directed to the valuable reports of the citizens' visiting committees. The committees this year have taken great interest in their work and have been painstaking in their investigations, impartial in their judgments, and conservative in their criticisms. These reports, coming from intelligent patrons and reviewing the schools from the standpoint of the citizen and parent, will be especially helpful to the school interests and will not be unappreciated by the good citizens of Madison.

A SIMPLE SANITARY MEASURE.

Under the direction of Mrs. Geo. Neckerman, a member of the citizens' school visiting committee, an interesting and valuable experiment was tried in the matter of sweeping and dusting school-rooms. To keep the rooms free from dirt and dust and the air pure and sweet, is one of the serious problems connected with school sanitation. Under the usual methods of dry sweeping and dusting the less harmful portions, sand and street dirt, can be disposed of by means of the broom and dustpan, but the more harmful portions, the fine chalk particles and the bacteria laden dust, are simply stirred up and driven from place to place. The movement of

classes and the activities incident to school work continue this disturbance, keeping the school-room air filled with dust which is so irritating to the throats and lungs of teachers and pupils.

In her frequent visits to the schools Mrs. Neckerman was forcibly impressed with the necessity of doing something to improve these conditions. She selected two rooms in the Third ward building and enlisted the services of the janitor to aid her in her experiment. Daily under her direction the two rooms were carefully dusted with cloths, and the floors were sprinkled with damp sawdust and swept carefully. During this experiment, covering about three months, the damp-swept rooms were not washed or scrubbed, while the hallways and the dry-swept rooms were scrubbed regularly every two weeks. Very soon there was a marked improvement in the condition of the damp-swept rooms. The dust and dirt had noticeably decreased, the woodwork and furniture looked brighter, the floors were lighter in color and looked cleaner and fresher, and the air seemed purer and sweeter. The disagreeable dusty, musty odor which almost always characterizes school-rooms had disappeared, leaving a pleasant odor of fresh pine. Teachers and pupils and even visitors noticed the improvement. The teachers were no longer annoyed by skirts soiled with floor dust, and in the primary room the children could play on the floor without soiling their garments. It was first thought that the new method of sweeping would increase the work of the janitor, but when the work of dusting became less and the scrubbing was reduced to a minimum, it was found that the damp sweeping had really lightened the work of caring for the rooms.

The amount of sawdust used was one-half barrel per month for each room, and the cost was twenty-five cents per barrel. When the sawdust is bought in large quantities, the cost will

be nearly met by the saving in scrubbing brushes and feather dusters. The new method of sweeping will be therefore only a little, if any, more expensive than the old and will certainly be more satisfactory in every way.

To test the improvement in these rooms in a sanitary way, Mrs. Neckerman secured the aid of Prof. Russell of the University, under whose supervision a number of bacteriological tests were made on the sweepings and air of both the dry-swept and damp-swept rooms. From the thesis of Mr. C. M. Ranseen, who assisted in these tests, we gather some data in regard to bacteria which are interesting and valuable.

It seems to be established that bacteria of the air have their origin in soil, there being no suitable pabulum in the air for their development. From the soil during extreme dryness these bacteria are hoisted into the air by the winds. The dust formed during dryness is composed of coarse particles or motes, easily visible in the sunbeams to the naked eye, and of finer dust only distinguishable with the aid of the concentrated beams. Most bacteria use these dust particles as their vehicles of transmission, while others go on their course independently, owing to their small size and specific lightness. Bacteria soon find their way into dwelling places through the minutest channels. Wherever dust is allowed to accumulate, as on damp walls, cracks in floors, furniture, beds, carpets, curtains, etc., these organisms are sure to predominate. When the dust is disturbed by sweeping, dusting, or even walking, these bacteria are again driven into the air. It has been found that the bacteria of the open air disappear to the ground with rain and do not rise again until all humidity has left. Water evaporated from the surface of the soil does not carry along with it any of the bacteria.

It has also been found that the number of germs settling upon a rough surface is far in excess of the number settling

upon a smooth surface. Walking across a room in the ordinary manner will cause germs to rise with the dust to the height of about six feet, while a dry-sweeping causes them to spread in a room to its fullest extent. About twenty times as many germs will settle on the floor as on the ceiling of a room. They may be transmitted from room to room and from one floor to another by means of smoke, currents of air, clothing, or other articles.

One method of determining the number of bacteria in any portion of air is to allow the dust and bacteria to fall upon gelatin or agar plates. The bacteria will develop into colonies which can be counted and examined separately. The number of germs which will fall on one square foot in one minute of time is used as the basis of comparison. In the tables below are given the results of some of these tests made in the rooms in the Third ward school building:

		DRY-SWEEPING		SAWDUST-SWEEPING	
		<i>Before</i>	<i>After</i>	<i>Before</i>	<i>After</i>
1. Feb. 16			14.5		6.
2. " 18			27.		16.
3. " 25			135.4		106.2
4. Mch. 2	8.7		147.	15.4	90.
5. " 9	8.4		35.	9.9	118.4
6. " 16	9.		130.	5.	54.
7. " 30	32.		1774.	20.	387.

The figures above record the number of germs which fell upon one square foot in one minute, both before and after the two methods of sweeping. The variations in the results are due in part to the time which was allowed to elapse between the sweepings and the tests. Test 1 was made one hour after sweeping; test 2 ten minutes after sweeping; tests 3, 4 and 5 immediately after sweeping. In test 5 the small number of germs after the dry-sweeping was due to the fact that the test was made the day after the floor had been thoroughly scrubbed. The large number of germs shown to be present

in the air at the time test 7 was taken, was due to the fact that the grounds and streets had been muddy for two or three days and much dirt had been carried into the rooms on the children's shoes.

It is important to observe that the presence of street dirt in the rooms on March 30th very greatly increased the number of bacteria in the air of the school-rooms. It must not be inferred that all bacteria are equally dangerous, for many of them are not germs of disease. The conditions, however, which are favorable to the development of bacteria of any kind are also favorable to the development of disease germs, and it may be relied upon that wherever bacteria are found disease germs will also be present in greater or less numbers. On the other hand it must not be forgotten that all fine dust and chalk particles, whether they are accompanied with bacteria or not, are more or less harmful, inasmuch as they are irritating to the air passages and are predisposing causes of throat, lung, and bronchial difficulties. From all of which it becomes apparent that the presence of dirt in the home or in the school-room is not only a shock to the housekeeping instinct and taste, but is a serious menace to health.

It will also be observed that the number of germs found after sawdust-sweeping was in every case less than the number after the ordinary dry-sweeping. These and other tests on the sweepings from the floors go to show that on an average the damp sawdust-sweeping reduces the number of disease germs in the school-room fully fifty per cent. Only one inference can be drawn from these results, and that is that it would be little less than criminal to continue the old method of dry-sweeping and dusting in the school buildings of the city. We are pleased to say that arrangements have already been made to introduce the damp-sweeping and dusting method into all the schools at the opening of the next school year.

It is only fitting to say in this connection that the credit for these valuable results belongs to Mrs. Geo. Neckerman, who devoted so much of her time and energies to those experiments, and paid from her own funds the expense connected with them. We trust that she will find some compensation in the consciousness of having in no small degree added to the comfort and health of the pupils and teachers of our schools.

SCHOOL CRITICISM.

There seems to be a growing disposition on the part of the people to criticise the public school. Expressions of discontent and disapproval are common, and severe denunciations and sweeping indictments are not infrequent. It does not necessarily follow, however, that the attitude of the people toward the school is one of hostility. A deep solicitude for their welfare may lead to an intelligent scrutiny of the methods and aims of the school with a view to their improvement. A keen appreciation of the work which the schools are accomplishing may suggest discriminating and helpful criticism. Even the sweeping and shallow denunciations of sensational dabbles in social problems are not without some compensations to the school. They at least excite interest and attest the prominent place which the school holds in the attention of the masses. The most superficial interest is preferable to indifferent apathy.

This critical attitude contributes in another way to the interests of the school. However superficial the inspection or hasty the judgment may be, they nevertheless emphasize the fact that the work of the school cannot be done in a corner; they furnish a safeguard against careless and thoughtless work. Amenability to public opinion enforces a closer scrutiny of school methods on the part of teachers, and encourages more rational conceptions of educational aims.

Very much of the adverse criticism of the public schools arises from an exaggerated idea of what ought to be accomplished—because too much is expected of them. The faith of the people in popular education has been unbounded, and the schools have been looked upon as the panacea for many of the ills of social and political life. "Each age," says Mackenzie Wallace, "has its peculiar social and political panaceas. One generation puts its trust in religion, another in philanthropy, a third in written constitutions, a fourth in universal suffrage, a fifth in popular education." The public school is the panacea in which the American people have put their trust. Where all other institutions have failed, the schools through some optimistic delusion have been expected to succeed. The three factors which must contribute to the education of the community are the church, the home, and the school. While all must contribute to intellectual and spiritual advancement, each has its peculiar task which the others cannot perform. The school can and should supplement the work of the church and the home, but it can never take their place or do their work. These limitations have not always been recognized, and the school has been expected to accomplish much that rationally belongs to the other institutions. When the school has failed to do all that has been so confidently expected of it, the disappointment has been keen and the censure and criticism severe.

All human organizations are subject to the limitations arising from the inherent imperfections of human nature. Even the church and the state are not exceptions; for if these are to be measured by the high standards that many enthusiastic souls have set up for them, they have proved more disheartening failures than has popular education. The Christian religion has been instructing and inspiring the most progressive races of men for the past nineteen centuries, and yet

no one will claim that an ideal moral and spiritual condition is in any degree universal, or that the millennium is close at hand. The problems of popular government have occupied the thoughts and minds of the best men of all ages, and yet no one will contend that more than a modicum of "liberty, equality, and fraternity" has been realized. The public school is a modern institution, and in its inception and functions has to do with imperfect human nature. To clothe it with more than human attributes, or to consider it as something superior to, and apart from, human society, is the most arrant folly.

From what has been said it must not be inferred that the outlook toward human advancement seems disheartening. The evidences of social and moral improvement are manifest on every hand. Political and social struggles are but evolutions which contribute to modern progress. Neither must it be inferred that there is any desire to belittle the offices of the teacher or the school. Public confidence in the school is steadfast, and its position among the instrumentalities at work for the betterment of the race is undisputed. It must not be considered, however, as a panacea for all ills, nor must it be expected to do the work belonging to other institutions of civilization. It is very desirable to reduce the popular estimate of the school as a factor in development to something like a just measure, and to have it understood that the school, no matter how good it may become, can never supply more than a minor part of the knowledge and discipline that is necessary for a well ordered life.

The Practical in Education.

It is often asserted that much of what is taught in the public school is of no practical value. The tendency of American life is strongly toward material things. This tendency is so

pronounced that the popular demand is for instruction in those branches only which are useful in daily life. It must be admitted that with a vast majority education is considered only as a means of getting a livelihood. Even the knowledge and discipline which result from the pursuit of certain branches, have recognized value only so far as they are of direct benefit in an industrial or in a professional way. "When the young man," says Arnold Tompkins, "contemplates leaving home to seek higher education, the current question is, 'What are you going to make of yourself?' thinking that but one kind of an answer is possible, and that in terms of a vocation. By the vast majority, education is assumed, without question, to be instrumental to 'getting on in the world,' and nothing more. So ingrained is this into our habit of thought that intelligent people generally show surprise when any other view of the case is suggested. Everywhere in conversation, on the street, in the car, in the social circle, in associations of teachers, and even among scientists, whose professed aim is truth for truth's sake, there is implied the utilitarian end as the ground of education. Ruskin complains of the same thing in England. He says in the many letters he receives from parents asking advice concerning the education of their sons and daughters he uniformly finds the thought of advancement in life; of something that will put a better coat on the boy's back; that will enable him to ring with confidence at the double-belled doors, and after a while to have a double-belled door of his own."

The economic side of education cannot be ignored. The struggle for sustenance is a constant one and so absorbs attention that the struggle for culture, for the realization of ideals of character, is hardly recognized. Yet few will undertake to maintain that material gain is the sole aim of life, or that physical comfort and happiness are more desirable

than spiritual good. In common thought these two ends are set opposite as if to attain the one were to ignore the other. It is also assumed that certain branches contribute to the practical or industrial side of life, while others have value in lines of culture and discipline. No such distinction properly exists. There is no antagonism between the two aims of education. The two, the physical and spiritual, must be reached through the same processes. The question is therefore not so much *what* shall be taught as *how* it shall be taught.

The common school branches are fundamental in the sense that they have a direct bearing on the struggle for physical existence. A knowledge of these is absolutely essential to industrial and commercial life. Without some knowledge of arithmetic the business of the world must stop. There could be no bank, no shop, no commercial intercourse. Each man would be cut off from his fellows. Being dependent upon himself he must use his energies in supplying his own necessities. This would make all vocations and professions impossible and destroy all industrial life. While not so obvious, perhaps the same results would follow were all knowledge of reading and writing, of geography and history, removed. Without these man would be out of touch with the race and civilization would be impossible.

It follows that a knowledge of the common branches is absolutely essential to civilization. Civilization is conditioned on physical freedom, and physical freedom corollates a degree at least of mental and spiritual freedom. Spiritual freedom is a concomitant to enlarged powers of mind and heart. The acquirement of a knowledge of the common branches involves the activity of the higher powers of the mind. The common school becomes an institution of liberal culture. There are therefore not two classes of subjects, cul-

ture subjects and practical subjects. The two ends in education have been attained in the same process and in the pursuit of the same branches.

The purpose of education is to equip for life's work,—to further life's interests. Whatever subject or method of instruction contributes most to this purpose, must be selected. All will agree that the development of character is the highest purpose of education. This must be held as the primary end of all school work. By focusing all effort on this fundamental purpose all other ends will be effectively secured. It is quite possible to attain a lower end without the higher, but an effort to secure the higher may secure the lower, even more effectively than if sought directly. "If the needs of the soul be administered unto, the utilitarian ends of life will be made more surely and truly realized than if the latter end be sought directly. If, in the act of teaching, the teacher holds firmly in consciousness, and is guided by the spiritual growth of the child, the best possible thing will be done for a successful career in life." Arnold Tompkins continuing says, "But these ends are not coordinate and reversible. It is not a matter of indifference which is set up as the goal; for it will be found that spiritual requirements are supreme, and, when met, the lower physical good is secured in the process; and more effectively than by direct effort. This puts the common school and university on the same plane. Both seek truth for truth's sake. Knowledge is its own end in one case as in the other. The common school is an institution of liberal culture; and the more thoroughly this end is secured the more substantial the equipment for the practical duties of life. If geography be so taught as to meet the spiritual necessity of the child, the best thing possible has been done in the interest of practical education. History best takes care of the practical question of citizenship by causing the pupil to feel

the life of the past throbbing in his own; and this is just what the teacher brings to pass for the pupil's sustenance. Reading so taught as to awaken ideals in the pupil and to stimulate him to realize them is sure to answer best all the practical purposes of that subject. Whatever drill in arithmetic is best suited to give scope and power to the mathematical faculty, as culture itself demands, is exactly in the line of practical training." The final truth to be urged is, that if the teacher wield the common school branches to the end of spiritual power, he will more effectively secure the practical knowledge and training for the daily duties of life. "It is ever thus: the teacher who keeps an eye single to the spiritual good of the pupil will most effectively secure the practical ends of the subject. The two are not in opposition, but to secure both, the aim must rest in the higher. The teacher who levels his work to the merely practical will miss that and all else; but the teacher who seeks the kingdom of heaven will have all things else added. It will be worth while for the teacher who is interested in this thought, to reduce all of the common school branches to means of spiritual life, and then note what a wonderful gain there has been in the interest of practical education."

"We must keep in mind that what is popularly known as practical education is the most impracticable. Power to think, to adjust the mind to the realities in the world, to reach true conclusions from carefully discriminated data; strongly developed and refined sensibilities; and an ethical nature fully aroused—these are in the line of a truly practical education. Book-keeping is not the immediate nor the fundamental qualification of a clerk; nor skill in measuring corn-bins and in computing interest the first necessity of a good farmer. In the eternal fitness of things, that which makes a man a man supplies the fundamental necessity for vocations.

A clerking man or a farming man is not so serviceable as a man clerking or a man farming." It thus becomes apparent that the lower ends are best attained through the higher. Many pupils from the public schools do fail in the simple problems of everyday life—computing interest, casting up accounts, measuring bins, lumber, wood, etc. This is not because these things were neglected but because they received isolated attention; because specific things were taught in specific ways; because the so-called practical was unrelated to the mental and spiritual. Dead formalism is due to the emphasis given form rather than content, processes rather than principles, knowledge rather than power. If the mental and spiritual necessities of the pupil are kept in mind, the question of the practical will be effectively disposed of. Truly, in education, as in ethics, it is the "letter of the law that killeth, but the spirit that maketh alive."

Multiplicity of Studies.

All agree that the school is a preparation for life. Whatever equipment in the way of knowledge and power is essential to a successful life, must be furnished by the school. As the views of life have been broadened, the demands upon the schools have necessarily increased. The effort to adapt the schools to the increased demands consequent upon a larger view of life, has resulted in the introduction into the school curriculum of what at first thought seems to be a very formidable array of subjects. To enumerate as independent subjects all the school exercises which enter into the work of a day or week, is very misleading. In many cases the subjects enumerated are only exercises in the application of principles belonging to the fundamental branches. The exercises in elementary algebra in the grammar grades are the generalizations of the principles of arithmetic, and occupy a portion of

the time formerly required for the work in that branch. Exercises in concrete geometry contribute to a clearer understanding of the principles of arithmetic. They are especially helpful in mensuration and are given in connection with that subject, requiring no additional time. Experience shows that by giving a portion of time usually allotted to arithmetic to the elements of algebra and geometry, the pupil not only gains some knowledge of these subjects, but really gets a broader and more intelligent view of arithmetic than he did when all the allotted time was given to this branch. Elementary science may be taught in connection with language lessons, and will furnish much of the subject matter for these exercises. In the primary grades nature work, clay modeling, paper cutting, color work, and other like exercises, are devices for occupying and directing the natural activities of the young child. When intelligently given, these exercises serve a wise purpose in training the budding faculties and in developing the powers which are essential to a well rounded life.

"There are apparent interruptions of school work which are not real interruptions," says Dr. Andrews, "and there are real interruptions which help instead of hindering. It was Herbert Spencer who refuted in his philosophy of style the old doctrine of rhetoric, that he wrote best who lodged his thought in readers' minds with the minimum of mental effort on their part. Spencer pointed out on the contrary that a writer may, without fault, make any necessary demands upon readers' attention provided he awakens their interest in a more than proportionate degree.

"This is not merely the true philosophy of style, but a correct principle of education. A brief game, a rhythmic march, a burst of sweet music in the midst of a morning's lessons is not a new load to haul, but new re-enforcement to the traction.

power. The judicious placement in the day's work of music, drawing, sloyd, saw or chisel exercises, calisthenics or gymnastics, not only does not lessen the day's yield of other knowledge, but positively increases it. This is explicable on well-known principles of psychology and mental hygiene." Arnold Tompkins has the same thought when he says, "It is misplaced sympathy to restrict the number of studies to make the work easy. It is more burdensome to confine the attention to one line than to give the change and variety of six lines. There is a false notion, too, that by confining the child to a few lines, considered most essential, as, reading, writing, and arithmetic, he will move proportionately more rapidly if the lines are decreased. This cannot be done for two reasons: first, the more rapid movement is naturally checked by the difficulty of the subject increasing more rapidly than the child's power of thought increases. All the lines can be carried as rapidly as his developing power permits the child to advance on any one line. Second, as indicated above, the lines omitted from the narrowed course are essential to the free movement in the lines selected. Even music, which seems to be slightly connected with the other branches, from the rest and buoyancy it gives the mind, may be carried along without retarding the progress in other lines. So that all the studies that would be omitted under the false notion of economizing the child's strength may be gained without loss of time, while supporting the lines so much desired.

"To be thorough in a few lines rather than a smatterer in many is a most deceptive argument. It thrusts in the face two horns of a dilemma, and in self-defense one of them is seized rather than to choose the other, forgetting that there may be a third choice. There is no such thing as being thorough in a few things without the knowledge of many. Besides, a student may be a smatterer in one line as easily as

in two. To smatter is to study things as isolated; to be thorough is to run a principle through them."

No doubt the number of subjects does cause some waste in the school program. This is not due to a lack of educational value in any of the branches, but because the relative worth of each has not been determined, and because they have not yet been brought into proper relation with the old work and with one another. We are in an educational way passing through a transitional period. Many of the changes have not yet been worked out perfectly, but are nevertheless full of promise. We believe, as is stated by Katherine Shute in the *Educational Review*, that, "inasmuch as the larger ideal must include the less, the time is not far distant when the schools will fit their pupils to love nature and good books and good pictures and good music and good manners without unfitting them to make change and spell the more common words of the English language."

In early days it was undoubtedly the province of the school to undertake nothing more than to teach the masses to cipher and to read and to write, and in so doing the requirements of the times were fully met. As the years have gone by the mission of the school has grown infinitely higher and broader. "It has sought," says Mr. Martin, "to lead children and youth into the fields of new knowledge as they have been successively opened, and it has tried to anticipate the demands which modern society would make upon them. As prospective citizens of their own country it has introduced them to history and civics; as citizens of the world, to an extended geography; as traders, it has provided arithmetic and book-keeping; as mechanics, mathematics and work in wood and iron; as housekeepers, sewing and cooking; as men and women, for health, for pleasure, for refinement, it has given instruction in hygiene, music, drawing, and literature. It

sums up its new conception of the breadth of its mission by seeking to send into life persons who without regard to their inheritance, mental, material, or social, shall be able to get the most possible out of life and to put the most possible into life."

Lack of Thoroughness.

Multiplicity of subjects very naturally tends to superficial work. Diversity of interests makes concentration of effort difficult. An attempt to teach too many subjects may lead to a lack of thoroughness in all. Thoroughness of knowledge and exactness of performance are attainments greatly to be desired. It must be confessed that many of the schools are not doing the thorough work that is desirable. Criticism at this point certainly finds some justification. It must be remembered, however, that even the excellent quality of thoroughness has its limitation. While accuracy is a great factor in education, it is not all. A man may not be able to read and spell without error and still in spite of this be a grand human being. The task of the school is not to make adding machines, but to train to efficient, rounded manhood and womanhood.

Attempts to secure an unusual degree of thoroughness may cause a serious waste of energy. The common notion that no degree of thoroughness is too great to be worth the time and effort to attain it, is a great mistake. Supt. Seaver of Boston relates an incident which illustrates this fact. A boy was taking lessons on the violin from a celebrated teacher. At the end of one of his early lessons he was much dissatisfied with his performance. He asked his teacher to be permitted to take the same exercise again for the next lesson, so that he might learn it more thoroughly; but the teacher refused, and gave a harder exercise for the next time. Again the pupil's performance was not satisfactory to himself, and again he asked permission to review. But no, the teacher assigned a still harder

exercise for the next lesson. Finally, after a course of these exercises, growing steadily harder and harder for each lesson, the pupil came back to the earlier exercises, which meanwhile he had not been permitted to review, and performed them with the greatest ease. Then he perceived that reviews of those earlier exercises would have been a waste of time.

Similar results have been observed by thoughtful teachers in connection with school work. The problems in arithmetic and algebra which mystify the beginner will be performed with ease after a series of honest struggles with more complex problems. The puzzling words and sentences of the first reading exercises become wonderfully simple after a study of the more difficult lessons. To continue the monotonous drill on the number tables until every detail is mastered, or to hold pupils to one selection in reading until the definition of every word is known and the meaning of every sentence is clear, may be a serious waste of time. Too much time and energy spent on perfecting details in any subject may deaden interest, and destroy the zest and ardor which are absolutely essential to great achievement.

Dr. Harris makes the fact apparent that something more serious than waste of time may result from over-thoroughness, namely, a condition of arrested development. In one of his addresses he says:

"We must, therefore, in the science of pedagogy, first fix in our minds the ideals, and then we must see how to elevate the child toward these ideals. We must ascertain what studies are necessary, and at the same time discover how much study of them is good and wholesome, and where they begin to be hurtful and arrest development. We all know how the good teacher loves to have her pupils on the round of a ladder where she is laboring. Under the plea of thoroughness she detains them, sometimes a year or more, on a lower round, not to their advantage but to their detriment. Before they ascend to the next round they have become listless and mechanical in their habits of study; and yet, it is certain that the school discovered an essential part of its method when it first saw the import-

ance of thoroughness. Thoroughness is necessary in all good instruction, but it is not good when carried to a point where induration, or hardening into habit begins. For at first a child increases his development in will power and arouses many faculties by the thorough exercise of one faculty; then, by degrees, the repeated acts of will power begin to produce a habit and the mind begins to act unconsciously in the line where it first acted with so much effort of the will; then, at last, the habit becomes nearly all and the mental development ceases. The other faculties are not any more aroused by the effort, but only one slender line of activity is brought into use and unconscious habit does most of the work. The induration has taken place and the continuance of thoroughness along this line robs other activities of nervous energy and absorbs them. A machine-like energy supervenes in place of intellect. What was at first an intellectual synthesis has sunk down into the realm of instinct, or to the forms of life activity but little above automatism.

"The attempt to secure what is called thoroughness in the branches taught in the elementary schools is often carried too far; in fact to such an extent as to produce arrested development (a sort of mental paralysis) in the mechanical and formal stages of growth. The mind, in that case, loses its appetite for higher method and wider generalizations. The law of apperception, we are told, proves that temporary methods of solving problems should not be so thoroughly mastered as to be used involuntarily or as a matter of unconscious habit, for the reason that a higher and more adequate method of solution will be found more difficult to acquire. The more thoroughly a method is learned the more it becomes a part of the mind, and the greater the repugnance of the mind toward a new method."

Spelling.

A criticism with which we are all familiar, and which usually goes unchallenged, is that our schools fail to make good spellers. It is undeniably true that there is a great deal of bad spelling in our schools, and that methods of teaching in this line may be greatly improved. Poor spelling, however, is not a weakness that is confined to the present generation. It is a matter of record that the school authorities of Boston gave a written examination some sixty years ago that led them to comment with severity upon the spelling of the pupils in the public schools. Letters and notes from parents lead

one to doubt seriously the efficiency of the methods of teaching spelling in the past. Although it is entirely impossible to make comparisons between the past and present, every evidence goes to show that the average pupil in the eighth grade of the schools to-day is a better speller in the written form than was the average pupil in the schools of fifty years ago.

In the past, spelling was taught as an accomplishment rather than as a useful art. It was done orally, and superiority was eagerly sought with a view to winning glory in spelling schools and to humiliating rivals in spelling contests. Skill was attained not in spelling common words in ordinary use, but unusual, puzzling catch-words, which were seldom used except in these contests. It must be noted also that the good spellers even in the past were few. The reputation of a school usually rested with two or three of the leaders, who were spurred to their utmost efforts by the loyal support and irresistible enthusiasm of the rank and file of the school. It is the few phenomenal spellers of the past that are responsible for the traditional faith of the present.

To-day spelling is considered simply as a means to an end. Ability to spell is of value only as a means of expressing thought in the written form. The test of good spelling is the ability to write words correctly in ordinary composition. Oral spelling is of no value except as an aid to the written form. Spelling is now considered a matter of form rather than sound, and is dependent on the eye rather than the ear. Oral spelling is a valuable drill exercise, but only so far as it aids in associating the sound with the form. No effort is made to teach the unusual catch words of the language, or to produce a few phenomenal spellers. The sole purpose is to train the mass of pupils to spell correctly the words ordinarily used in the expression of thought in the written form.

During the past year considerable attention was given in our schools to the subject of spelling. From time to time lists of common words were made up and given to the pupils for study and drill. Near the close of the year a list of fifty words was made from those studied and sent out as a test. In this exercise the teachers were directed to pronounce the words rapidly and but once, to note the time required to pronounce and write the whole list, and in marking the papers to count as mistakes all words omitted, misspelled, written over, blotted, erased, or defective in any way. These demands were very exacting but were in the interest of readiness and accuracy. The thought is that if the first impulse and move are not toward the correct formation of the written word, the word is not perfectly known. Even under these exacting conditions the results were very satisfactory. The average standing of the eight hundred pupils who took the exercise was 90.4 per cent. The average time required for pronouncing and writing the fifty words was five and three-tenths minutes. The average standing of the pupils of the eighth grade was 95.6 per cent, and the average time four minutes. One eighth grade had an average standing of 98.5 per cent and required only three minutes for the whole exercise. It is a matter worthy of special note that the class which did the most rapid work was the most accurate, both as to the writing and the spelling.

Sometime ago Superintendent Cogswell of Cambridge, Massachusetts, tested the ability of the pupils of his ninth grade (the highest grade) to spell words in ordinary use, without previous preparation or drill. Each pupil was requested, without reference to book or paper, to prepare a set of examination questions—two questions on each of the following subjects: Arithmetic, grammar, geography, history, geometry, and physics. The papers were then collected and

retained until further directions were sent. Later, the papers were given back to the pupils, and each pupil counted the words on his paper, omitting the little words like *an* and *the*. The number of words was marked on each paper. They then found the number of misspelled words, counting only once any word misspelled on any paper. The results for about six hundred pupils showed an average of over 90 per cent of correct spelling. Only one school fell below 90 per cent, while one averaged about 98 per cent. Other similar tests were made in the Cambridge schools which gave results even more satisfactory.

In our own schools at the close of the school year an estimate was made of the number of words correctly spelled in their written examinations by the pupils in the seventh and eighth grades. When the papers were written the pupils did not know that any special account was to be taken of the spelling. The papers in United States history were selected as the basis for the estimate. The averages were obtained in about the same manner as were those in Cambridge. These estimates showed an average of a little over 97 per cent of correct spelling in the two grades. The lowest average for a school in the eighth grade was 93 per cent, while the highest average was 99.2 per cent. It must be remembered that in these estimates the work of every pupil present in the grade, good, bad and indifferent, was counted.

With considerable confidence in its trustworthiness, we venture the statement that an equal number of children could not have been found in the schools of fifty years ago, who could have attained so high an average of correct written spelling under similar conditions. We believe that no equal number of teachers, assembled in institute or association, would under similar tests show any higher average of correct spelling. We venture, perhaps a little more rashly, another

statement, that the manuscripts of an equal number of college instructors and professors, taken as they come, without previous notice, would indicate no higher average of correct spelling than that indicated by the papers of the pupils in the above tests. And yet we are told that the present generation of children is totally unable to spell. This estimate is due in part to the fact that there is now and then a pupil in the schools who, from some mental defect or lack of early training, is wholly unable to spell, a condition for which the school is unjustly held responsible. Again, the efficiency of the schools is judged by the class of boys and girls who leave without finishing a course, to take positions as apprentices, clerks, typewriters, and stenographers. As a rule these are the weak pupils and leave because they are unable to do the work of the school in a satisfactory manner. The strong, vigorous, well equipped boys and girls usually remain to finish the course, and then pass on into higher institutions of learning. Then again it is probable that no inconsiderable part of the criticism arises from the natural tendency to exalt the past and to glorify all that is old and to discredit all that is new. Be this as it may, we believe that the commonly accepted opinion that the children of fifty years ago were much better spellers than are the children of to-day, is far, very far, from the truth. Without much question in a line of unusual words, and in oral contests, the children of fifty years ago could outspell the children of to-day. It is, however, the judgment of those who have given the matter the most attention, and all tests seem to justify this judgment, that in the common, every day composition, where ordinary words are used, our children of to-day are better spellers than were the children in the old schools. The phenomenal spellers may be fewer but the spelling of the masses is much better.

English.

The teaching of English in the public schools is subject to much criticism. That the public schools do not teach English has been asserted so commonly and with so much assurance that the statement has become almost stereotyped. We must confess, on the whole, that the use of English is not taught as well as may be desired. Every effort is being made to improve, and the schools are improving rapidly, in this direction. Much of the criticism in this line comes from young instructors and inexperienced assistants in higher institutions of learning, who fail utterly to appreciate the difficulties under which the elementary and secondary schools are laboring. Few of them realize what a large proportion of the children in these schools are of foreign parentage and never hear in their homes a single word of good English. In the lower elementary schools the different nationalities are easily discernible, but as the children pass on through the grades these differences gradually disappear, and no peculiarity of appearance or manner marks their difference in race. From a heterogeneous mass they have mellowed into a homogeneous group of bright and active American boys and girls, who promise well for good, loyal, intelligent American citizenship. Many of these derive their English training entirely from the schools and master the language well. Their speech never betrays the least sign of brogue or patois, and they write with much correctness.

The tendency is to expect altogether too much from the high school graduate. To look for exactness in expression and finish in style in undeveloped boys and girls is unreasonable. It must be remembered that time is an important factor in acquiring facility in the use of English. Clear expression implies clear thinking. Ability to think clearly and to reason logically comes only with time and is a concomitant of ma-

turity. "Out of the fulness of the heart the mouth speaketh." To expect of immature boys and girls a "ripeness of scholarship, a richness of tint, a mellowness" which experience alone can give, is the worst of folly. Not until some culture germ is found which, planted in the pupil, will produce the "fragrance and aroma which time alone has thus far been able to give," will the unreasonable expectations of our critics be satisfied.

Virility.

It is said, and with some truth, that the schools of to-day do not develop those rugged and virile qualities which make for energetic, progressive manhood. There does seem to be some lack of independent power and some slowness in assuming responsibility on the part of the youth of to-day. That fiber which rejoices in conquest and looks upon obstacles, as something to be overcome is not so common as could be desired. We have no desire to return to what Dr. Andrews terms "birch pedagogy" but we do recognize many merits in the schools of our fathers. They did teach the art of strenuous effort and recognized the value of that master virtue, tenacity of purpose. They did emphasize the "ought" and "must" in a way that engendered a wholesome respect for duty and obligation.

The reaction which has taken place along these lines is not entirely due to the schools, but in part at least to the changed conditions of social life. The free and responsible life of the country has in a measure given place to the restless, purposeless, idle life of the city. A greater leniency and an excessive indulgence characterizes the home life of the child. When these influences are considered it is really a marvel that the school has not more completely succumbed to the spirit of the times. With tens of thousands of city children the school, with its orderly discipline and definite demands, is a saving influence. When a fair judgment on these matters is

possible, it will without doubt be found that the school is performing its duties in the way of developing fibre and virility quite as well as the home or the church.

Morality.

The question of the relation between school education and morals is a very old one, but it is constantly coming up in some new form. The attitude taken on this question by some of the leading writers and thinkers has attached to it new and serious interest. Among the most notable of these writers are Richard Grant White and Benjamin Reece, who have taken the ground that education has not diminished crime. The article which perhaps has occasioned the most comment and criticism appeared in the *North American Review*, from the pen of Rebecca Harding Davis, in which she attempts to prove that education not only has not diminished crime but has actually served to increase it. She even goes so far as to intimate that the graded schools are breeding places of crime. No attempt can be made to discuss this question with any fullness. A few words will suffice to show the fallacy of some of the reasoning and to state a few of the facts.

Because the United States census shows that there has been a marked increase in the enrollment of the schools and in the number of inmates of the prisons during the same period, it is argued that the increase of prisoners is the result of the increase of attendance upon the schools. Rev. A. W. Gould shows the absurdity of such reasoning when he remarks, in a discussion on this subject, that diseases have increased during the past half century and so has medical skill; but that does not prove that one increase was caused by the other. Without increased skill and power to cope with them, it is very probable that diseases would have increased much more rapidly. So without the increased efficiency of the schools,

the growth of crime probably would have been still more rapid.

Much is made of the fact that a large percentage of the criminals can read and write. But that does not prove that their education made them criminals. Again using the thought of Rev. Gould, it is probable all the criminals can see, but no one would argue that it was their ability to see that made them criminals. "The densest ignorance may, like total blindness, keep men from crime; but we do not propose to put out our eyes of either mind or body. We will have men learn to see better, morally and physically. It is imperfect education that has brought men to prison. They may indeed have some sort of an education, but the vast majority of them are ignorant themselves, and have ignorant kindred and associates; and to be ignorant amid the civilization of to-day is to be jealous and bitter and rebellious." The great need is for more and better education. The mere ability to read and write will not save men from prison. They must develop a self-reliant and courageous spirit, learn self-denial, and acquire loftier ideals of life.

The returns from prisons and jails have been studied from time to time with the view to getting the facts as to the relation between schooling and crime. The results of this study have been valuable and interesting, but any attempt to give even a hasty review of the details would be out of place at this time. It will suffice to state briefly some of the results.

A study of the returns from the jails and prisons of seventeen of the states showed that only about one-fourth of the inmates were illiterate or not able to read and write. The fact that three-fourths of all prisoners could read and write at first thought seriously challenges the claim for the good influence of the schools. The question, however, is not whether a larger or smaller proportion of criminals are illit-

erate, but whether a given number of illiterates in the population furnish as many criminals as the same number of persons who can read and write. In the states referred to 4 per cent of the population were illiterates. The 4 per cent of illiterates furnished 25 per cent of the criminals, and the 96 per cent who could read and write furnished only 75 per cent. If one per cent of the illiterates had furnished only one per cent of the criminals, it would appear that education made no difference in regard to crime. But in these states the illiterates furnished more than six times their quota, while those who could read and write furnished one-fifth less than their quota. In other words, a thousand illiterates on an average furnished eight times as many prisoners as the same number who could read and write.

It has been stated that the number of juvenile offenders in London was greatly increased after the establishment of the London free schools, and the inference drawn that the schools were responsible for this increase. A careful study of the statistics by Commissioner Harris reveals the fact that while the total number of offenders may have increased, the number of offenders in proportion to the population had fallen off nearly one-half. The 128 persons in jail out of every 100,000 of the population in 1880 had decreased to 68 out of the same population in 1890. The authorities in England who are studying this matter attribute this great falling off of criminals in the jails to the wholesome effect of the schools. In the judgment of many, the good effect of the school has been felt more positively in improving the morals of the community than in quickening the intellect.

These investigations reveal also an interesting fact in regard to the relation between education and industry. It appears that the children who receive the greatest amount of schooling furnish the most productive population. In the

state of Massachusetts each child receives on an average about seven years of schooling, which is nearly double the amount that each person on an average is getting in the whole United States. The total production of the labor of the people of the United States in 1880 was about forty cents for each man, woman and child, while that of the people of Massachusetts for the same year was about eighty cents for each person. Thus the production of Massachusetts, with its larger average of schooling for each inhabitant, was nearly double that of the average of each inhabitant of the whole nation. Although these facts are not entirely conclusive, they do seem to indicate that the virtues of prudence, thrift, and industry are nurtured in the schools, and that there is some relation between the industrial and moral conditions of a community and the educational facilities which are afforded.

It has been stated often that the school educates the intellect but does not train in morals. Because of the absence of training in formal religion, the schools have been pronounced Godless. It is true that neither dogma, creed, nor formal piety can receive attention in the public school, but it does not follow that the school are immoral in their influence or irreligious in their tendency. Some confusion arises from an attempt to separate education, character, morals, and religion by sharp lines of difference. These have much in common and are vitally connected in principle. When a boy is taught to take up his daily tasks cheerfully, to meet every difficulty squarely, without dodging or flinching, and to assume responsibility courageously, he is certainly acquiring the essential elements of character. When he is trained in habits of punctuality, regularity, industry, cleanliness, decency of appearance and behavior, he truly has the fundamentals of the highest morality. When he is given the habit of cheerful obedience, a regard for the rights and feelings of others, a

respect for law and order, and a love for truth, he has surely the very spirit and essence of practical religion. We may not be able to teach morals in a formal way or give instruction in the truths of religion, but all good instruction is ethical in its results. Ability to see things as they are and to adjust the mind to realities leads towards honesty and truthfulness. Power to think and to form judgment is an aid in adjusting means to ends and in anticipating moral consequences. The habit of viewing things from all sides and seeing the other and opposite phases, leads to character and liberality. In fact, all instruction and all discipline, when understood and rightly directed, should contribute to ethical and spiritual growth.

Other Criticisms.

One of the criticisms that can be made on the schools with reason is that they have not been able to bring the pupil into close touch with real things. Philosophically stated the pupil is not led to find himself in the subject taught. It is not that the schools have failed to give training in special lines or for vocations, for probably this is not their function, but that they have failed in a measure to reach the content which lies back of the form, to reveal the realities for which symbols stand. In spite of our philosophy of attention and doctrine of interest, it is still a question how to make a boy see that the tables and processes of arithmetic have anything to do with real relations which exist in nature; that the language and map symbols of geography stand for actual conditions and real places and features; that the records and narrations of history are based on human experiences and actions. Our educators are aware of this weakness and efforts are being made to remedy it. Much is hoped for along this line from the introduction of the kindergarten and manual training exercises. In these the central thought is to direct the natural

activities of the child and to emphasize the practical and the concrete, to bring the pupil into contact with real things and processes. But even these methods must be applied with intelligence and discretion, for efforts to be natural are sometimes the most unnatural. The exercises connected with the kindergarten gifts and with manual training exercises, may become mechanical and artificial. There is danger of arousing interest simply for the sake of interest, or for mere amusement. It is easy to mistake interest in external devices for interest in the subject itself. Real interest is possible only when the mind is brought into vital touch with the thought in the object, and finds in it some realization of truth.

Another criticism that is made with some justice is that the schools do not afford sufficient training in the right use of books. An appreciation of first hand knowledge must not lead to the disparagement of book knowledge. A knowledge of things must not result in ignorance of books. In our efforts to cultivate the habits of observation and research, we must not fail to develop the power and habit of gathering information from the printed page. "To say nothing of the past or of the immaterial universe, this world," says Dr. Andrews, "contains by the quadrillion all-important things of which we can never have hand or eye apprehensive. Sane educational discipline must therefore deal largely with books; their constant use must be inculcated and the love of them set forth as an indispensable part of schooling. History must be open to the maturing pupil, and he must be taught to draw therefrom lessons to guide him in manhood. Book knowledge is certainly not all, but it is valuable, nay, invaluable. At this point we need a certain return to the methods of the school in the wilderness forty years ago, when the book and the pupil's hard study of it did so much to make him a man. Serious reading should be urged—essays, history, science,

philosophy; books that test and books that drill—not fiction and poetry alone. Noble passages should be memorized and the cardinal dates of history ‘nailed for keeps.’ This demands will power, but it is important and should be insisted upon. A pupil should on graduation have not only an open mind and a rounded, beautiful nature, but a large amount of absolutely correct information in detail.”

It is thought by some that under our prevailing methods pupils are not trained to do vigorous and independent work. In the reaction against the old methods of grind, when the easy thing was necessarily the wrong thing, and gratifying activity was demoralizing excess, too much has been made of gush and involuntary interest. In the effort to make work pleasing much of the ardor and zest which accompanies achievement has been lost. It is a serious mistake to think that to make a task interesting is to make it necessarily easy. The very basis of all interest is the consciousness of making progress, of accomplishing something, of acquiring power and skill. Some of the most gratifying experiences of life came with the glow and satisfaction attending honest and successful effort. We do rejoice in the conditions which make possible “sunlight and pure air, and comfortable seats and tasteful decorations and healthful lunches, and sympathetic teachers” but these should be the stimulating influences which arouse interest, call out self-activity, and encourage earnest and strenuous effort. We have no desire to make the school environment any less inviting but we do feel the need of emphasizing the value of hard work and persistent effort. There is need of impressing our youth with the seriousness of school and life work, and of bringing them to a realization of the fact that there can be no rewards without labor, no real success without sacrifice.

In closing this part of the report I wish to quote again from

Dr. Andrews when he says in a more hopeful view, "The public school teaching of the next century will correct this, developing the heroic qualities in children. The teacher for his part should certainly be the source of interest to his class, but woe to the pupil if he depend for motive on such foreign source. No greater virtue can exist in a child than the inspiration to follow up and finish an unpleasant task. The work men have to do is not always delightful. You must take life as it comes, distasteful with the inviting. Most often the sunshine, less or more, irradiating your path, must spring from within yourself. Permanent interest in your work cannot be supplied by another. When perchance a little is thus generated your own strength is lessened, your manliness, your independence impaired. Pupils' resolution must be developed, their self-reliance, their courage, their initiative, and their ability to bring things to pass. My conviction is that schools are soon to give this due training in will power and in character. Such reform will render education well-nigh complete. That the on-rushing century will mark vast educational progress none can doubt; may we hope that its advance will match that of the vanishing hundred years? Mad as the optimism may seem, I believe it. As the school which now is is to that of the year 1800, so, or more so, shall the school of the year 2000 be to that existing to-day."

R. B. DUDGEON,

Superintendent of Schools.

Madison, Wis., August, 1901.

PRINCIPAL'S REPORT.

To R. B. DUDGEON, *Superintendent of City Schools, Madison, Wis.*

Dear Sir:—I have the honor to submit to you my tenth annual report on the high school.

A COMPARISON.

At the close of the ten-year period, it may be in order to make a short comparison between existing and former conditions.

To those familiar with the high school history of the past ten years, there appears a great degree of progress in several directions.

1. Our enrollment has increased 81.7 per cent. The per cent. of attendance has remained very uniform averaging about 95 per cent., while tardiness has decreased 60 per cent.

YEAR.	TARDINESS.	PER CENT. OF ATTENDANCE.	ENROLLMENT.
1891-1892.....	697	95	323
1892-1893.....	472	95.5	339
1893-1894.....	380	96.5	357
1894-1895.....	420	95	397
1895-1896.....	351	96	417
1896-1897.....	398	95	479
1897-1898.....	200	96	486
1898-1899.....	290	96	534
1899-1900.....	372	95	578
1900-1901.....	275	95	587

2. In scholarship, there has been a noticeable improvement. According to the testimony of a teacher who was a former pupil in the high school, the standard of scholarship has been greatly advanced. In making our changing conditions fit our ideals much difficulty has arisen on account of our crowded rooms, but in spite of this, the increasing demands made upon us by U. W. and State authority have been met as rapidly as conditions would permit.

3. In spirit and earnestness the improvement is very marked.

Your own observation will bear witness to this statement while the reports of visiting committees refer to it in terms of praise. As the direct result of the existence of such a spirit, the ease of management has been greatly increased. Questions of discipline once so difficult have grown to be less feared until most of the management is now a pleasure.

Whatever has been gained in easy administration, comes from a persistent effort to have it understood that the high school is a place for business and therefore should be conducted upon business principles. "Do the things which profit thee. Think ere thou act" is not too old to be of service in directing the activities of high school pupils.

RETAINING TEACHERS.

In order to maintain discipline and instruction in the high school at the point of maximum efficiency, care must be taken not only in the selection of teachers, but also in retaining such as are found competent. Having found a corps of teachers capable of working together in harmony and for the best interests of pupils, it is manifestly unprogressive to allow good teachers to go elsewhere under the inducement of higher salaries. The high school is not intended as a training school for teachers, and yet, having gained some successful experience with us, teachers are in position to accept propositions from boards of education having more money at command.

The board of education is sometimes criticized for its failure to meet the demands made upon it in this direction, but the fault does not rest with the board. It rests with the authority of the city government which determines the amount of money a board shall have at its disposal. Given a certain amount of money with which to maintain its schools, the question arises with the board, "How can the best results be secured, not at the least expense, but with the money at our command?"

Accountable as the board is to the city, it seeks to secure the greatest educational advancement, and yet avoid what many never think of, viz:—a deficit. The remedy lies in an increased fund—a fund commensurate with the needs of a growing city. In securing this, wisdom in providing it will doubtless be followed by wisdom in expenditure for a school system in keeping with the highest and best ideals.

METHODS OF INSTRUCTION.

In our search for causes of pupils' failure, teachers' methods have been given considerable attention. While there are numerous causes on the pupils' side, it would be unfair to assume that the teachers' side is above criticism. Observation of teachers' work, however, reveals a good degree of preparation, unusual earnestness, a desire to work in harmony with other teachers and for the best interests of pupils, and a keen sense of the responsibility involved both in the instruction and discipline of the high school.

While commending the work of the teachers, I would urge more attention to two particulars, viz.:

1. More definite assignment of lessons. In fact such a definite assignment that no possible chance for misunderstanding may exist. This may take time, but will tell on the character of the next recitation. Vagueness in requirements in this direction is productive of great waste of energy on the part of conscientious pupils and adds to the indifference of the careless.

2. A more sympathetic interest in pupil's work and a better understanding of pupils' motives of action.

If a recitation becomes an annoyance, if the meeting of pupil and teacher either for work or for discipline becomes a mutual aggravation, no desirable results can be secured. In both of these, the master hand of the teacher must be recognized, but the pupils' right to considerate and just treatment must not be overlooked. "Correct methods, said Comenius, "are the panacea for the ills of teaching." If this be true, as much care should be exercised in methods of discipline as in methods of recitation.

COURSE OF STUDY.

A well founded impression prevails among teachers to the effect that third year classical pupils have too much work. Since the addition of English history to all courses two years ago, the classical people have had three periods of work more per week than ever before. The science and English pupils had the same addition; but their other work was so arranged that the increase is not so marked.

While the work seems a little too great in this direction, I should not recommend any change until the plan has been tried longer. It is possible that some change can be made to compensate for this apparent crowding.

In the first year English and science courses more work should be required in the studies already in progress. The apparent lack of work can be removed by increasing the intensity of the work to the extent of keeping everybody busy, but not to the extent of discouragement. Extra work in German and English can be furnished so as to keep all pupils fully employed.

PART-TIME STUDIES.

A majority of teachers are opposed to studies in which recitations occur only two or three times a week.

The chief objection lies in the fact that the time of the first recitation of the two or three is exhausted in determining the ground covered by the last recitation. So much time has elapsed since the last lesson that

pupils are unable to get their bearings and thus proceed intelligently with the advance lesson.

It must be borne in mind that the plan is new and has not had sufficient trial. As might be expected, the greatest difficulty arises in the first year class in which plans are poorly laid. Results are better in third and fourth year classes whose members, on account of greater maturity and experience, are able to plan their work to advantage. Teachers having this work in charge should urge the great necessity of planning work so as to be ready for it at the proper time.

In pursuing such a plan, it is necessary to avoid too great a multiplication of studies. It may be difficult to determine how many studies can be successfully carried at one time, but there is a growing belief that from primary school to university the pressure of study is too great and involves an outlay of energy in study which is not compensated by results. As far as my observation goes, pupils would gain immensely in thoroughness if fewer studies were attempted. They would gain in expertness and enjoy study instead of being conscious of superficial knowledge and a distaste for study.

In at least four directions has the course been improved:

1. The extension of the work in history.
2. The extension of the work in algebra.
3. The introduction of English into all courses for all years.
4. The adjustment of science work in biology, botany, and physiology so as to secure greater unity, and to prevent overlapping of work in the first two subjects.

All of these must add interest to pupils' work. As a pupil's interest bears a direct ratio to his estimate of its usefulness to him, the wisdom of the above mentioned changes are apparent.

ONE SESSION.

The one session plan was followed during the spring term with no new developments either in advantages or in disadvantages.

No doubt the worst feature of the plan is that chances for individual assistance are largely diminished. There is not much time for this before 8 a. m. After 1 p. m. no one desires to remain. Confined, therefore, to teachers' free periods the work of individual instruction is much hindered. The high school is too large to permit a great amount of work to be done during free periods only.

Another feature, concerning both teacher and pupils, is the fact that teachers cannot do their best work continuously. The last periods of the session are marked by a decline in teaching energy which detracts from the teachers' efficiency and therefore from the pupils' progress.

ATTENDANCE OF GRADE IV.

Unsatisfactory as it is, the plan of attendance for this grade seems to be a necessity. It relieves the crowded condition of the main rooms and is justifiable on that ground but, even when managed most wisely, cannot be looked upon as conducive to the best study.

If parents would undertake the responsibility of looking after a pupil's time, and of requiring the right use of time, one evil of the plan would be abolished.

Another disagreeable feature lies in the inconvenience of the plan. As the recitation rooms are so fully occupied there is no place for pupils to go when a few minutes early or when obliged to stay over one period. The pupil must run the risk of being tardy or of staying out of doors until the time for the recitation to begin. Vacant recitation rooms are utilized as far as they are available but with more teachers than rooms, the chances for finding vacant rooms are reduced to a minimum.

ATHLETICS.

While athletic success may not be measured by the condition of the treasury, the existence of organized athletics in the high school should be permitted only when the athletic association can boast of freedom from debt. If athletic sports are to receive the attention and support of business men, they must be so managed as to show a balance on the right side of the account. If gate receipts do not meet expenses, athletics should be dropped and our attention turned to the regular business of the high school.

Owing to the persistent efforts of Messrs. Link and Stangel our athletic year closes with a balance of \$85.75 in the treasury. All old debts extending back several athletic generations, have been paid and thus the association has been placed in a financial condition unknown to the oldest resident. The above mentioned balance would have had a short lived existence, had it not been for our abolishing the base ball team. Such a step was taken, not from any desire to interfere with what has always been to us a fascinating game, but because of the fact that the base ball team could never pay its way. As a consumer of cash and a creator of deficits, it has had no equal. While some of its friends were slow to give it up, the wisdom of abolishing it is now very evident.

Another step in advance has been taken in not permitting the election of a pupil manager for the coming foot ball season.

According to the rules of the Interscholastic Association the principal is manager of the athletic teams. He may delegate the authority to some one else. Here, the plan has been to allow the athletic association

to elect a manager. The principal has always approved such election even when he felt that the choice was unwise.

There are several reasons why the pupil manager should not be elected. In the first place, he does not have much freedom of choice or decision. Too many people have something to say in all arrangements to make it comfortable for a pupil manager. His being held to such accountability arises from the fact that the superintendent and principal have always required a manager to report for frequent conferences upon the progress of events.

Again the tendency to over-expenditure or unwise expenditure (mentioned in a former report) has been so painfully evident that nothing but the strictest supervision would save us financially. In order, therefore, to reduce the number of supervisors, to insure a better understanding in contracts, greater responsibility in finances, and easier management, the new plan has been adopted. While it may not obviate all difficulty, its superiority over the old plan is already proven.

Our success in games has been gratifying. Whatever our standing may be, we are certain that the work of our foot ball team was marked by earnestness, a conscientious regard for the rules of the Inter-Scholastic Association, and, best of all, by good conduct.

MUSIC.

The experiment in chorus work twice a week by the whole school was a marked success. Competent judges affirm that the quality of the singing under the new plan greatly exceeds all former singing in the high school.

No doubt there are directions in which improvement is still greatly to be desired. As the new plan has been on trial for less than two terms it is very probable that there are some undesirable conditions whose elimination will demand the united effort of teachers and pupils.

DRAWING.

The work in drawing continues to be of a high quality. Further improvement will be made by placing drawing upon the same basis as other branches. A recognition of its importance will be declared by requiring a passing standing in the subject. Failure in it will scarcely be possible except through deliberate neglect. While it is not expected that all will reach the same degree of excellence, it is desirable that all pupils shall give it their best effort. Our requirements in this subject need not be greater than or different from those in other subjects but should represent our idea of its importance.

Pupils from other schools entering our second year and not having had drawing should be required to make it up.

To add to the efficiency of Miss Cravath's work, there is every indication of the need of an assistant. I speak now merely from the needs of the high school. Under pressure of lack of time, one branch of the work has been given up. For several years, pupils in the second, third and fourth grades had an opportunity to continue their work in drawing at such times as were convenient. This means the formation of a class having a taste for the subject and if their time permits, certainly an opportunity should be afforded for the further pursuit of the study.

LITERARY SOCIETIES.

The literary societies have had a successful year. Interest in these societies seems to be increasing. As the benefits of membership become more apparent, a greater number will avail themselves of the privileges here offered.

In the selection of members, it has been urged that great care should be exercised. Willingness to work and good standing in studies have been recommended as conditions for membership.

The Nautilus Club, at least, has followed instructions and as a result is building up an organization which promises very great advantages to its members while it reflects great credit upon the high school.

The boys' society is undoubtedly doing good but needs closer supervision in its meetings. Its members are not selected with the same care as in the girls' society. Good results of the society are seen in the debates presented from time to time.

FRATERNITIES.

The visiting committee's report criticises the influence of secret societies in the high school and urges action looking towards their suppression.

As long as these societies occupy such a prominent place in U. W. life, it is not strange that the high school should be invaded by them.

They are, no doubt, prolific wasters of time and energy, and in this regard may be criticised even if they do not display their offensive features in determined efforts to manage class or high school affairs.

A prominent citizen has characterized the high school as a "democratic institution" whose affairs should in no way be managed by associations or cliques, whether secret or not.

While deploring the existence of such organizations, it must be said, in justice to the young people composing them, that, with one exception there has been discovered no tendency to make their organizations obnoxious.

From a careful survey of the subject it would appear that as long as such organizations hold their meetings at the homes of the members, and make no efforts to monopolize high school honors and positions, our authority can scarcely be exercised beyond an effort to discourage them.

Here is a supreme opportunity for the exercise of parental authority. It can be made very efficient and would, if properly exercised, amount to prohibition, thus relieving high school authority of a difficult burden. We stand ready to assume all reasonable responsibility, but are confessedly slow to take from parents their right and duty to regulate the affairs of their children when not in school.

DECLAMATORY LEAGUE.

Our place in the Declamatory League remains unimportant, but it may be that place is commensurate with the attention given the subject. More was done than in previous years and much more interest taken by pupils generally.

As no other schools would unite with us in a contest, our representative to the District contest was determined by a home contest which was entered into with much enthusiasm.

While commending the effort of instructor and pupils, the fact remains that we, as a school, have not paid enough attention to this important subject. The crowding of the rhetorical work of the high school into three periods is unfortunate and can never result in high class speaking. The subject merits a better consideration, more time, and an instructor's whole time. The change to the old plan for the coming year meets with the approval of all concerned.

In carrying on the work of this department, care needs to be exercised in selecting the class of work to be done. There is a tendency in one of two directions, viz.: dramatic reading and reading for entertainment. There seems to be no medium ground covering the ability to read well, to speak distinctly and effectively. The notion seems to prevail in some minds that good reading involves the expenditure of an immense amount of bodily energy, while others believe that all school work in this subject should contribute to entertainment and therefore only the funny piece receives attention.

There can be no excuse for requiring a pupil to commit a selection which is not worth remembering. It may be that after the school period is passed, the pupil may become an entertainer, but in his high school days, the ends sought are discipline and development. Every selection committed should be a gem. Every declamation should be a masterpiece. Time spent on doggerel selections or upon attempts to render tragic selections is worse than wasted. Acting should be left for later

stages of study and the pupil should devote his whole attention to the cultivation of his ability to express himself clearly and to bring out the thought of his declamation. More attention therefore, should be paid to straight-forward reading and less to elocution as at present known.

LIBRARY.

Recognizing the importance of the library in all high school work, I earnestly recommend an increase in the number of books for reference. Under the immediate direction of the teachers, the reading of pupils is carried on much more effectively than in former years. There is less desultory reading, less play with books just to pass away time than under our old plan. The departments needing aid in this direction are mainly science and literature.

LABORATORY WORK.

All science work in the high school is suffering from a lack of room. In biology and physiology our divisions have been made smaller and thus the effectiveness of the work has been greatly increased but the decrease in floor space caused by cutting off two rooms from the laboratories has more than offset the good resulting from the small divisions.

Recitation room and laboratory should be separated, but under existing conditions cannot be.

Laboratory work in physics requires more space than in other sciences, and as the laboratory divisions are large it is almost impossible to give the work proper supervision. In fact, when classes are at work it is difficult to get from one part of the room to another.

It is to be noted that while our attendance has increased 81.7 per cent. our rooms have increased only 29 per cent. Of this increase of five rooms, two have been cut from two others so that what we gain for one purpose is lost for another. Two more rooms have been made from the attic room over the main room of new part which was never intended for recitation purposes as is shown in its lighting, warming, ventilation, and the difficulty in reaching it by a narrow and steep stairway. Another room was made from a basement corner—the old home of the chemical department—a room wholly unfit for habitation, too dark, too cold, too damp. With different heating apparatus, it might be improved but is far from satisfactory. As there are no more attics or basement corners to be utilized, further increased attendance can be accommodated only by allowing more pupils to report for recitations only.

One of the most discouraging results of this lack of room lies in the inability of instructors to arrange for experiments and this most seri-

ous difficulty is not apparent to anyone except to those familiar with the subject. Work begun must all be left in one recitation room subject to accidental or careless disarrangement, so that one is never certain of the exact condition of things.

Willing as we are to be judged by exact standards and modern methods of teaching, it must be borne in mind that what we do is limited in two particulars, viz.:

1. Lack of room.
2. By the time at the disposal of instructors.

With increasing numbers, the work of supervision has increased so that the time at the disposal of the Principal is much shortened.

While not ashamed of our results, we are painfully aware that they fall far short of our ideals.

Our lack of room is the great hindrance to successful work, and very much exceeds that arising from equipment. Our apparatus in quantity and quality is much superior to our opportunities for using it.

While deprecating existing conditions, we are well aware that no further improvement can be made until a new building is provided which shall enable us to pursue our science studies in a more satisfactory way.

It is humiliating to be making constant apology for the character of the work done, but the impossibility of anything better under present conditions is too evident to require further comment.

PUBLIC EXERCISES.

The following public exercises were held:

SEMI-PUBLIC PROGRAM.

Opening Address.....	Mr. H. W. Adams
Reading	Margaret Frankenburger
Selection	Orchestra
Solo	Mildred Gapen

Debate—

Resolved, That the Dispensary System as in vogue in South Carolina is preferable to total prohibition.

Affirmative—

A. Baas,
C. King,
C. R. Welton.

Negative—

F. Cronk.
Z. Upham,
W. Atwood,

Reading	Emma Glenz
Selection	Orchestra
Whistling Solo.....	Marian Jones

Decision.

Judges.—Prof. H. L. Smith, Prof. D. B. Frankenburger, Rev. B. B. Bigler.

ARBOR DAY.

PROGRAM.

1. "Down in the Dewy Dell".....Fourth Year Glee Club
2. Quoted Tributes to Woods and Flowers.....Second Year Pupils
3. Selection Double Quartette
4. Reading,—“Naughty Zell”.....Alice Newcomb
5. AddressProf. A. A. Bruce
6. Intermezzo from Cavalleria (*Mescagni*).....String Quartette
7. Class History..... { Jean Stevens.
Rob. R. Hiestand.
8. Solo — “It was a Lover and His Lass..... { *Shakespeare*.
Leila Wallace. { *De Koven*.
9. Reading (*Selected*).....Mildred Curtis
10. Spring Song (*Tully*).....Girls' Glee Club

Planting of Tree.

11. Oration, “Address to Graduating Class”.....George DeLacy
12. Song, “America.”
May 3, 1901.

COMMENCEMENT.

“Nothing Without Labor.”

PROGRAM.

MUSIC.

- Prayer.....Rev. P. B. Knox
- *Salutatory.....Fred Viall Larkin

MUSIC.

- Address—“Elements of Success”.....Hon. L. D. Harvey
State Superintendent

MUSIC.

- *Valedictory.....Bertha May Taylor
- Presentation of Diplomas.....Professor Storm Bull

MUSIC.

*Chosen by the Class.

GRADUATES.

ANCIENT CLASSICAL COURSE.

Richard Ely

MODERN CLASSICAL COURSE.

Elizabeth Abaly
 Chauncey Abbott, Jr.
 Katharyn Isabella Brahany
 George Stanley Barber
 Edith Adelia Buell
 Josephine Louise Bach
 Arche Berton Braley
 Charles August Breitenstein
 Forbes B. Cronk
 Grace Servatia Cantwell
 Barbara Hillon Curtis
 Arthur Cecil Deming
 George Lewis De Lacy
 Margaret Monica Donovan
 John Eckley Daniells
 Martha Marion Fay
 Adelaide Elfrida Griffiths
 Edna Lucretia Harrison
 Frank Hall Hinrichs
 Hazel Isaacs

Gwendolyn Gaynor Jones
 Marion Burr Jones
 Charles August Robert Leatzow
 Augusta Christine Lorch
 Annie Minetta Littlewood
 Cora Miriam Norsman
 Claire Parsons
 Marshall Hylon Pengra
 Carl Frederick Pfund
 Marie Matilda Redel
 Alma Catharine Reif
 Leverett Ernest Rice
 Cecil Everett Schreiber
 Harry Stock
 Estella Marie Starks
 Pearl Niel Samuels
 Marie Edith Tirrell
 Bertha May Taylor
 Chauncey Rex Welton

SCIENCE COURSE.

Mabel Adams
 Kate Agnes Billington
 Cora Ethel Bissell
 Lulu Edith Cass
 Frank Mathew Conlin
 Leo Marshall Cook
 John Thomas Cummings
 Willard Richard Denu
 John Alford Froenich
 Ernest Albert George Guenther
 Alice Cary Gallagher
 Arnon Taylor Henry
 Rob Roy Hiestand
 Una Lone Johnson
 Max Werner King
 Olive Carmen Lawson

Fred Viall Larkin
 Emmett Gregory Lyons
 Elizabeth Marie Lynch
 Ruth Erema Lyon
 Reuben Julius Neckerman
 Harry Marimies Olsen
 Edith Post
 Claudien Purtell
 Helen Meroe Pierce
 Hattie Margaret Roesch
 Jean Murray Stephens
 Lottie Irene Schne.
 Lillian Elizabeth Taylor
 Zura Eusebius Upham
 John Charles Vroman

PRINCIPAL'S REPORT.

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ENGLISH COURSE.

Frederick Albertus Collman	Ottillie Louise Kirst
Jessie Morrell Coombs	Alva Ketchum
Earl Harvey Darling	Lulu Lillian Runge
Eugene Fuller	James Raymond Stack
Edward John Hammer	Harry Edward Sykes
Joseph Ignatius Hyland	Chester Arthur Taylor
Marietta Holt	

GRADUATES SINCE 1875.

Graduates to date, male.....	366
Graduates to date, female.....	513
Total	879
Graduates for past 10 years, male.....	262
Graduates for past 10 years, female.....	311
Total	573
Graduates of M. H. S., also graduates of U. W., male.....	112
Graduates of M. H. S., also graduates of U. W., female.....	101
Total	213

It is to be noticed that while more girls than boys have graduated from the High School, the order is reversed counting the graduates of U. W., who also are graduates of the high school.

The above statement shows that of all graduates of the high school since 1875, 65.2 per cent, have graduated in the past 10 years.

The total number of graduates up to and including 1897 is 569. Counting all of our graduates from U. W., including those of 1901, we have 213. Therefore, 37.4 per cent. of our high school graduates have also graduated from U. W.

Of the 280 U. W. graduates on the program in the class of 1901, 23 of them or 8 per cent. were our high school graduates.

OUR STUDENTS AT U. W.

Our interest in the young people who graduate from us does not cease at the time of graduation. It is a pleasure to follow them through the University and further into active life. A brief statement of the honors received by our pupils at the last U. W. Commencement may not be out of place in this report.

The Science Club medal was awarded to Mr. Herman Pfund for the best thesis in science.

Special honors were awarded to Miss Caroline Evans for thesis in mathematics.

Mr. Louis Rowell received a universal scholarship in Electrical Engineering.

Mr. Irving Brandel was chosen University Fellow in Pharmacy, and Mr. Edward Cook in English.

The degree of Doctor of Philosophy was conferred upon Miss Lottie Pengra and Mr. Kenneth Leith, both High School graduates.

ALUMNI ASSOCIATION.

By the persistent efforts of Miss Kate M. Corscot an Alumni Association was formed. Its first banquet was given June 15.

Alumni present report a most enjoyable time. Considering the number of graduates in the city, it ought not to be a difficult task to maintain a flourishing association.

CONCLUSION.

The year has been one of the most successful. In ease of management, earnestness of pupils and teachers, and the progressive spirit shown the year is certainly unsurpassed. Pupils have adapted themselves to circumstances in a way quite beyond expectations.

While we recognize the shortcomings of high school pupils, we have great faith in their good intentions and controlling motives.

Respectfully submitted.

J. H. HUTCHISON,
Principal High School.

REPORT OF THE SUPERVISOR OF DRAWING.

TO MR. R. B. DUDGEON, *Superintendent of Schools, Madison, Wis.*

Dear Sir. I hereby submit my fifth annual report.

While the general character of the work has been as in preceding years, there are a few changes that impress me.

It is true that the high school work does not fulfill all that the grade work promises. The best results can be obtained only from individual criticism and the classes are too large to admit of this. As the number of ward schools increases, there is no time for optional classes, so that beyond the freshman year, there is no opportunity for continuing the work.

Many of the best high schools are putting art work on the same basis as other branches, making provision for it through the entire course.

Two years ago brush work was introduced in the grades. Ink was used so that pupils might become accustomed to handling the brush without the added problem of color. This year the use of color has been made general with results gratifying to both teachers and pupils. In first and second grades constructive work has been carried on more systematically than before. A type form is studied and something based on this form is made and decorated. To illustrate: The cube is studied and a train resembling this form is folded and cut. Ordinary drawing paper has been used for this purpose and color has helped in the decoration. This is a step toward manual training and I hope it may be continued through the grades.

This time it is the generosity of Mrs. Wayne Ramsay that places four large framed photographs in our schools. The Coliseum and Guido Reni's Aurora go to third ward; the Bridge of St. Angelo and Caesar to second ward.

An unknown parent sends to the high school a large portrait of Daniel Webster, a parting gift from her son a member of the graduating class. These are most welcome gifts which prove to us a growing interest in school-room decoration. Below is an outline of the course for the year.

AIMS.

1. To train mental faculties—Observation leads to clear precept; clear precept to clear concept; clear concepts lead to correct judgments. To stimulate originality.

2. To train the hand to execute with nicety what the mind dictates.
3. To create a love for and appreciation of beauty in form, color, and arrangement.
4. To correlate drawing with other lines of school work making them mutually helpful.
5. To help the child to make the most of his God-given powers, developing them into a character of moral beauty and symmetry.

FIRST AND SECOND GRADES.

Mediums of Expression.—Charcoal, water color, paper cutting, clay modelling.

Representation.—Drawing from bright colored flowers, toys, and type forms. Nature work and reading lessons used for imagination work.

Construction.—Modelling in clay forms of animal and plant life. Paper folding and cutting—making May baskets, soldier caps, sun-bonnets, etc. Block building and stick laying.

Decoration.—Making of simple decorative forms—borders, rosettes, crosses.

THIRD AND FOURTH GRADES.

Mediums of Expression.—Charcoal, brush, ink and water color for freedom and directness of work; pencil for careful, accurate work.

Representation.—Principles involved in drawing cylinders in different positions. Nature and illustrative drawing. Simple light and shade.

Construction.—Difference between working drawing and appearance drawing discussed. Free hand drawings of type forms, patterns.

Decoration.—Study of simple historic designs. Study of good space relation in plaids and arrangement of flower and leaf sprays in a given space. Simple landscape composition.

Artists.—Millet, Landseer, Williams, Hamilton, Gibson.

FIFTH AND SIXTH GRADES.

Mediums.—Pencil, charcoal, brush and ink, water colors.

Representation.—Cylindric principles reviewed. Principles involved in drawing rectangular objects facing and turned. Drawing from plant and animal life. Grouping. Variations in shade and shadow shown.

Construction.—Working drawings of type forms using simple conventions.

Decoration.—Egyptian and Greek ornament and architecture. Reproduction of forms, studying elements of beauty. Pleasing arrangement of flower and leaf sprays in a given space. Landscape composition continued.

Artists.—Arthur Dow, John La Farge, Rembrandt, Da Vinci, C. D. Gibson.

SEVENTH AND EIGHTH GRADES.

Mediums.—Pencil, ink, water color.

Representation.—Review of perspective principles already studied. Principles in drawing of cone and triangular prism. Light and shade drawings of groups of objects based on type forms. Showing of color and material of objects. Work from plant and animal life.

Construction.—Use of ruler and compasses. Simple geometric problems; application of these principles in working drawings of type forms and of joints.

Decoration.—Greek, Roman and Byzantine ornament and architecture; main characteristics and examples of these styles studied. Flower designs and landscape composition. Designs for iron work, grilles, brackets, registers, etc.

Artists.—Abbott, Thayer, John La Farge, Raphael, Herbert Adams.

HIGH SCHOOL.

Mediums.—Pencil and water color.

Representation.—Review of perspective principles, more attention to details in light and shade and form. Case drawing. Landscape composition.

Construction.—Use of T square, drawing board and triangles in making working drawings and patterns of type forms, joints, screws, four part elbow joint.

Decoration.—Review of essentials of good design. Application to headings, book and magazine covers, Arbor Day program, catalogue.

Artists.—Myron, Praxiteles, Barye.

Review.—Characteristics and examples of styles of architecture.

I thank yourself and co-workers for your hearty support.

Respectfully submitted,

IDA M. CRAYATH,

Supervisor of Drawing.

REPORT OF THE SUPERVISOR OF MUSIC.

To MR. R. B. DUDGEON, *Superintendent of Schools, Madison, Wis.*

Sir.—In presenting to you my annual report of the department of music in the public schools of Madison, I would call your attention first to the condition of the material in use in the ward schools.

At the beginning of the school year just closed the text books in music were added to the list of books to be bought by the pupils, this step having been made necessary by the wearing out of the stock originally furnished by the board of education. The response was very satisfactory, a sufficient number purchasing to allow of the few books in good repair, remaining from the before mentioned stock, to be placed in the hands of pupils whom the teacher knew to be really too poor to bear the added expense.

It may be interesting to mention, in this connection, that the teachers seem of one opinion in thinking that the individual ownership of the books has been most beneficial in creating greater enthusiasm for the study, and I cannot refrain from noting the case of a boy in second year who sawed wood one Saturday morning to earn money with which to purchase his first Music Reader. This was done without suggestion and the intense interest he has shown in the book thus obtained has been an inspiration to me on several occasions.

The general course as outlined in last year's report has been followed during the year with a few changes, made possible where there has been but one grade in a room. In these cases more ground has been covered and in many ways more satisfactory work done. In rooms where the Sixth Grade has been alone the Second Reader has been completed, including the three voice exercises and songs. In two buildings where the Seventh Grade has been alone the Introductory Third Reader has been used to most excellent advantage. I think this to be the most useful book of the Normal Music Course, containing as it does, much valuable practice in minors and modulation not provided for elsewhere. I hope to be able to bring about its use in all seventh grades next year thus finishing all the technical difficulties, taught in our public school course, below the eighth year, making the last year of ward school a period of review through the exercises and choruses of the Cecilian Book, adding a certain amount of Musical History. What little has been done in the past along this

last mentioned line has proven that it is a department of music which appeals greatly to all pupils, and that it can be used as a means of sustaining the interest of the boys over the period of the changing voice when reluctance for actual performance very often, and reasonably, appears.

More dictation and other forms of written work in music have been required of the pupils in all grades during the past year than before, and I believe it to have been time most profitably spent. When we fail to see faults in our work we cease to grow, so it is with no feeling of shame that I admit several points open to criticism. Voice quality and rhythm are both far below the standard we wish to attain, but I confidently hope before next year's report is due, to see a most marked gain in these respects. It is not needful here, to note the plans in mind for the accomplishing of this end, but I do wish to express my satisfaction at the fact that whatever plans are made, they will be both competently and heartily supported by the teachers through whom the results will be obtained.

The change from work in divisions to general chorus practice in the high school has been fairly satisfactory to all concerned, and I am thoroughly convinced that there is a greater desire on the part of the pupils to make their music a factor in their school life and reputation than there was before the present plan was adopted.

The optional work, glee clubs, orchestra, etc., have been very satisfactory. Each year brings changes among the members, but there has been no falling away of interest or enthusiasm whenever these organizations have been called upon for special effort.

On the whole the year has been one of most pleasant experience in all its relationships. We have, as director and teachers, tried to keep before us the greater side of the subject, expressed by Ruskin in these words, "Music is the first, the simplest, the most effective of all instruments of moral instruction," and so believing have tried to keep the best material within our reach before the pupils, remembering that it is not the amount of technical music that he acquires which is of most importance to the pupil in his life preparation; it is the cultivation of his taste and ability to choose the best. As the fine in art suggests the fine in conduct so the fine in thought and conduct influences the choice through life. Whether we have helped one boy or girl in this way the past year I cannot report, and yet it is this unreported part of my department which I consider its most important mission in our schools.

With the greatest appreciation of the kindly support of yourself and all for whom you, as superintendent stand, I respectfully submit this report.

MARGARET R. SMITH,

Supervisor of Music.

REPORTS OF VISITING COMMITTEES.

REPORT OF COMMITTEE FOR HIGH SCHOOL.

To the President of the Board of Education of Madison.

Dear Sir.—The committee appointed to visit the Madison high school for the present year begs leave to submit the following report.

We take pleasure in expressing to you our appreciation of the excellent work of the teachers and the fine spirit that pervades the school. The criticisms that have come to us regarding the teaching force have been so few and so unimportant, that it would be wholly unnecessary to mention them here.

The greatest need which the committee desires to emphasize is that of a suitable high school building, for most of the defects of the school seem to us to arise from just this need. We are unanimous in the opinion that in justice to the citizens of Madison whom we have been appointed to represent, this matter can scarcely be put too strongly.

The present building is wholly inadequate for the purposes which it is intended to serve, and it is in its present condition a serious menace to the health of the children of the city. So long as better quarters are not furnished, it is simply impossible to make suitable provision for instruction along several lines which are of fundamental importance in any properly equipped school.

The ventilation and heating in the older portion of the building have been much improved by the introduction of a fan driven by an electric motor, but no such provision has been made for the other end of the building. For the heating and ventilation of the newer part of the building there is at present a set of furnaces which are inefficient and expensive to maintain, and so arranged that it is impossible to force the warm air into the rooms. For many of these rooms, including the main study room, there is practically no ventilation except by the windows, and in the winter season this means is not available for some of the rooms since they are covered with storm sash. In a recent speech before the Six O'Clock club it was stated that the floor space allowed to each pupil in the main study room is but seven square feet, while for a short time in the morning in the same room the space per pupil is only 124 cubic feet and during the day it averages about 350 cubic feet. The floor space is less than one-half the amount prescribed by the best authorities on school hygiene, and the cubic space during the day is considerably less than the minimum allowed by the prison regulations of some of our states.

The building was constructed to accommodate 300 to 350 pupils. The present enrollment is nearly 600, and it is possible that in the near future provision must be made for 800 or even 1,000 pupils. The number of recitation rooms is less than the number of teachers employed and the combined capacity of the two rooms used for study is more than 100 less than the number enrolled, so that a considerable number of the pupils go to the building only to recite.

It is a reproach to our city that there is in the schools no provision for manual training or domestic economy. But it is impossible to consider the introduction of such courses until more room is provided. For the same reason the work in drawing is seriously hampered, and proper work in physical culture is out of the question.

Under the present arrangement work in physics is done in a basement room, 18 by 40 feet, with a nine-foot ceiling, heated by a stove and ventilated by windows the tops of which are only about four feet from the ground. This room serves not only as a laboratory but as a store room for all the apparatus used for the work. The work is done at six tables, about each of which are crowded six to eight students, and for the most of the work the amount of apparatus is so small that only one or two sets can be provided for each table. We submit that it is not right to expect good work when such facilities are provided, and in justice to both teachers and pupils we ask that this defect be remedied. The conditions under which the other work in science is done are much better, but even in the other laboratories serious lack of room is apparent. Two of the rooms in use are attic rooms that were never intended for recitation rooms. To reach them, there is a long, narrow, crooked stairway along which pupils must pass single file. They are inadequately heated by stoves, and no fire escapes have been provided. If it is absolutely necessary to use these rooms we insist that proper fire escapes be provided before the beginning of another session. Properly equipped lockers for wraps and lunches would make impossible the pilfering that takes place from time to time in the cloak rooms. These cannot be provided on account of lack of room.

It seems to the committee that no further argument need be made for the immediate erection of a new building. To delay this matter would seem to argue that the people of Madison are willing to weigh the health and even the lives of their children against the money required to erect and equip a suitable building.

It is true that the proximity of the high school to the university adds greatly to the size and cost of the school and consequently to the burdens that must be borne by the tax payers, but we believe that when our citizens realize what the conditions actually are they will

demand that a new building be erected at once. The need is immediate and imperative.

Whether it would be best to construct one part of the building now and the other part next year, or to attempt to complete a new building at once, is a matter that must be decided after the method of raising the money required for construction and the temporary housing of the pupils have been carefully considered. Whatever plan may be adopted, we urge most strongly that no attempt be made to add to or to remodel the present building. In our opinion any such attempt would only serve to inflict the present conditions upon our city for another decade.

The city needs a high school building which shall have unity of plan, which shall exemplify the best school architecture of the present day, and above all, which shall provide adequately for all needed recitation and assembly rooms, laboratories, work shops and gymnasiums in which facilities may be furnished for the best work that can be done in the light of modern educational methods. We believe that our citizens will be satisfied with nothing short of this, and we are of the opinion that these ends cannot be economically attained without planning for an entirely new building. In this opinion we are supported by experts who have examined the building.

We would urge that even though steps be taken at once to provide for a new building, some outlay should be made to increase the efficiency of the heating and ventilation for the newer part of the building before another winter. This matter seems to us to be of such vital importance that it cannot be delayed, even though it should be decided to tear down the building next summer.

The question of proper rooms for the work in drawing has already been mentioned. The committee is of the opinion that the work should be enlarged not only by furnishing proper rooms, but by providing additional instructional force. We understand that in the past there has been a considerable demand for courses in drawing extending beyond the required work of the first year, and that in spite of the arduous duties of the inspector of drawing an opportunity has been given to do such work. For the present year, however, this work has been omitted because room could not be spared for it. The present supervisor is obliged not only to give the instruction in the high school, but to superintend the work in drawing in all the schools of the city. It is surprising indeed, that she has been able to accomplish so much. We recommend that an additional instructor be secured and that in some way rooms be provided where the optional work beyond the first year may be done. We consider this work of such importance as to warrant renting rooms tempor-

arily outside of the school building if they cannot be secured in any other way.

The committee wishes to call attention to the laxity in enforcing the rules of the state board of health in regard to vaccination of school children. It is worthy of remark that during the present year the public schools have contributed little if any to the spread of smallpox in our city, but is not reasonable to expect that if the disease should be so prevalent another year it would be kept out of the public schools. We commend the efforts that have been made this year to diminish the danger from contagious diseases by better methods of cleaning the rooms and express the hope that the work will be kept up.

Several previous committees have spoken at length in regard to social affairs in the high school, and it is only under strong conviction that something more should be done in the way of restricting or abolishing some of the various societies existing within the school, that we take up the matter at this time. We strongly endorse the recommendation of last year's committee that the board "take whatever measures may be necessary to bring about the discontinuance of these societies as soon as may be practicable." We would call particular attention to the society known as the Entre Nous club which is composed as we understand, largely of pupils from the high school and which exemplifies many of the evils incident to such societies. This society occupies a set of down-town rooms which we are told are used for the boys to lounge and smoke in. The teachers report that in some cases the members of this society have been a disturbing element in the social life proper of the school, and cases of serious delinquencies in school work have been reported to us. The rental of the rooms is, as we understand, paid by the receipts from balls given by the society. It requires no argument to prove that such an institution is a serious menace to the moral health of our youth. We recognize the difficulty of dealing with societies which are so remotely connected with the high school, and we urge that parents whose children are in the high school shall assist in every possible way to put an end to such societies or at least to see that their connection with the high school shall cease entirely.

Respectfully submitted,

AMOS P. WILDER,
C. R. VAN HISE,
ELSBETH VEERHUSEN,
BERTHA PITMAN SHARP,
JNO. B. WINSLOW,
ARABELLE S. BRANDENBURG,
J. M. NAUGHTIN,
E. B. SKINNER, *Chairman.*

REPORT OF THE COMMITTEE FOR THE PRIMARY GRADES.

To the Members of the School Board.

The committee which has visited the primary grades of the city schools, desires to present the following report.

We wish to express ourselves as favorably impressed by the conditions observed in the primary grades of the several wards that we have been able to visit, and we are glad to report that we do not feel to criticize any teacher. We wish to congratulate the board upon their selection of teachers, whom we find capable and conscientious, and most of them enthusiastic in their work.

Your committee desires to make a few suggestions, simply that we may be helpful to the board, who we feel are doing so much for the greater usefulness of the schools in our city.

We would suggest that the visiting committee might do more practical, efficient work if they were appointed earlier in the school year. They could then note changes or improvements made during the year, and could much better make comparisons or suggestions.

We would suggest that the old sixth ward building be put in better condition, the walls freshened and the closets remodeled. We find that the bannisters on the stairs are unsafe and greatly need repairing. In second ward the closets also need remodeling, but this we understand has already been considered by your board. We notice in a few of the rooms that the teachers' desks looked untidy. Faded flowers had not been thrown out, or books dusted or kept in order. An object lesson could easily be taught to the pupils, that of order and cleanliness and beauty, by slight effort on the part of the teacher.

We would recommend, after hearing the expressions of satisfaction from the teachers of last year's effort, that receptions for teachers and parents be arranged for the coming year. We believe good results were attained by such meetings. We would also urge the parents to visit the schools often. The teachers desire it, and both teacher and pupil will feel encouraged by the attention and interest thus manifested.

We find that there is need of more light in the second primary room of third ward. We think a window could be put in near the blackboard. In the other second primary room of the same ward, a new and larger desk is needed, and in the second primary room of fourth ward two rows of new and larger seats are needed. The children are too large for those now being used.

We would suggest that there might be greater uniformity of work accomplished by the same grades of the different wards if the teachers could frequently visit. The stronger teachers could thus help the weaker and both be mutually helpful.

We desire to further suggest that it would be helpful for the pupils to stand while singing. Better results would be gained in the singing and the change of position would be most restful to the children.

We would suggest that a sufficient amount of work be given to the grade not reciting to keep them fully occupied, thereby there would be less restlessness and inattention in the schoolroom, and the teacher would be able to give herself more fully to the grade reciting, and both would be benefitted.

Your committee would recommend hat the use of saw-dust in the sweeping of all the rooms. We believe good results have followed its use thus far.

We especailly recommend the work of the kindergarten and would beg you to see to it that the empty rooms in the seventh ward are used for that purpose. We feel that there is especial need right there, and we trust this will receive your immediate attention and approval.

Respectfully submitted,

ANNIE L. MILLER,

SARAH E. LAW,

VIOLA F. HUTCHISON,

MARION F. FREDRICKSON,

HELEN M. DAVIDSON,

EDNA E. CHYNOWETH, *Chairman.*

REPORT OF THE COMMITTEE FOR GRAMMAR GRADES.

To the Board of Education, Madison, Wis.

Your committee visited the grammar grade departments of most of the ward schools. The work in progress commended itself and bespoke a very efficient management, and on the whole an able and conscientious corps of teachers.

We believe it is not asking too much that *every teacher* in the schools be fully qualified for and master of the work of her room. Not being qualified to control, discipline and teach, she should not be retained.

The pupil should not learn disrespect and disobedience in the school room, but he will learn both when the teacher is a failure. We found several failures. The excellent work done by the large majority of the teachers will not be here detailed. We deem it rather our duty to point out some of the things in which changes are desirable. Throughout the rooms visited, we noted an almost universal lack of distinct articulation, proper pronunciation and correct spelling.

The teachers as well as the pupils failed in proper pronunciation of words in common use.

To teach pupils to pronounce correctly, teachers should themselves pronounce correctly. Also they should teach the pupils the markings and how to use the dictionary and then insist on its constant use. When the pupil mispronounces a word, the mispronunciation should not be repeated, this is to emphasize the inaccuracy more than the proper pronunciation of the word, and educates the ear falsely. Rather repeat again and again the correct pronunciation that the ear may recognize and know the correct sound of the word.

In distinct articulation the ear is again an important factor. Persistent daily vocalizing, emphasizing, always the correct articulation, is the only certain way to teach distinct articulation.

The ear again is in spelling much neglected, the black-board supplements the page of the book and in all this the eye is being trained but the ear untrained. The correct spelling should be again and again vocalized as well as written and thus the eye and ear are being trained and articulation improved. Hence more oral spelling should be done, and no lesson, whether reading, geography, history or any other branch should be considered well done until every word be mastered in meaning and spelling.

More books of reference are needed in the rooms, and at least two dictionaries, in good condition, should be in each room. Torn and littered books should not be placed before the pupils.

Teachers should not be expected to furnish books of reference, their wages are too meager for this. The efficient teacher should receive higher pay than she is now getting in our schools. Our schools are favored with unusually capable teachers, their services should be appreciated by a good advance in wages.

The sanitary conditions in some of the wards are deplorable. In the Second ward there are no inside closets, for either teachers or pupils, while in the Fourth ward and High School no separate conveniences are provided for teachers.

In Second ward school, the rooms need calcimining and floors and desks should be scrubbed, and the desks varnished. In this same ward the water pipes should be carried to the upper floors, so that pupils would not be obliged to drink water standing all day long and contaminated from the foul condition incident to a room full of pupils. There is an unsightly fence near this ward school that should be removed or replaced by something more likely to educate the higher senses.

Through the perseverance and untiring energy of one of the members of our committee, Mrs. George Neckerman, we can recommend

unqualifiedly a change from the old methods of sweeping and dusting to the saw-dust method of cleaning the school room. The old method resulted simply in changing the location of the dust in the room and failed to rid the room of the dust. The saw-dust method takes up practically all the dust and leaves the floors, walls and desks free, since the air is not charged with dust to settle down again on floor, desks, books, walls, etc., as is the case when the old method is employed. The school board should adopt the saw-dust method, and health and cleanliness in the schools will be much improved.

Respectfully submitted,

L. B. MURPHY, *Chairman*,
MRS. R. G. THWAITES,
MRS. W. D. PARKER,
MRS. GEO. M. NECKERMAN,
MRS. WALKER S. LYON.

CONTAGIOUS DISEASES.

No pupil shall be permitted to attend any of the public schools of this city from a dwelling in which a person is sick with scarlet fever, small-pox or diphtheria.

Nor shall any pupil who has been exposed to either of said diseases, and is liable from such exposure to have or communicate the same, be permitted to attend any of said schools until a reputable resident physician or the health officer shall certify that all danger of spreading contagion by such pupil is past.

Nor shall any pupil who has been sick with either of said diseases be allowed to attend any of said schools for a period of six weeks after his recovery therefrom, and then only upon the health officer's certificate that the residence and clothing of such pupil have been thoroughly disinfected, and that there is no danger that others will take the disease from such pupil.

No pupil who has any contagious disease not named in the preceding rule, or who has been exposed to any such disease, and is liable from such exposure to have or communicate the same, shall be permitted to attend any public school in the city, except upon the written permission of the health officer.

VACCINATION.

The following statements and rules were adopted by the state board of health of Wisconsin, June 21, 1894:

WHEREAS, The state board of health of the state of Wisconsin is empowered, authorized and directed by law to make such rules and regulations for the protection of the people of the state from dangerous contagious diseases as in its judgment may be necessary; and

WHEREAS, With the prevalence of small-pox (which disease is by said board hereby designated as contagious and dangerous to the public health), in this and in other states, the assembling of unvaccinated children in the schools of this state is believed to be a source of special danger to the people of this state, the state board of health does hereby adopt and publish the following rule, to be of general application throughout the state.

CONTAGIOUS DISEASES.

SECTION 1. No child shall be allowed to be enrolled as a pupil in any public, private or parochial school without first presenting to the principal or teacher of the school in which he applies for enrollment or attendance, the certificate of a reputable physician, that he has been successfully vaccinated, or in lieu of such certificate of successful vaccination, certificate from a reputable physician that such child has been vaccinated at least twice within a period of three months next preceding the date of such application, such latter certificate, however, shall be void after the expiration of one year from its date.

SECTION 2. No parent or guardian of any child shall allow or permit such child to attend any public, private or parochial school in this state, and no principal or teacher of any school shall allow a child to be enrolled as a pupil or attend such school as such without the evidence of vaccination herein required and it is hereby made the duty of the proper school authorities in their respective localities to enforce foregoing rule.

COURSE OF STUDY.

FIRST GRADE.

ENGLISH: 1. Reading.—Words and sentences from blackboard and chart. Word method supplemented by sentence and phonic methods. Parts of several first readers, changing from one to another as vocabularies and circumstances make desirable.

2. Word Study.—Word building. Capitals. Abbreviations.

3. Oral and Written Exercises.—Conversations suggested by objects, pictures, and individual experiences of pupils. Reproduction of short stories, myths, and fairy tales told by the teacher. History stories.

4. Memorizing Choice Selections.

NUMBERS: Object exercises to 10. Writing and reading numbers of three orders. Drill on the primary combinations to 10. Board and slate exercises corresponding to oral exercises. Rapid drill in adding single columns, applying constantly the known combinations. Story problems, using familiar denominate numbers and objects. Analysis of simple problems.

NATURE STUDY: Oral lessons on the human body. Lessons on plants, tree blossoms, and flowers.

PENMANSHIP: Particular attention to position of body and pencil. Simple exercises to train the muscles of hand and arm. Careful supervision of all writing to prevent the formation of bad habits. Present perfect copies on blackboard and paper for children to study and copy. Teach capitals as needed.

DRAWING: Work according to outline furnished by supervisor.

MUSIC: Rote songs. Major scale. Diatonic intervals. Note reading from board and first chart. Ear tests.

SECOND GRADE.

ENGLISH: 1. Reading.—First Reader completed. Two Second Readers. Continue use of blackboard in teaching new words. Drill in elementary sounds. Teach meaning of words by association, not by formal definition.

2. Word Study.—Words from reading lessons copied and spelled from dictation.

3. Oral and Written Exercises.—Reproduction of short stories, myths, and fairy tales. Description of pictures. History stories. Exercises based on nature study.

4. Memorizing choice selections.

NUMBERS: Revised Model Elementary Arithmetic to page 96.

GEOGRAPHY: See outline for oral lessons in geography.

NATURE STUDY: Lessons on plants and animals according to outline.

PENMANSHIP: Drill exercise for position and movement. Daily use of pencil and paper. Criticism of writing in all exercises. Have a definite time for special drill. Use pen and ink. Sheldon's vertical writing, Book No. 2.

DRAWING: Same as first grade.

MUSIC: First Chart and Part I. of First Normal Music Reader. Names of keys. Written dictation. Rote songs. Ear tests.

THIRD GRADE.

FALL TERM.

ENGLISH: 1. Reading.—A more difficult Second Reader. Scudder's Book of Fables and Folk stories.

2. Word Study.—Words and sentences written from dictation with pen in regular spelling blank. Lists of words from reading lessons and other exercises copied on the board by the teacher and studied by the pupils from the script forms.

3. Oral and Written Exercises.—Reproduction of stories and descriptions. Copying sentences and stanzas. Capitals. Use of quotation marks and apostrophe. History stories. Letter-writing.

4. Memorizing choice selections.

NUMBERS: Revised Model Elementary Arithmetic to page 141.

GEOGRAPHY: See outline for oral lesson in geography.

NATURE STUDY: Lesson on plants and animals according to outline.

PENMANSHIP: Special exercise for freedom of movement and light lines. Sheldon's vertical writing, Book No. 3.

DRAWING: The Prang Elementary Course in Art Instruction, Book No. 3.

MUSIC: First Chart and Part II. of First Normal Music Reader. Learn names of keys and write all scales. Some songs by note. Written dictation. Ear tests. Rote songs.

WINTER TERM.

ENGLISH: 1. Reading.—A Third Reader. Hans Andersen's Fairy Tales, First Series.

2. Word Study.—Continue work of fall term.

3. Oral and Written Exercises.—Dictation exercises, common abbreviations, plurals in s, singular possessive forms. Reproduction of stories and descriptions. Exercises based on nature study.

4. Memorizing choice selections.

NUMBERS: Revised Model Elementary Arithmetic to page 180.

GEOGRAPHY: See outline for oral lesson in geography.

NATURE STUDY: Lesson on plants and animals according to outline.

PENMANSHIP: Complete Book 3, and the first 12 pages of Book 4.

DRAWING: The Prang Elementary Course in Art Instruction, Books Nos. 3 and 4.

MUSIC: Continue work of previous term. Two-voice work suggested in vocal drills, etc.

SPRING TERM.

ENGLISH: 1. Reading.—A Third Reader. The Story Mother Nature Told Her Children.

2. Word Study. Continue work of fall term.

3. Oral and Written Exercises.—Proper verb forms from copy and dictation exercises. Contractions. Letter-writing. Reproduction of history stories and descriptions. Exercises based on nature study.

4. Memorizing choice selections.

NUMBERS: Revised Model Elementary Arithmetic to page 193.

GEOGRAPHY AND HISTORY: See outline for oral lessons in geography. American history stories.

NATURE STUDY: Lessons on plants and animals according to outline.

PENMANSHIP: Complete Book 4.

DRAWING: The Prang Elementary Course in Art Instruction, Book No. 4.

MUSIC: Continued work of previous term. Two voice exercises from board and music reading.

FOURTH GRADE.

FALL TERM.

ENGLISH: 1. Reading.—Selections from a Third Reader. Hawthorne's Little Daffydowndilly and Oother Stories, and Biographical Stories.

2. Word Study.—Continue work of third grade. Use of dictionary.
3. Oral and Written Exercises.—Dictation and reproduction of historical, geographical, and nature study matter. Use of capital letters. Letter-writing.

4. Memorizing choice selections.

NUMBERS: Revised Model Elementary Arithmetic to page 225.

GEOGRAPHY AND HISTORY: Geography of Wisconsin according to outline. Readings from Thwaite's Historic Waterways. Stories of the history of Wisconsin.

NATURE STUDY: Seeds, their dissemination by winds, currents, and animals. Trees, their preparation for winter as shown by leaves, sap, and buds. Observation of plants as the season changes.

PENMANSHIP: Same as third grade.

DRAWING: Same as third grade.

MUSIC: Review all scales using First Music Reader. Finish the two voice exercises in First Music Reader. Give simple divisions of beat in vocal drills and in exercises on board and Second Music Chart. Songs by note. Written dictation.

WINTER TERM.

ENGLISH: 1. Reading.—Selections from Third Reader for drill work. Hawthorne's Little Daffydowndilly and Other Stories, and Biographical Stories.

2. Word Study.—Continue work of the third grade. Use of the dictionary.

3. Oral and Written Exercises.—Dictation and reproduction of historical, geographical, and nature study matter. Plural possessives. Abbreviations. Letter-writing.

4. Memorizing choice selections.

NUMBERS: Revised Model Elementary Arithmetic to page 262.

GEOGRAPHY AND HISTORY: See outline for oral lessons in geography. Pioneer History of the Mississippi, read by the teacher.

NATURE STUDY: Effects of freezing on plants. Winter conditions of plants. Protection of buds. Effects of freezing and thawing on different kinds of ground, under varying conditions.

PENMANSHIP: Same as third grade.

DRAWING: Same as third grade.

MUSIC: Begin Second Normal Music Reader. One-voice exercises in conjunction with two-voice exercises containing the same difficulties in time. All songs by note. Written dictation.

SPRING TERM.

ENGLISH: 1. Reading.—Continue work in Third Reader. Ruskin's King of the Golden River.

2. Word Study.—Continue work of the third grade. Use of the dictionary.

3. Oral and Written Exercises.—Dictation and reproduction of historical, geographical and nature study matters. Plurals in *es*, *ves*, and without *s*. Possessives. Drill on verb forms and pronouns commonly misused. Letter-writing.

4. Memorizing choice selections.

NUMBERS: Revised Model Elementary Arithmetic completed.

GEOGRAPHY AND HISTORY. See outline of oral lessons in geography. Stories from Roman history.

NATURE STUDY: Seeds and germination. Buds. Reproduction of flowers.

PENMANSHIP: Same as third grade.

DRAWING: Same as third grade.

MUSIC: Continue work of previous grade giving more difficulties in rhythm. Teach sharp four and flat seven. Some two-voice songs. Written dictation.

FIFTH GRADE.

FALL TERM.

ENGLISH: 1. Reading.—Eggleston's First Book in American History.

2. Word Study.—Two exercises from Sheldon's Word Studies, two from lists of words from other lessons, and one review exercise each week. All words studied from the blackboard in script forms.

3. Oral and Written Exercises.—Dictation and reproduction of literary, historical, and geographical matter. Continue work in letter forms, punctuation, abbreviations, word forms, and letter-writing.

4. Memorizing choice selections.

ARITHMETIC: Fundamental operations. Decimal fractions.

GEOGRAPHY AND HISTORY: Physical and political North America. Physical and political United States. Use progressive outline maps. Longitude and time. Stories of American history,—explorers, colonists.

NATURE STUDY: Lessons on the human body, with special reference to the effect of stimulants and narcotics through the year. Smith's Primer of Physiology in hands of teacher.

PENMANSHIP: Special exercises for freedom of movement. First twenty pages of Book 5, Sheldon's Vertical Writing.

DRAWING: The Prang Elementary Course in Art Instruction, Book No. 7.

MUSIC: One-voice exercises from Second Music Reader with fractional divisions of the beat. Two-voice exercises and songs. Written dictation.

WINTER TERM.

ENGLISH: 1. Reading.—Hawthorne's Wonder Book.

2. Word Study.—Same as fall term. Use of dictionary.

3. Oral and Written Exercises.—Dictation and reproduction of literary, historical and geographical matter. Special attention to capitals and punctuation.

4. Memorizing choice selections.

ARITHMETIC: United States Currency. Factors and Multiples.

GEOGRAPHY AND HISTORY: Middle Atlantic, South Atlantic, South Central, and North Central States. Stories of the French and Indian wars.

NATURE STUDY: Lessons on the human body continued one period a week.

PENMANSHIP: Complete Book 5, and first twelve pages of Book 6.

DRAWING: The Prang Elementary Course in Art Instruction, Books Nos. 7 and 8.

MUSIC: Continue work of fall term, adding sharp one and sharp five.

SPRING TERM.

ENGLISH: 1. Reading.—Kingsley's Water Babies.

2. Word Study.—Same as fall term.

3. Oral and Written Exercises.—Dictation of literary, historical, and geographical matter. Paraphrasing of sentences and paragraphs. Parts of speech.—Subject and predicate taught incidentally.

4. Memorizing choice selections.

ARITHMETIC: Common fractions.

GEOGRAPHY AND HISTORY: West Central States, States of the Plain, Western States, and Commercial Geography of the United States. Stories of the Revolutionary and other National Periods.

NATURE STUDY: Lessons on the human body continued one period a week.

PENMANSHIP: Complete Book 6.

DRAWING: The Prang Elementary Course in Art Instruction, Book No. 8.

MUSIC: Continue work of previous terms.

SIXTH GRADE.

FALL TERM.

ENGLISH: 1. Reading.—Robinson Crusoe.

2. Word Study.—Continue work of fifth grade. Analysis of derivative words. Compound words.

3. Oral and Written Exercises.—Dictation, narration, and reproduction of literary, historical, and geographical matter. Composition work in chapters I. to VI., inclusive and Parts of Speech in chapter XII., Southworth's and Goddard's Elements of Composition and Grammar.

4. Memorizing choice selections.

ARITHMETIC: Finish common fractions.

GEOGRAPHY AND HISTORY: British America, Mexico, Central America, West Indies, South America. Stories of American History from Revolutionary period to Civil War.

NATURE STUDY: General exercises on the atmosphere,—properties, temperature, winds, moisture, climate, electrical and optical phenomena. See Warren's New Physical Geography, pages 67 to 94.

PENMANSHIP: Same as fifth grade.

DRAWING: Same as fifth grade.

MUSIC: Chromatic scale. More advanced problems in rhythm. One and two-voice exercises and songs from Second Music Reader. Written dictation.

WINTER TERM.

ENGLISH: 1. Reading.—Longfellow's Children's Hour and other Selections, Warner's A-Hunting of the Deer and other Essays, Hawthorne's Tanglewood Tales Part II., Riverside Series, Triple Number.

2. Word Study.—Continue work of the fall term.

3. Oral and Written Exercises.—Dictation, narration, and reproduction of literary, historical, and geographical matter. Composition in text-book in chapter VII. and VIII., and Parts of Speech in Chapter XII.

4. Memorizing choice selections.

ARITHMETIC: Denominate numbers, including linear measure, square measure, cubic measure, liquid measure, dry measure, avoirdupois weight, table of time, and miscellaneous tables with a few applications under each.

GEOGRAPHY AND HISTORY: Physical and Political Europe. Stories from Greek and Roman History.

NATURE STUDY: General exercises on water,—springs, rivers, lakes, oceans, oceanic movements. See Warren's New Physical Geography, pages 44 to 66.

PENMANSHIP: Same as fifth grade.

DRAWING: Same as fifth grade.

MUSIC: Continue work of previous term. Three-voice work in vocal drills, etc.

SPRING TERM.

ENGLISH: 1. Reading.—Burrough's Birds and Bees, and Sharp-eyes.

2. Word Study.—Continue work of fall term.

3. Oral and Written Exercises.—Dictation, narration, and reproduction of literary, historic, and geographical matter. Composition in text-book in chapters IX. to XI., inclusive, and Parts of Speech in chapter XII.

4. Memorizing choice selections.

ARITHMETIC: Miscellaneous problems under denominate numbers and practical rules.

GEOGRAPHY AND HISTORY: Physical and Political Asia. Oceanica. Stories of Chivalry and Crusades.

NATURE STUDY: Seeds and germination. Buds. Roots. Leaves. Reproduction, flowers and seeds.

PENMANSHIP: Same as fifth grade.

DRAWING: Same as fifth grade.

MUSIC: Continue work of previous term. Three-voice exercises and songs from Second Music Reader.

SEVENTH GRADE.

FALL TERM.

ENGLISH: 1. Reading.—Kingsley's Greek Heroes.

2. Word Study.—Exercises selected from Sheldon's Word Studies and from other branches of study. Words studied from script form.

3. Oral and Written Exercises.—Dictation, narration, description and reproduction of literary, historical, and nature study matter. Biographical sketches.

4. Grammar.—Southworth and Goddard's Elements of Composition and Grammar, chapter XIII., with review of chapter XII.. Sentence analysis

5. Memorizing choice selections.

MATHEMATICS: 1. Arithmetic.—Percentage and application to simple interest.

2. Algebraic expressions and symbols, including the methods of solving simple equations.

GEOGRAPHY AND HISTORY: 1. Physical and Political Geography of Africa.

2. Principal ocean and trade routes of the world.

3. Mathematical geography.

NATURE STUDY: Elements of astronomy in connection with mathematical geography.

PENMANSHIP: Sheldon's vertical writing, Book No. 7, to page 20.

DRAWING: The Prang Elementary Course in Art Instruction, Book No. 11.

MUSIC: Vocal and Interval drills from Chromatic Scale. Use Introductory Third Reader.

WINTER TERM.

ENGLISH: 1. Reading.—Scott's Lady of the Lake.

2. Word Study.—Continue work of fall term.

3. Oral and Written Exercises.—Continue work of fall term. Historical sketches.

4. Grammar.—Text-book, chapters XIV. and XV. Sentence analysis continued.

5. Memorizing choice selections.

MATHEMATICS: 1. Arithmetic.—Percentage to partial payments.

2. Elements of Algebra.—Simple equations.

GEOGRAPHY AND HISTORY: 1. Wisconsin in detail.

2. Civil government of state, county, city.

3. Stories from the history of England. Discovery and exploration of the United States.

NATURE STUDY: Lessons on elementary physics,—properties of matter, mechanical powers.

PENMANSHIP: Book 7 completed, and Book 8 to page 13.

DRAWING: The Prang Elementary Course in Art Instruction, Books Nos. 11 and 12.

MUSIC: Major and Minor Scales.—Exercises from Introductory Third Reader.

EIGHTH GRADE.

FALL TERM.

ENGLISH: 1. Reading.—Masterpieces of American Literature.

2. Word Study.—Same as seventh grade.

2. Oral and Written Exercises.—Description of persons, places, manners, and customs, as found in reading, history, and geography.

4. Grammar.—Text-book, chapters XVII. and XVIII. Sentence analysis continued.

5. Memorizing choice selections.

MATHEMATICS: 1. Arithmetic.—Ratio and Proportion, Involution and Evolution.

2. Concrete Geometry.—One period a week.

HISTORY: United States, revolutionary period. Administrations through the war of 1812.

NATURE STUDY: Same as seventh grade.

PENMANSHIP: Same as seventh grade.

DRAWING: Same as seventh grade.

MUSIC: Technical work of lower grades reviewed. Exercises and songs from Cecilian, Book III. Musical History according to special outline.

WINTER TERM.

ENGLISH: 1. Reading.—Masterpieces of American Literature.

2. Word Study.—Same as seventh grade.

3. Oral and Written Exercises.—Continue work of fall term.

4. Grammar.—Text-book, chapters XIX. to XXIII., inclusive. Sentence analysis continued.

5. Memorizing choice selections.

MATHEMATICS: 1. Arithmetic.—Miscellaneous examples and general review.

2. Concrete Geometry.—One period a week.

HISTORY: United States, Administrations, and Civil War.

NATURE STUDY: Same as seventh grade.

PENMANSHIP: Same as seventh grade.

DRAWING: Same as seventh grade.

MUSIC: As outlined in previous term.

SPRING TERM.

ENGLISH: 1. Reading.—Masterpieces of American Literature.

1. Word Study.—Same as seventh grade.

3. Oral and Written Exercises.—Continue work of fall term.

4. Grammar.—Text-book, finished and reviewed.

5. Memorizing choice selections.

MATHEMATICS: 1. Arithmetic.—The Metric System, applications made by pupils.

2. Concrete Geometry.—One period a week.

HISTORY: United States, reconstruction and topics of the times.

NATURE STUDY: Same as seventh grade.

PENMANSHIP: Same as seventh grade

DRAWING: Same as seventh grade.

MUSIC: As outlined in fall term.

COURSE IN READING AND LITERATURE FOR THE ELEMENTARY GRADES.

FIRST GRADE.

CLASS READING: Words and sentences from blackboards, slates and charts. Word method supplemented by the sentence and phonic methods. Use script from the beginning. Insist on accuracy, neatness, and legibility in all slate and blackboard work. Read parts of several First Readers, changing from one to another as the vocabularies and circumstances may make desirable. The final accomplishment of the year's work should give the pupil the ability to recognize readily all words taught, to read intelligently simple sentences and paragraphs, and to spell by letter and sound the words of the reading lesson.

STORY TELLING: The teacher will tell the children some of the classic nursery tales,—Red Riding Hood, Cinderella, Jack and the Beanstalk, Jack the Giant Killer, Stories from the Old Testament, and such others as may be selected.

READING TO CLASS: The teacher will read to the children from Stories for Kindergarten and Primary Schools, and selections from the list on page 103.

SELECTIONS TO BE MEMORIZED. The Baby, Baby Bye, Sweet and Low, Little Pussy, How They Talk, The Owl and the Pussy Cat.

SECOND GRADE.

CLASS READING.—First Readers completed. Two Second Readers. Continue use of blackboard and slates in teaching new words. Drill in elementary sounds giving attention to pairs and combinations of letters representing sounds. Special drill in pairs and groups of words which must be spoken together. Teach meaning of words by association, not by formal definition. The final accomplishment of the year's work should give the pupil power to call at sight all words taught, to know what they mean in the sentence, to understand the thought of the lesson, and to express the thought in an easy manner, with tones of voice resembling those heard in good conversation.

STORY TELLING.—The teacher will tell the children the stories of

Siegfried, Theseus, Perseus, Circe's Palace, Ariadne, and other myths.

READING TO CLASS.—The teacher will read to the children from Stories for Kindergarten and Primary Schools, and selections from list on page 103.

SELECTIONS TO BE MEMORIZED.—The Boy and the Bird, The Cloud, A Visit from St. Nicholas, Hang Up the Baby's Stocking, The Little Lazy Cloud, The Boy's Song.

THIRD GRADE.

FALL TERM.

CLASS READING—A more difficult Second Reader. Scudder's Book of Fables and Folk Stories. Meaning of words, phrases, and sentences. Cultivate the art of getting out of books what is in them by requiring the substance of all the lessons in the language of the pupil. Give frequent tests in silent reading. Let occasional lessons be very abundant with respect to quantity to test the ability of the pupil to apprehend readily the printed page. Give frequent tests in sight reading to cultivate ability to call new words.

READING TO CLASS. Stories of Children of Other Nations, Little Lucy's Wonderful Globe, Hero Stories from Homer's Iliad and Odyssey, and selections from list on page 104.

SELECTIONS TO BE MEMORIZED.—Hiawatha's Childhood, Little Moments, Kitty.

WINTER TERM.

CLASS READING.—A Third Reader. Hans Andersen's Fairy Tales. First Series. Continue work of fall term. Aim to have pupils acquire naturalness of expression, correct pronunciation, and fluency.

READING TO CLASS. Little Lord Fauntleroy, Adventures of a Brownie, Queer Little People, and selections from list on page 104.

SELECTIONS TO BE MEMORIZED. The Child's World, Suppose My Little Lady, A Good Name.

SPRING TERM.

CLASS READING. A Third Reader. The Story Mother Nature Told Her Children. Continue work of fall term.

READING TO CLASS. Hans Andersen's Fairy Tales Second Series, Princess Idleways, Black Beauty, Toby Tyler, and selections from list on page 104.

SELECTIONS TO BE MEMORIZED.—Little by Little, the Brown Thrush, Seven Times One.

FOURTH GRADE.

FALL TERM.

CLASS READING. Selections from a Third Reader. Hawthorne's Little Daffydowndilly and Other Stories, and Biographical Stories. Make intelligent silent reading the first object. Have substance of lessons reproduced by pupils before reading aloud. See that the details as well as the outline of the stories are observed. Have short stories read once at sight and then reproduced in writing. Give special oral drill. Encourage home reading.

READING TO CLASS. Each and All, Mr. Stubb's Brother, The Hoosier School Boy, Cast Away in the Cold, and selections from list on pages 104-5.

SELECTIONS TO BE MEMORIZED. Boys Wanted, Little Brown Hands, To-Day.

WINTER TERM.

CLASS READING. Selections from the Third Reader for drill work. Hawthorne's Little Daffydowndilly and Other Stories, and Biographical Stories. Continue work of fall term.

READING TO CLASS. Benjamin Franklin, The Little Lane Prince, and selections from list on page 105.

SELECTIONS TO BE MEMORIZED. The Sculptor, Somebody's Mother, The Children's Hour.

SPRING TERM.

CLASS READING. Continue work in Third Reader. Ruskin's King of the Golden River. Continue work of fall term.

READING TO CLASS. Aunt Martha's Corner Cupboard, Little Folks of Other Lands, Hans Brinker and the Silver Skates, and selections from list on page 105.

SELECTIONS TO BE MEMORIZED. Hiawatha's Sailing, The Fountain.

FIFTH GRADE.

FALL TERM.

CLASS READING. Eggleston's First Book in American History. Give special attention to clear and distinct articulation. Teach use of dictionary and diacritical marks. Continue work of preceding year.

READING TO CLASS. Story of King Midas, Paul Revere's Ride, Life in the North, and selection from list on page 105.

SELECTIONS TO BE MEMORIZED.—The Vicar's Sermon, The Village Blacksmith, Landing of the Pilgrims, The Arrow and the Song.

WINTER TERM.

CLASS READING.—Hawthorne's Wonder Book. Continue work of fall term.

READING TO CLASS.—Gradmother's Story of Bunker Hill, Rip Van Winkle, and selections from list on page 105.

SELECTIONS TO BE MEMORIZED.—How Sleep the Brave, One by One, Break, Break, Break.

SPRING TERM.

CLASS READING. Kingsley's Water Babies. Continue work of fall term.

READING TO CLASS.—Prince and Pauper, The Snow Image, and selections from list on page 106.

READ AT HOME.—The Four MacNichols, Boys of Other Countries, Washington and His Country.

SELECTIONS TO BE MEMORIZED.—The Barefoot Boy, Beautiful Things.

SIXTH GRADE.

FALL TERM.

CLASS READING.—Robinson Crusoe. Cultivate the pictorial imagination by requiring pupils to see clearly pictures in words and to represent to themselves the details of descriptions. In oral reading insist upon distinct enunciation, good tones, and proper position.

READING TO CLASS.—Swiss Family Robinson, Twice Told Tales, Juan and Juanita, and selections from list on page 106.

READ AT HOME.—Tanglewood Tales, Daniel Boone.

SELECTIONS TO BE MEMORIZED.—Psalm of Life, Independence Bell, The Last Leaf, Ring Out Wild Bells.

SPRING TERM.

CLASS READING.—Longfellow's Children's Hour and other Selections, Warner's A-Hunting of the Deer, and other Essays, Hawthorne's Tanglewood Tales, Part II., Riverside Series, Triple Number.

READING TO CLASS.—The Arabian Nights, Stories from the History of Rome, and selections from list on page 106.

READ AT HOME.—Plutarch's Lives, The Oregon Trail.

SELECTIONS TO BE MEMORIZED.—The Builders, Breathes There a Man, The First Snowfall.

SPRING TERM.

CLASS READING.—Burrough's Birds and Bees, and Sharp Eyes. Continue work of fall term.

READING TO CLASS.—Ten Boys on the Road from Long Ago to Now, Little People of Asia, Chick Purdy, and selections from list on page 106.

READ AT HOME.—Little Men, Little Women, My Summer in a Garden.

SELECTIONS TO BE MEMORIZED.—The American Flag, Hunting Song, The Four Lakes of Madison.

SEVENTH GRADE.

FALL TERM.

CLASS READING.—Kingsley's Greek Heroes. Definition of important words and phrases. Logical relation to sentences. Historical, geographical, and literary allusions. Rigid and systematic drill in distinct articulation and pronunciation.

READING TO CLASS.—Turn, Fortune, Turn, The Old Man Dreams, and other selections from list on page 107.

READ AT HOME.—Boys Who Became Famous, Tom Brown, The Spy.

SELECTIONS TO BE MEMORIZED.—Sweet is the Pleasure, Spartacus to the Gladiators, Alfred the Great to His Men, The Chase, Soldier Rest, and other selections from Lady of the Lake.

WINTER TERM.

CLASS READING.—Scott's Lady of the Lake. Study biography of author, style of composition, and scope of selection. Recognize simple figures of speech. Cultivate pictorial imagination. Require written expansion of incidents, development of word pictures and comparison of characters.

READING TO CLASS.—The Festal Board, The Bells, and other selections from list on page 107.

READ AT HOME.—Tales of a Grandfather, Girls Who Became Famous, The Last of the Mohicans, The Pilot, The Chambered Nautilus.

SELECTIONS TO BE MEMORIZED.—The National Flag The Ship of State, What Constitutes a State, Gradatim or Round by Round.

SPRING TERM.

CLASS READING.—The Young American.

READING TO CLASS.—The Witch's Daughter, Courtship of Miles Standish, and other selections from list on page 107.

READ AT HOME.—Tales of a Grandfather, Stories of Adventure, Indian History for Young Folks.

SELECTIONS TO BE MEMORIZED.—Clear the Way, Flowers, Crossing the Bar, Nobility.

EIGHTH GRADE.

FALL TERM.

CLASS READING.—Masterpieces of American Literature. Explanation of figures of speech, analysis of the thought, rearranging the elements of the sentence, substitutions of synonyms or equivalent phrases, and expanding picturesque words into paragraphs, are all valuable exercises. Reproductions both oral and written should be frequent. Choice passages should be marked and memorized.

READING TO CLASS.—Paul Revere's Ride, Nathan Hale, and other selections from list on page 107.

READ AT HOME.—Stories of Discovery, Stories of Our Country, Fisk's Washington and His Country, Standish of Standish, Betty Alden.

SELECTIONS TO BE MEMORIZED.—Warren's Address, To a Water Fowl, The Song of Marion's Men, The Chambered Nautilus, An Appeal to Arms, Old Ironsides.

WINTER TERM.

CLASS READING.—Masterpieces of American Literature. Continue work of fall term.

READING TO CLASS.—The Slave Ships, John Burns of Gettysburg, and other selections from list on page 108.

READ AT HOME.—The Talisman, The Last of the Mohicans, John Halifax.

SELECTIONS TO BE MEMORIZED.—Snow Bound (The Snow Storm), Lincoln's Address at Gettysburg, Liberty and Union, Thanatopsis (Selections).

SPRING TERM.

CLASS READING.—Masterpieces of American Literature. Continue work of fall term.

READING TO CLASS.—Custer's Charge, The Vagabonds, The Cry of the Children, and other selections from list on page 109.

READ AT HOME.—Boys of '61, Life of Abraham Lincoln, Ben Hur, David Copperfield, Uncle Tom's Cabin.

SELECTIONS TO BE MEMORIZED.—What is So Rare as a Day in June, Mercy (Portia to Shylock), The Blue and the Gray, A Man's a Man for a' That.

SELECTIONS TO BE MEMORIZED BY PUPILS.

FIRST AND SECOND.

FALL TERM.

Baby Bye	<i>Theo. Tilton.</i>
I Love Little Pussy.....	<i>Jane Taylor.</i>
How They Talk.....	<i>Marcus Wilson.</i>
The Owl and the Pussy Cat.....	<i>Marcus Wilson.</i>
The Boy and the Bird.....	<i>Unknown.</i>

WINTER TERM.

The Cloud	<i>Unknown.</i>
A Visit from St. Nicholas.....	<i>C. S. Morse.</i>
Hang Up the Baby's Stocking.....	<i>W. H. Lippincott.</i>

SPRING TERM.

The Little Lazy Cloud.....	<i>Unknown.</i>
The Baby	<i>George Macdonald.</i>
The Boy's Song	<i>James Hogg.</i>
Sweet and Low.....	<i>Tennyson.</i>

THIRD GRADE.

FALL TERM.

Hiawatha's Childhood	<i>Longfellow.</i>
Little Moments	<i>Unknown.</i>
Kitty	<i>Marion Douglas.</i>

WINTER TERM.

The Child's Word.....	<i>Unknown.</i>
Suppose, My Little Lady.....	<i>Unknown.</i>
A Good Name.....	<i>Marcus Wilson.</i>

SPRING TERM.

Little by Little.....	<i>Unknown.</i>
The Brown Thrush.....	<i>Lucy Larcom.</i>
Seven Times One.....	<i>Jean Ingelow.</i>

FOURTH GRADE.

FALL TERM.

Boys Wanted	<i>Unknown.</i>
Little Brown Hands.....	<i>M. H. Krout.</i>
To-day	<i>T. Carlisle.</i>

WINTER TERM.

The Sculptor	<i>G. W. Doane.</i>
Somebody's Mother	<i>Unknown.</i>
The Children's Hour.....	<i>Longfellow.</i>

SPRING TERM.

Hiawatha's Sailing	<i>Longfellow.</i>
The Fountain	<i>Lowell.</i>

FIFTH GRADE.

FALL TERM.

The Vicar's Sermon.....	<i>Chas. McKay.</i>
The Village Blacksmith.....	<i>Longfellow.</i>
The Landing of the Pilgrims.....	<i>Mrs. Hemans.</i>
The Arrow and the Song.....	<i>Longfellow.</i>

WINTER TERM.

One by One.....	<i>Adelaide A. Proctor.</i>
How Sleep the Brave.....	<i>Will Collins.</i>
Break, Break, Break.....	<i>Tennyson.</i>

SPRING TERM.

The Barefoot Boy.....	<i>Whittier.</i>
Beautiful Things	<i>Unknown.</i>

SIXTH GRADE.

FALL TERM.

Psalm of Life.....	<i>Longfellow.</i>
Independence Bell	<i>Unknown.</i>
The Last Leaf.....	<i>Holmes.</i>
Ring Out, Wild Bells.....	<i>Tennyson.</i>

WINTER TERM.

The Builders	<i>Longfellow.</i>
Breathes There a Man.....	<i>Scott.</i>
The First Snowfall.....	<i>Lowell.</i>

SPRING TERM.

The American Flag.....	<i>J. W. Drake.</i>
Hunting Song	<i>Scott.</i>
The Four Lakes of Madison.....	<i>Longfellow.</i>

SEVENTH GRADE.

FALL TERM.

Spartacus to the Gladiators.....	<i>Elijah Kellogg.</i>
Sweet Is the Pleasure.....	<i>Unknown.</i>
Alfred the Great to His Men.....	<i>J. S. Knowles.</i>
The Chase	<i>Scott.</i>
Soldier Rest	<i>Scott.</i>

SPRING TERM.

The Ship of State.....	<i>Longfellow.</i>
What Constitutes a State.....	<i>Sir William Jones.</i>
Gradatim, or Round by Round.....	<i>J. G. Holland.</i>
The National Fag.....	<i>Charles Sumner.</i>

WINTER TERM.

Nobility	<i>Alice Cary.</i>
Flowers	<i>Longfellow.</i>
Crossing the Bar.....	<i>Tennyson.</i>
Clear the Way.....	<i>Unknown.</i>

EIGHTH GRADE.

FALL TERM.

An Appeal to Arms.....	<i>Patrick Henry.</i>
Warren's Address.. ..	<i>John Pierpont.</i>
Song of Marion's Men.....	<i>Bryant.</i>
Old Ironsides	<i>Holmes.</i>
The Chambered Nautilus	<i>Holmes.</i>
To a Water Fowl.....	<i>Bryant.</i>

WINTER TERM.

Liberty and Union.....	<i>Daniel Webster.</i>
Snow-Bound (The Snow Storm).....	<i>Whittier.</i>
Thanatopsis	<i>Bryant.</i>
Address at Gettysburg.....	<i>Lincoln.</i>

SPRING TERM.

Mercy (Portia to Shylock).....	<i>Shakespeare.</i>
A Man's a Man for a' That.....	<i>Burns.</i>
The Blue and the Gray.....	<i>Francis M. Finch.</i>
What Is So Rare as a Day in June.....	<i>Lowell.</i>

SELECTIONS TO BE READ TO PUPILS.

FIRST AND SECOND GRADES.

FALL TERM.

Over in the Meadow	<i>O. A. Wadsworth.</i>
Lady Moon	<i>Lord Houghton.</i>
What Are You Good for.....	<i>Emily Miller.</i>
Lady Bird, Lady Bird.....	<i>C. B. Southey.</i>
Pussy's Class	<i>Mary M. Dodge.</i>
If you Please.....	<i>M. Douglas.</i>
Kitty and Mousie.....	<i>P. Morgan.</i>
Wishing	<i>Wm. Allingham.</i>
The Tree	<i>B. Bjornson.</i>
Santa Claus and the Mouse.....	<i>Unknown.</i>

WINTER TERM.

The Little Angel.....	<i>Elizabeth Prentiss.</i>
Is It You.....	<i>Unknown.</i>
The Four Winds.....	<i>Kings.</i>
A Valentine	<i>Unknown.</i>
A Little Goose.....	<i>E. S. Turner.</i>
Marjorie's Almanac	<i>T. B. Aldrich.</i>
The Winds and the Leaves.....	<i>Unknown.</i>
All Things Bright and Beautiful.....	<i>Mrs. Alexander</i>

SPRING TERM.

Little by Little.....	<i>Unknown.</i>
Pitter, Patter	<i>Unknown.</i>
Little Gustava	<i>C. Thaxter.</i>
Cheerfulness	<i>Marion Douglas.</i>
Who Stole the Bird's Nest.....	<i>L. Child.</i>
I am Coming, Little Maiden.....	<i>Mary Howitt.</i>
Good Night and Good Morning.....	<i>Lord Houghton.</i>
The Months.....	<i>Unknown.</i>
Rain Drops	<i>Unknown.</i>
Little Birdie	<i>Tennyson.</i>

THIRD GRADE.

FALL TERM.

Little Mamma	<i>Chas. Webb.</i>
Kept In	<i>Ethel Beers.</i>
The Kitten and the Falling Leaves.....	<i>Wordsworth.</i>
Thanksgiving Day	<i>Lydia Child.</i>
Little Bell	<i>T. Westwood.</i>
The Mountain and the Squirrel.....	<i>Emerson.</i>
The Silver Bird's Nest.....	<i>H. F. Gould.</i>
The Johnny Cake.....	<i>Whittier.</i>
Which Loved Best.....	<i>J. Allison.</i>

WINTER TERM.

The Tiger	<i>Wm. Blake.</i>
The Chatterbox	<i>Jane Taylor.</i>
Little Drops of Water.....	<i>Unknown.</i>
Father's Coming	<i>Mary Howitt.</i>
Little Foxes and Little Hunters.....	<i>Unknown.</i>
Sleigh Song	<i>G. W. Petter.</i>
The Fairy Artist.....	<i>Unknown.</i>
The New Year's Eve.....	<i>Hans C. Anderson.</i>

SPRING TERM.

Calling Them Up.....	<i>Mara L. Pratt.</i>
Rain Drops	<i>Unknown.</i>
Miss Willow	<i>Mara L. Pratt.</i>
Jack in the Pulpit.....	<i>C. Smith.</i>
The Fainting Blue-Bell.....	<i>Unknown.</i>
Little Dandelion	<i>H. B. Bostwick.</i>
The Lilac	<i>C. D. Bates.</i>
Grace and Her Friends.....	<i>Jean Ingelow.</i>

FOURTH GRADE.

FALL TERM.

The Brook	<i>Tennyson.</i>
A Wonderful Thing Is a Seed.....	<i>Unknown.</i>
Casabianca	<i>Mrs. Hemans.</i>
The Singing Lesson.....	<i>Jean Ingelow.</i>
November	<i>Unknown.</i>
The River	<i>Unknown.</i>
The Eagle	<i>Tennyson.</i>

Ir. School Days.....	<i>Whittier.</i>
Ring Out the Old.....	<i>Unknown.</i>
Little and Great.....	<i>Unknown.</i>
Daffydowndilly	<i>Anne M. Pratt.</i>

WINTER TERM.

The Frost	<i>W. Gould.</i>
Over and Over Again.....	<i>Josephine Pollard.</i>
Baby's Shoes	<i>W. C. Bennett.</i>
The Children	<i>Chas. M. Dickinson.</i>
The Skater's Song.....	<i>Rev. E. Peabody.</i>
Seven Times Two.....	<i>Jean Ingelow.</i>
Farewell Advice	<i>Chas. Kingsley.</i>
In the Tower.....	<i>Susan Coolidge.</i>

SPRING TERM.

The Voice of the Grass.....	<i>S. Roberts.</i>
What the Burdock was Good for.....	<i>A. S. R.</i>
Polly's Pansies	<i>J. W. Benham.</i>
The Voice of Spring.....	<i>Mrs. Hemans.</i>
The Violet	<i>Jane Taylor.</i>
Robert of Lincoln.....	<i>Bryant.</i>
Mrs. June's Prospectus.....	<i>Susan Coolidge.</i>

FIFTH GRADE.

FALL TERM.

God Bless Our Stars Forever.....	<i>B. F. Taylor.</i>
An Order for a Picture.....	<i>Alice Cary.</i>
The Stormy Petrel.....	<i>Barry Cornwall.</i>
In Swanage Bay.....	<i>Dinah M. Muloch.</i>
Death of the Flowers.....	<i>Longfellow.</i>
The Grasshopper and the Cricket.....	<i>Leigh Hunt.</i>
Labor Is Worship.....	<i>Francis S. Osgood.</i>
Sowing and Harvesting.....	<i>Emily S. Oakey.</i>
Death of the Old Year.....	<i>Tennyson.</i>

WINTER TERM.

The Wreck of the Hesperus.....	<i>Longfellow.</i>
To the Falls of Niagara.....	<i>J. S. Buckingham.</i>
Fifty and Fifteen.....	<i>Unknown.</i>
A Prairie Dog Village.....	<i>Edward B. Nealy.</i>
The Captain's Daughter.....	<i>J. F. Fields.</i>
Perseverance	<i>R. L. Andros.</i>
The Shell	<i>Tennyson.</i>

SPRING TERM.

Narcissus	<i>Dart Fairthorne.</i>
The Birds	<i>Mary Howitt.</i>
Roses or Rue	<i>Unknown.</i>
To the Skylark.....	<i>Shelley.</i>
Rain in the Summer.....	<i>Longfellow.</i>
The Brave Old Oak.....	<i>H. F. Shorley.</i>
Under the Greenwood Tree.....	<i>Shakespeare.</i>
The Bugle Song.....	<i>Tennyson.</i>
Driving Home the Cows.....	<i>Unknown.</i>

SIXTH GRADE.

FALL TERM.

St Lawrence River.....	<i>Unknown.</i>
Queen of the Antilles.....	<i>Mary B. Clarke.</i>
Bingen on the Rhine.....	<i>Caroline Norton.</i>
The Death of Napoleon.....	<i>J. McCullum.</i>
Drifting	<i>T. B. Reed.</i>
Leak in the Dyke.....	<i>Phoebe Cary.</i>
Charge of the Light Brigade.....	<i>Tennyson.</i>
The Mistletoe Bough.....	<i>Thos. H. Bayly.</i>

WINTER TERM.

Hohenlinden	<i>Thos. Campbell.</i>
The Inch Cape Rock.....	<i>Robert Southey.</i>
Herve Riel	<i>Robert Browning.</i>
Legend of Bregenz.....	<i>Adelaide Proctor.</i>
Arnold Winklereip	<i>J. Montgomery.</i>
Melrose Abbey	<i>Scott.</i>
Maroco Bozarris	<i>F. G. Halleck.</i>
Dying Gladiator	<i>Byron.</i>
Poland	<i>Thos. T. Campbell.</i>
Incident of the French Camp.....	<i>Robert Browning.</i>

SPRING TERM.

Hymn Before Sunrise.....	<i>Sam. T. Coleridge.</i>
Pegasus in Pound.....	<i>Longfellow.</i>
Death of Leonidas.....	<i>Geo. Croly.</i>
The Palm Tree.....	<i>Whittier.</i>
The Leap of Roushan Reg.....	<i>Longfellow.</i>

SEVENTH GRADE.

FALL TERM.

Ninety-nine in the Shade.....	<i>Rossiter Johnson.</i>
Four-Leaved Clover	<i>Unknown.</i>
Dickens in Camp.....	<i>Bret Harte.</i>
Forty Years Ago.....	<i>Unknown.</i>
Turn Fortune, Turn Thy Wheel.....	<i>Tennyson.</i>
The Old Man Dreams.....	<i>Holmes.</i>
The Cloud.....	<i>Shelley.</i>
The Pen	<i>Lytton.</i>

WINTER TERM.

Abou Ben Adhem.....	<i>Leigh Hunt.</i>
The Festal Board.....	<i>Unknown.</i>
The Bells	<i>Edgar A. Poe.</i>
Parting of Marion and Douglas.....	<i>Scott.</i>
Bruce and the Spider.....	<i>Bernard Barton.</i>
The Rainy Day.....	<i>Longfellow.</i>
The Spacious Firmament on High.....	<i>F. Addison.</i>

SPRING TERM.

Elizabeth, Aged Nine.....	<i>M. E. Sangster.</i>
The Witch's Daughter.....	<i>Whittier.</i>
Courtship of Miles Standish.....	<i>Longfellow.</i>
The Honey Bee.....	<i>Unknown.</i>
The Birds of Killingworth.....	<i>Longfellow.</i>
The Moss Rose.....	<i>Krummacker.</i>
To a Skylark.....	<i>Shelley.</i>
The Gladness of Nature.....	<i>Bryant.</i>
Birds	<i>Eliza Cook.</i>
The Skeleton in Armour.....	<i>Longfellow.</i>

EIGHTH GRADE.

FALL TERM.

Paul Revere's Ride.....	<i>Longfellow.</i>
Nathan Hale	<i>F. M. Finch.</i>
Andre's Last Request.....	<i>N. P. Willis.</i>
Roll Call	<i>N. G. Shepherd.</i>
The One Hoss Shay.....	<i>Holmes.</i>
The Raven.....	<i>Edgar A. Poe.</i>
The Slave in the Dismal Swamp.....	<i>Tennyson.</i>
The Brave at Home.....	<i>Thos. B. Read.</i>

WINTER TERM.

The Slave Ship.....	<i>Whittier.</i>
How Old Brown Took Harper's Ferry....	<i>E. C. Stedman.</i>
Barbara Freitchie	<i>Whittier.</i>
The Cumberland	<i>Longfellow.</i>
Kentucky Bell	<i>C. F. Woolson.</i>
Sheridan's Ride.....	<i>Thos. B. Read.</i>
The Black Regiment.....	<i>G. H. Baker.</i>
The Picket Guard.....	<i>Coyle.</i>

SPRING TERM.

Custer's Last Charge.....	<i>F. Whittaker.</i>
The Vagabonds	<i>J. T. Trowbridge.</i>
The Cry of the Children.....	<i>Browning.</i>
The Boys	<i>Holmes.</i>
Among the Rocks.....	<i>Browning.</i>
Elegy Written in a Country Churchyard..	<i>Gray.</i>
The Deserted Village.....	<i>Goldsmith.</i>

OUTLINES OF ORAL LESSONS IN GEOGRAPHY.

SECOND GRADE.

I. Lessons in color, form, size. Simple exercises in place, using objects to illustrate such terms as *up, down, above, before, between, under, below, behind, around*.

II. The application of geographical terms to the features of the landscape. A moulding board and pictures are helpful here.

III. Points of compass as determined by the sun. Have children give the directions of objects from one another in the schoolroom. Tell how one may find the directions in the day-time, and on a bright night; how sailors tell directions. Establish a meridian line in the schoolroom.

IV. Plants. 1. Trees kinds and identification by wood, leaves, bark, and general appearance. 2. Fruits, identification and use. 3. Cultivated crops, identification and use.

V. Animals, wild and domestic. 1. Birds, names of those common to the locality, identification by plumage and song. 2. Fishes, names of those common. 3. Usefulness of all animals.

VI. Sky. Clouds, rain, snow, mist, fog.

THIRD GRADE.

FALL TERM.

I. Lessons in size. 1. Exercises in estimating length by the eye, and with the ruler, using objects in the room. 2. Teach the table of Linear Measure as far as needed. 3. Draw by scale a plan of the schoolroom, the school yard, a city block, showing that the maps, or outlines, represent the surface as a bird would see it from above. 4. Estimate distance using different points and objects in the city and its surroundings. 5. By comparison develop ideas of *area* and *scale*. In map drawing always use some definite scale.

II. Carefully study the natural features of the locality to develop correct mental pictures of rivers, mountains, plains, lakes, the ocean, etc.

III. Recognize in manufactured products the result of the occupations of men. Name different occupations in the vicinity; the materials used in them; the power used.

WINTER TERM.

I. Continue work in drawing and in interpreting maps of the school yard, city block and city, locating the principal streets and buildings, always using a definite scale.

II. Continue study of the natural features of the locality. Rivers—source, bed, branches, banks, current, where water comes from, use in drainage, etc.

III. Study globe,—simple lessons to teach that the earth is round, turns around; surface composed of land and water; the names of the grand divisions of each.

IV. Interpretation of the symbols of the map.

SPRING TERM.

I. Map of the grand division of North America so printed as to show relief. Location of its mountains and plains. Show that its general outline and the direction of rivers depend upon the location and direction of its mountains. Name and locate its rivers, lakes, the oceans that border it, its great indentations and projections.

II. Develop idea of political division. Teach the political divisions of North America; that is, associate the name with the form and location. In the same way teach the political divisions of the United States; locate the capital and two or three important cities in each state. Use a dissected map. Give ideas of comparative area.

FOURTH GRADE.

FALL TERM.

I. Geography of Wisconsin. Use outline map drawn upon the blackboard; scale ten miles to an inch.

1. Size,—length and breadth.

2. Boundaries.

3. Locate three of the principal rivers, and show the slope of the surface drained by each; also locate three lakes of the interior.

4. With colored crayon represent the prairie lands, timber lands, and mineral sections.

5. Locate and discuss some of the leading industries.

6. Locate ten cities; journeys between them by rail and water. Use railroad map.

7. Name and locate counties by help of dissected map.

WINTER TERM.

I. Teach the square mile or "section." Draw a "section map" of Dane county. Teach its area. Using the "section lines," divide it into towns. Teach their names and location. Teach the surface and drainage of the county; locate its chief cities and villages. Review occupations and their products, and trace lines of transportation through the country. Review important points in geography of Wisconsin and United States. Use Geographical Readers. Study map of South America.

SPRING TERM.

I. Study map of the grand divisions that indicate relief in the following order: Africa, Australia, Europe, Asia. Teach the location of the mountains and plains of each; show that outline and direction of rivers are determined by location and direction of mountains. Name and locate their rivers, lakes, the oceans that border them, their great indentations and projections.

SUGGESTIONS AND OUTLINES ON HISTORY.

IN ELEMENTARY GRADES.

The history work of the lower grades should be made so interesting that the pupil's love of reading what is true and valuable will be fostered. As the pupil passes from grade to grade the subject matter taught should be made more and more a means of mental discipline,—training in habits of reflection and determining motives.

The stories should at first be told or read by the teacher. Constant use should be made of the pictures representing the situation of the stories. A little later the pupil under the direction of the teacher and with references carefully arranged, may learn to gather information for himself. When pupils are thoroughly filled with the subject they will be eager to tell what they know. In this way valuable results are attained in the way of language work. Pupils should not feel that these are task lessons, hence from time to time stories may be read or told to them with no thought of having them reproduced. The aim should be to interest the pupil, to carry him beyond the commonplace, to arouse his fancy, and to call up in his mind vivid mental pictures.

The work in history should be closely associated with the work in geography. From the third year every event should be located on the map. As the growth of history is largely the result of geographical condition it is important that children should early begin to cultivate the habit of associating every fact of history with its peculiar physical environment. Constant reference should therefore be made to the map until the pupils never think of reading history without having one before them. It is only in this way that knowledge of history can become definite and vivid.

The following books will be found helpful to both teachers and pupils: Pratt's American History Stories, Monroe's Story of Our Country, Eggleston's First Book in American History, Wright's Children's Stories in American Progress, Gilman's Historical Readers, Montgomery's The Beginner's American History, Thwaites' Historic Waterways, Thwaites' History of Wisconsin, McMurtry's Pioneer Historic Stories of the Mississippi Valley, Aunt Charlotte's Stories of Roman History, Lang's Heroes of Seven Hills, Bonner's Child's History of Rome, Beeseley's Stories from the History of Rome, Bonner's

Child's History of Greece, Cox's Tales of Ancient Greece, Lanier's Boy's King Arthur, Hanson's Stories from King Arthur, Edgar's Crusaders, Lanier's Boy's Froissart, Buckley's History of England for beginners, Calcott's Little Arthur's History of England. A Pathfinder in American History, published by Lee & Shepard, is especially helpful to all teachers of history.

TOPICS.—THIRD GRADE.

Stories.—Columbus, Americus Vesputius, Balboa, Cortez and Montezuma, Pizarro and the Incas, De Soto and the Mississippi, Drake, Raleigh and Queen Elizabeth, Magellan's Voyage Around the World.

FOURTH GRADE.

FALL TERM.

Stories of the History of Wisconsin.—I. Discoveries of Nicolet, Joliet, Marquette, Hennepin, La Salle, Charlevoix.

II. Settlement of missions at La Pointe, De Pere, and Green Bay.

III. Stories of customs and manners of the Indians.

IV. Winnebago War of 1827: Conduct of Red Bird at Prairie du Chien; skirmish at Bad Axe; surrender near Portage; treaty.

V. Black Hawk War of 1832: Black Hawk and his wrongs; Battles of Pecatonica, Wisconsin Heights, Bad Axe; Capture of Black Hawk.

VI. Mounds, location, age, etc.

WINTER TERM.

Pioneer Stories of the Mississippi Valley.—La Salle, Geo. R. Clarke, Lincoln, Joliet and Marquette, Hennepin, The Sioux Massacre, Daniel Boone, Robertson, Marietta and Cincinnati, Lewis and Clarke, Fremont.

SPRING TERM.

Stories from Roman History.—Romulus and Remus. The Seizure of the Sabine Women, Tarpeian Rock, Fight of the Horatii and the Curiatii, Expulsion of the Etruscan Kings, Horatius at the Bridge, Coriolanus, Story of the Sacred Geese, Why Manlius condemns his son to death, How Hannibal Crossed the Alps and fought in Italy, Siege of Carthage, Devotion of Carthaginian Women, Scipio, Regulus. The Gracchi, Cataline, Cæsar, Birth of Christ, Nero.

FIFTH GRADE.

FALL TERM.

Colonization.—John Smith, Pocahontas, The Mayflower and the Pilgrims, Miles Standish, Roger Williams, William Penn, The Settlement of Connecticut, The Pequot War, King Phillip's War, The Indians, The Dutch at New Amsterdam, Importation of Slaves.

WINTER TERM.

Stories of the French and Indian War.—Washington's Journey through the wilderness, How Washington Built Ft. Necessity, Death of Gen. Braddock, Expulsion of the Arcadians, Story of Evangeline, Wolf at Quebec, The Indian Chief Pontiac.

SPRING TERM.

Revolutionary Period.—Boston Tea Party, Paul Revere, Battles of Concord and Lexington, Washington Crossing the Delaware, La Fayette, Israel Putnam, Benjamin Franklin and the Lightning Rod, Arnold the Traitor and Andre the Spy, Surrender of Cornwallis.

SIXTH GRADE.

FALL TERM.

The Republic.—Eli Whitney and the Cotton Gin, Daniel Boone and the Indians, Thomas Jefferson, Fulton and the Steamboat, the Railroad, Morse and the Telegram, Story of Mad Anthony Wayne, Commodore Perry, Fugitive Slave, Anthony Burns, John Brown's Raid.

WINTER TERM.

Greek and Roman History.—Aristotle, Pericles, Lycurgus, The Spartan Boy who stole the Fox, Miltiades, Leonidas, Diogenes, Philip of Macedon, Alexander the Great, Socrates, Demosthenes, Morality of Cato, Cincinnatus, Brutus, Pompey, and other stories given in fourth grade.

SPRING TERM.

Chivalry.—King Arthur, Guinevere, Sir Lancelot, Sir Tristram, Tales of King Edward the Third, Robert Bruce of Scotland, Sir Henry of Flanders, Earl of Derby, Chevalier du Bayard, Sir Philip Sydney.

Crusades.—Stories of the Tomb of Christ and the Turks. Stories illustrating the purpose of the Crusades, Richard the Lion-hearted, Peter the Hermit, Godfrey of Bouillon, Frederick Barbarossa, Siege of Antioch, The Children's Crusade.

SEVENTH GRADE.

WINTER TERM.

I. Civil Government.—State, county, city.

II. Stories from the History of England.—The Ancient Britons, Julius Cæsar's Conquest of Britain, Anglo-Saxon Conquest, The Christians, Norman Conquest, Hundred Years' War, War of the Roses, The Tudor Kings, The Stuart Kings and Elizabeth Revolution, The Georges, Queen Victoria. The teacher must use judgment in selecting the most interesting events and grouping them about central heroic characters.

III. The Original Inhabitants of America.—Mound Builders, Cliff Dwellers, Indians.

SPRING TERM.

I. Explorers and Discoverers.—Spanish, English, French.

II. Colonization.—The English in America, The French in America.

EIGHTH GRADE.

FALL TERM.

The Revolution and the Critical Period.—Causes of the Revolution; The Revolution; Life and Society in Colonial Times; Colonial Government; The Critical Period and the Constitution.

I. Washington.—Political Parties; Financial Measures; Troubles with England and Jay's Treaty; The Cotton Gin.

II. John Adams.—Trouble with France; Alien and Sedition Laws; Death of Washington.

III. Jefferson.—War with Tripoli; Difficulties with France; Purchase of Louisiana; Embargo Act; Burr; Fulton and the Steamboat.

IV. Madison.—Causes of the War with England; Chief Engagements; Growth of Navy; Results of the War; Death of the Federal Party.

WINTER TERM.

Administrations continued—

V. Monroe.—Missouri Compromise; Monroe Doctrine; Purchase of Florida; New Parties

VI. John Q. Adams.—Protective Tariff; Public Improvements; Pension Bureau.

VII. Jackson.—Jackson's Character and His Course with Regard to Office Holders; U. S. Bank Nullification; Vetoes; Internal Improvements; Foreign Affairs; New Parties.

VIII. Van Buren.—Anti-Slavery Agitation; Ashburton Treaty; Panic of '37; Sub-Treasury Scheme.

IX-X. Harrison and Tyler.—Morse and the Telegraph; Annexation of Texas.

XI. Polk.—Mexican War; Causes, Result; Discovery of Gold in California.

XII-XIII. Taylor and Fillmore.—Slavery Agitation; Wilmot Proviso; Compromise of 1850; Fugitive Slave Law.

XIV. Pierce.—Repeal of Missouri Compromise; Kansas and Nebraska Act; Gadsden Purchase.

XV. Buchanan.—The Dred Scott Decision; John Brown's Raid; Election of Lincoln; Secession of States and State's Rights Doctrine.

XVI. Lincoln.—The Civil War.

1. Preliminary Events.

2. Defense of Washington and the capture of Richmond; Bull Run; Peninsula Campaign, together with Antietam and Gettysburg; Grant's Campaign.

3. The Blockade and Foreign Relations.

4. The Opening of the Mississippi; Forts Henry and Donaldson; Shiloh; New Orleans; Vicksburg.

5. Negro Contraband and Emancipation; Emancipation Proclamation; Negro Soldiers and Exchange of Prisoners; Prison Life in the South; The Draft.

6. Sherman's Campaign in Georgia; Capture of Atlanta; March to the Sea.

7. Closing Events of the War.

SPRING TERM.

Administrations continued—

XVII. Johnson.—His Dispute with Congress; Impeachment; Thirteenth and Fourteenth Amendments; Purchase of Alaska; Sub-Marine Telegraph.

XVIII. Grant.—Re-admission of States; Fifteenth Amendment; Alabama Claims; Centennial Celebration.

XIX. Hayes.—Electoral Commission; Troops Withdrawn from the South; Railroad and Coal Strikes; Eads and the Mississippi; United States Money and Gold.

XX-XXI. Garfield and Arthur.—Garfield's Assassination; Civil Service Reform; the Freedman and Education.

XXII. Cleveland.—Civil Service Reform advanced; Labor Troubles; The Chicago Anarchists; Presidential Succession; Chinese Immigration; Inter-State Commerce Act.

XXIII. Harrison.—Settlement of Oklahoma; The Seal Fisheries; Difficulty with Chili; Six New States; The New War Ships.

XXIV. Cleveland.—Depression of 1893; The World's Fair; Revision of the Tariff; The Seal Fisheries; The Pullman Strike; Polygamy and the Admission of Utah; The Venezuela Boundary Question.

XXV. McKinley.—The Tariff; International Arbitration; The Spanish-American War; Annexation of Hawaii; Greater New York.

General review of Topics.—Slavery, State Sovereignty, Growth of Territory, Political Parties, Tariff, Civil Service Reform, Inventions, Means of Travel, Education, Literature.

NATURE STUDY.

I. The object of nature study should be:

1. To interest the pupils in nature. The work should be so conducted as to inspire the children with a love of the beautiful, and with a sympathy for all living things. Children should be taught how to preserve and protect the plants, rather than how to dissect them.

2. To train and develop the children. The children should be trained to (a) observe, compare and express (see, reason and tell); (b) to investigate carefully, and to make clear, *truthful* statements; (c) to develop a taste for original investigation.

3. The acquisition of a knowledge of plants and animals.

II. Methods: The children must study plants or flowers, not about them, in books. They must be led to make their own unaided observations, and to express them. By questions, the teacher can lead to particular observations. The children's thoughts concerning the flowers may furnish subject matter for oral and written language lessons.

As busy work, the children should be led to trace and sketch leaf, stem, and root forms of some particular flower; to represent its colors with paints; to write little stories about it; to make a number of sentences in regard to its leaves, petals, and sepals; to tell where it grew, how it grew, and when to look for it; to describe some incident connected with the flower or recalled by it.

In this manner, nature study may contribute something to language, reading, spelling, drawing, painting, numbers, and geography.

In connection with this work, the teacher should relate or read to children stories about flowers, and from time to time have pupils memorize and recite short poems and selections relating to flowers and nature. Wordsworth's poem on the Daffodils, Barry Cornwall's on the Snowdrop, and many others will be found appropriate. Many quaint and curious stories connected with flowers may be related. The mythical origin of the hyacinth, the legend of the sacred lily, the financial disturbance in Holland caused by the tulip, will be found interesting.

OUTLINES OF WORK.

(First four grades.)

CENTRAL THOUGHT; CARE AND PROTECTION.

I. Seeds and Germination.

Let the children:

1. Plant beans and watch their growth.
2. When the seedlings are two or three inches high, study the seed and its parts.
3. Study the pea in a corresponding way, and then compare it with the bean, noting first the differences and then the resemblances.
4. Study seed and plant, in each case, in relation to their surroundings, air, water and sunlight. (Children should be led to discover the uses of the different parts, first to the plant and then to the animal and man.)
5. Continue the observations on the bean and pea during the remaining part of the school year, noting the development, use, and general structure of buds, stems, roots, leaves, and, if possible, of flowers and fruit.

II. Buds.

The study of buds should be carried on in connection with the work in germination suggested above.

Let the children:

1. Gather branches having large buds, such as the horse-chestnut, elder, or the lilac; put them in water, watch them, and tell about their development and the gradual unfolding of their parts.
2. Study the stem and its parts, wood, bark, and pith, their uses and structure.
3. Later, study the fresh buds and compare them with those which have unfolded.
4. Compare the first bud studied with some other large bud.

III. Reproduction and Flowers.

In connection with the study of buds call the attention of the children to the catkins of the willow, the poplar, and the hazel and then to the flowers of the elder, the lilac, and, if possible, of the bean and the pea.

Let the children:

1. Find the dust-bearing (staminate) and seed-bearing (pistillate) flowers and parts of flowers. (This will give opportunity to develop the idea that flowers are for the production and protection of seeds.)

2. Study the dissemination of seeds that fly, as those of the dandelion and milkweed; seeds that sail, as those of the maple and the basswood; seeds that stick, as those of the burdock and the tick; seeds that fall, as those of the bean and the pea.

3. Study fruits. (They should learn the use of fruit to the plant and to man.)

As early as may seem wise, the teacher should develop, largely by stories and supplementary reading, the use of other parts of the plant to the seed and flowers.

IV. *Leaves.*

Let the children:

1. Watch the unfolding of the leaves in the bud, and notice their protection and arrangement as suggested before.

2. Note the use of leaves and their parts, stipules, stalks, and blade; and of veins, epidermis, breathing pores, and pulp. (In connection with the use of veins, they should study venation.)

3. Study the positions, arrangement, and parts of leaves with reference to their uses; their relation to sunlight, air, rain, and the directing of water to the roots.

4. Study the positions of leaves with reference to buds, and note the order and plan shown in bud and leaf.

By means of charts or blackboard outlines, to which pupils may constantly refer, they should be familiarized with the more common forms of the leaf as a whole and of base, apex, margin, and should be trained to give orderly, exact, concise descriptions.

SUGGESTIONS.

The hardy bulbs are in some respects better adapted to the school-room than any other class of plants. Almost any catalogue offers at very low rates, collections of bulbs suitable for *forcing*, and contains hints in regard to their culture to insure against failure. To secure a succession of bloom, it will be well to start bulbs at intervals of about two weeks. To obtain flowers from bulbs before the close of the term in June, their growth must be forced by an abundance of moisture and heat.

In order that the growth of roots and the daily advance of each tiny rootlet may be noted, the following will be helpful:

(a) Grow two or three bulbs in water. For this purpose the hyacinth and Chinese sacred lily will be found most satisfactory

(b) Place a piece of coarse netting across the mouth of a tumbler, push it down in the center, place seeds upon it, and keep covered with water.

(c) Cut four pieces of sheet batting to fit a plate, place two layers on the plate, arrange seeds on these, cover with the other two pieces, and keep well moistened. The power of root and rootlets to force their way through the cloth, and the raising of the upper layers by the stems and leaves, will awaken much interest.

The following books will be found very helpful in this work:

Leaves and Flowers, by Mary A. Speers; How to Know the Wild Flowers, by Mrs Wm. Star Dana; Glimpses of the Plant World, by Fannie D. Bergen; The New Botany, by W. J. Beal; Concerning a Few Common Plants, by G. L. Goodale; Sea-Side and Way-Side, No. 3.

HIGH SCHOOL COURSES.

YEAR.	ANCIENT CLASSICAL.	MODERN CLASSICAL.
I.	Algebra 3	Algebra 3
	Civil Government } 5	Civil Government } 5
	Physical Geography } 5	Physical Geography } 5
	Latin Lessons 5	Latin Lessons 5
	English..... 2	English..... 2
	Music..... 2	Music..... 2
	Drawing..... 1	Drawing..... 1
	Rhetoricals..... 1	Rhetoricals.... 1
II.	Algebra 2	Algebra 2
	Latin..... 5	Latin..... 5
	Greek 5	German 5
	History..... 3	History..... 3
	English..... 2	English..... 2
	Rhetoricals 1	Rhetoricals..... 1
III.	Physics..... 5	Physics..... 5
	Latin..... 5	Latin..... 5
	History..... 3	History... 3
	Greek 5	German 5
	English Reading 2	English Reading 2
IV.	Geometry 4	Geometry 4
	Algebra 1	Algebra 1
	Latin 5	Latin 5
	Greek 5	German 5
	English Readings 2	English Readings 2
	Theory and Art of Teaching.... 1	Theory and Art of Teaching 1

HIGH SCHOOL COURSES.

YEAR.	GENERAL SCIENCE.	ENGLISH.
I.	Algebra 3	Algebra 3
	Civil Government } 5	Civil Government } 5
	Physical Geography } 5	Physical Geography } 5
	English 2	English 5
	German 3	Music 2
	Music 2	Drawing 2
	Drawing 2	Rhetoricals 1
	Rhetoricals 1	
II.	Algebra 2	Algebra 2
	History 3	History 3
	English 2	English 5
	German 3	Biology 5
	Biology 5	Arithmetic (optional) 2
	Arithmetic (optional) 2	Rhetoricals 1
	Rhetoricals 1	
III.	Physics 5	Physics 5
	German 5	Literature 5
	History 3	History 3
	Physiology 3	Physiology 3
	English Readings 2	English Readings 2
IV.	Geometry 4	Geometry 4
	Algebra 1	Algebra 1
	German 5	Literature 5
	American History 5	American History 5
	English Readings 2	English Readings 2
	Theory and Art of Teaching 1	Theory and Art of Teaching 1

ADMISSION TO HIGH SCHOOL.

Admission to the High School may be secured as follows:

1. Graduates of the eighth grade of the Madison public or parochial schools may be admitted upon the presentation of a certificate of admission signed by the superintendent of city schools.

2. Graduates of the eighth grade of the schools of other cities or of the country schools are admitted subject to such conditions and examinations as the superintendent may impose.

3. Candidates for advanced standing are admitted upon the following conditions:

(a) Graduates from schools accredited to U. W. or a similar institution, may be given credit for completed work provided such work is equivalent in text-book, time, method, and standing to that required in the Madison high school. In any case the credit given will be conditional upon the character of the work done while with us.

(b) Upon examination in subjects for advanced standing. This will apply to pupils coming from three year high schools.

In all cases the credit to be given will be determined by the superintendent and principal.

TUITION.

Tuition for all non-resident pupils, that is, pupils whose parents do not live in the Madison school district, is as follows:

	High School.	Ward School.
Fall term	\$10.00	\$6.00
Winter term	8.00	5.00
Spring term	6.00	4.00

Tuition is payable by terms and within two weeks after the opening of each term. No reduction in tuition will be made in case of absence for less than one-half term.

TEXT-BOOKS

WARD SCHOOLS.

Revised Model Elementary Arithmetic.
 The New Model Arithmetic.
 The Natural Geographies.
 Sheldon's Word Studies.
 First Lessons in Language,
 Southworth & Goddard.
 Elements of Composition and Grammar,
 Southworth & Goddard.
 Smith's Physiology.
 History of the United States,
 Fiske, McMaster, Scudder, or Gordy.
 Sheldon & Co., Vertical System.
 Normal Music Course.

HIGH SCHOOL.

Shakespeare—Selected Plays	<i>Rolfe, Hudson</i>
Commercial Arithmetic	<i>Thomson.</i>
Algebra	<i>Van Velzer & Slichter.</i>
Geometry	<i>Van Velzer & Slichter.</i>
Composition and Rhetoric	<i>Herrick & Damon.</i>
English Literature	<i>Pancoast.</i>
Latin Grammar	<i>Bennett.</i>
Latin Lessons....	<i>Tuell & Fowler.</i>
Cæsar	<i>Kelsey.</i>
Latin Composition	<i>Riggs.</i>
Cicero	<i>Kelsey.</i>
Virgil	<i>Greenough.</i>
Greek Grammar	<i>Goodwin.</i>
Greek Lessons	<i>White.</i>
Greek Composition	<i>Jones.</i>
Anabasis	<i>Goodwin.</i>
Homer	<i>Seymour.</i>
German Lessons	<i>Spanhoofd.</i>
German Reader	<i>Rosenstengel.</i>
Physical Geography	<i>Eclectic.</i>

English History	<i>Coman & Kendall.</i>
Greek History	<i>Botsford</i>
Roman History	<i>Meyers and Allen.</i>
American History	<i>Channing.</i>
Civil Government	<i>Fiske.</i>
Physiology	<i>Martin.</i>
Botany	<i>Coulter.</i>
Physics	<i>Hall & Bergen.</i>
Biology	

In the higher Latin and Greek courses any approved text-book may be used.

HIGH SCHOOL GRADUATES.

CLASS OF 1875.

Carrie H. Billings (Mrs. J. W. Tamplin).*
Archibald Durrie, A. B., U. W. '79, Presbyterian Clergyman, Bismark,
N. D.
Oliver Ford,* A. B., U. W. '79.
Howard Hoyt, L. L. B., U. W. '81, Lawyer, Milwaukee.
Annie I. Horne, B. L. U. (Mrs. W. A. Clapp), Wauwatosa.
Frank Huntington, Bookkeeper, St. Paul, Minn.
Ella Hickock (Mrs. Harvey Clark), Monroe, Wis.
William Kollock, Wichita, Kan.
Charles Lamb, A. B., U. W. '80, Lawyer, Madison, Wis.
Charles Oakey, L. L. B., U. W. '79, Osceola Mills.
Edward B. Oakley, B. S., U. W. '79, Teacher, San Jacinto, Cal.
Thomas Parr,* B. S. Met. E., U. W. '81.
Hattie O. Thoms, Teacher, Evanston, Ill.
William Windsor, L. L. B., U. W. '78, Phrenologist and Publisher,
Washington, D. C.

CLASS OF 1876.

Lizzie Bright (Mrs. Frank Phoenix), Delavan, Wis., Teacher Deaf
and Dumb Institute.
Margaret Coyne.*
Maria Dean, B. L., U. W. '88, M. D. Boston Univ. '83, Helena, Montana.
Sarah Dudgeon, K. U. '89 (Mrs. E. J. Baskerville), Detroit, Mich.
Carrie French (Mrs. E. F. Gibbs), Madison.
Henry B. Favill, A. B., U. W. '80, Rush '83, M. D., Chicago, Ill.
Stella Ford (Mrs. Chas. Abbott), Madison, Wis.
Chas. Hudson, Supt. of Mail Carriers, Madison, Wis.
Willis Hoover, Missionary, South America.
Euphemia Henry, (Mrs. T. J. McMaster), Dakota.
Hattie Huntington (Mrs. McDonald), St. Paul, Minn.
Kitty Kelly, Madison, Wis.
Carrie R. Kellogg (Mrs. Brigham Bliss), St. Paul, Minn.
George E. Morgan, B. C. E., U. W. '80, L. L. B., U. W. '82.*

*Deceased.

Henry Mason, Garden City, Kan.
 William E. Morgan, Physician, Chicago, Ill.
 Annette Nelson, Teacher, Madison, Wis.
 Alfred Patek, A. B., U. W. '80, Room 46, Tribune Bldg., New York,
 N. Y.
 Stanley Proudft,* A. B., U. W. '81.
 Henry Wilkinson, Chicago, Ill.

CLASS OF 1877.

Emma Bascom.*
 Florence Bascom A. B., U. W. A. M. '87, Ph. D. Johns Hopkins '93.
 Anton Bjornson, U. W. '82, Ashley, N. D.
 Anna Butler, Superior, Wis.
 Edmund Burdick, L. L. B., U. W. '80, 168 N. Main St. Wichita, Kan.
 George Byrne, Lumber Dealer, Kansas City, Mo.
 Walter Chase, Madison.
 Julia Clark, A. B. A. M. '84, U. W. '81 (Mrs. J. W. Hallam), Sioux
 City, Iowa.
 Salmon Dalberg, B. L., U. W. '81, Law '83, Attorney, Milwaukee, Wis.
 Lizzie Dresser (Mrs. Shaw.)
 Colin Davidson, Clerk, Railroad Office, Omaha, Neb.
 Frank Hyer.*
 Fannie Hall.
 Minnie Hopkins (Mrs. Dewey), Boston, Mass.
 Charles H. Kerr, A. B., U. W. '81, Publisher, 175 Dearborn St., Chi-
 cago, Ill.
 William Lyon, A. B., U. W. '81, Edenvale, Hillsdale, Cal.
 Jennie McMillan (Mrs. John T. Kelley), Milwaukee, Wis.
 Mattie Noble.*
 Willard Snell, Clerk, J. E. Moseley, Madison, Wis.
 Howard L. Smith, A. B., U. W. '81, L.L. B. '85, Attorney, Prof. of
 Law, U. W.
 Hattie Stout, Madison, Wis.
 Frankie Steiner (Mrs. F. Weil), Milwaukee, Wis.
 Jennie M. Williams, Teacher, Third Ward, Madison.
 James Young.*

CLASS OF 1878.

Sarah Chambers, B. L., U. W. '82 (Mrs. C. A. Wilkin), Fairplay, Colo.
 William Dodds, B. S., U. W. '82, E. P. Allis Co., Milwaukee, Wis.
 Lucy Gay, B. L., U. W. '82, Assistant Professor of French, U. W.
 William Oakey, Madison.

*Deceased.

Wendell Paine,* A. B., U. W. '83.
 Walter B. Pearson, Contractor, Chicago, Ill.
 Henry Pennock, B. Mech. En., U. W. '83, Real Estate Agent, Omaha,
 Neb.
 Mary E. Storm, Teacher, Madison.

CLASS OF 1879.

Lillie Beecroft, B. L., U. W. '83, Pratt Institute '94, Athens, Alaska.
 Sarah Clark, B. L., U. W. '84 (Mrs. C. W. Cabeen), Syracuse, N. Y.
 Rosa Fitch, B. L., U. W. '84, (Mrs. Albert Briggs), Madison.
 Jennie Lovejoy.*
 Alice Lamb, B. L., U. W. '84, (Mrs. M. Updegraff), Washington, D. C.
 Julia Ray, B. L., U. W. '84 (Mrs. Jordan), Morris, Ill.
 August Umbriet, U. W. '83, Assistant District Attorney, Milwaukee.
 Mary Wright (Mrs. Oakey).

CLASS OF 1880.

Clara D. Baker, A. B., U. W. '84 (Mrs. W. H. Flett), Merrill.
 Agnes Butler (Mrs. B. W. Snow), Madison.
 Mary L. Byrne (Mrs. C. S. Slichter), Madison.
 Julius Burdick, Madison.
 Rose Case (Mrs. Howard Wells), Chicago.
 Theresa C. Cosgrove, Teacher, Fourth Ward, Madison.
 McClellan Dodge, B. C. E., U. W. '84, Civil Engineer, Eau Claire.
 Louisa Davids, Sanborn, Iowa.
 Annie H. Durrie (Mrs. T. A. Goodwin), Helena, Montana.
 Clarissa Gano (Mrs. Robert Lipsey), Normal Park, Ill.
 Josephine Hausmann, Madison.
 Fannie Langford (Mrs. L. B. Ring), Woodland Court, Milwaukee.
 Flora Mears, Madison.
 James J. Morgan, Chicago Medical College, '88, Physician, Chicago.
 Harry L. Moseley, A. B., U. W. '84, L. L. B. '87 Madison.
 Kate McGill, Teacher, Madison.
 Kitty Moody (Mrs. Geo. Fish), Greeley, Col.
 Emily Prescott, Nebraska.
 Nellie Phillips.
 Flora Pollard (Mrs. C. J. Batten), Chicago.
 Lucy Smith, 625 N. Lincoln St., Chicago.
 Nettie Smith, 625 N. Lincoln St., Chicago.

*Deceased.

CLASS OF 1881.

Fredericka Bodenstein, Teacher, Madison.
Helen Bjornson (Mrs. Swenson), Madison.
Grace Clark, B. L., U. W. '85 (Mrs. F. K. Conover), Madison.
Rosa Dengler, Teacher, Madison.
Fanny Ellsworth, B. L., U. W. '95, Teacher, Madison.
Daisy Greenbank (Mrs. F. W. Dunstan), Ashland.
Robert Hendricks.*
Lucy Herfurth (Mrs. C. N. Harrison), Madison.
Alice Lindstrom, Madison.
Lizzie McMillan.*
Mary E. Oakey, Madison.
Jessie Partridge.*
Emma Smith, Nebraska.

CLASS OF 1882.

Elmer Coombs, Clinton, Wis.
Elizabeth Cutler.*
Mary Connor, Token Creek, Wis.
Lillie Clement.
Kate Devine.*
Lelia Dow, Artist, Madison.
Mary L. Edgar, Prin. First Ward, Madison.
Minnie Gill, Madison.
Elizabeth Heney, in a Convent, Chicago.
Jessie R. Lewis (Mrs. Lloyd Skinner), Madison.
Maggie Robb, San Francisco, Cal.

CLASS OF 1883.

Louisa Ambrecht, Madison.
Daisy Beecroft, Madison.
Frankie Brooks (Mrs. Plummer), St. Paul, Minn.
Eleanor Crowley.
Emma Deards (Mrs. Sutherland), Syene, Wis.
Mary Farley.
Fannie Gay (Mrs. Chas. W. Lomas), Ft. Howard, Wis.
Emma G. Hyland, Teacher, Madison.
ONellie Jewett (Mrs. McWhinney), Chicago.
Libbie Klusmann, Proof-reader, State Journal.
Etta Patterson* (Mrs. A. J. Klumb), Milwaukee.
William Rosenstengel, Electrician, Buffalo, N. Y.
Albert Rundle L. L. B., U. W. '90, Chicago, Ill.

*Deceased.

CLASS OF 1884.

Inger Conradson, Teacher, Brooklyn.
 Julia Dahlberg Teacher, Milwaukee.
 Annie Hauk (Mrs. John Mader), Madison.
 Ida Herfurth, Stenographer, Clerk, Agricultural Dept., U. W.
 Sophie M. Lewis (Mrs. H. E. Briggs), Phoenix, Ariz.
 Addie Lindley (Mrs. Reid), Merrill, Wis.
 Alice Rodermund.*

CLASS OF 1885.

Lillie D Baker, A. B., U. W. '89 (Mrs. E. N. Warner) Madison.
 Olive E. Baker, B. L., U. W. '91 (Mrs. John Beffel), Chicago.
 Sophy S. Goodwin, B. L., U. W. '89, Madison.
 Alice Goldenberger, B. L., U. W. '91, Madison.
 Jennie A. Jones (Mrs. E. Derge), Emporia, Kansas
 Delia A. Kelly, Madison.
 James B. Kerr, A. B., U. W. '89, L. L. B. '92, St. Paul, Minn.
 Anna A. Nunns, A. B., U. W. '89, Historical Library, Madison.
 Blanche L. Rider (Mrs. William Harrington), Madison.
 Lenore L. Totto, Milwaukee.
 Sue G. Tullis, B. L., U. W. '89, Teacher H. S., Madison.

CLASS OF 1886.

William Anderson.*
 Kittie M. Bruce Teacher of Music, Studying in Europe.
 Robert C. Burdick, Madison.
 Eldon J. Cassody, A. B., U. W. '90, L. L. B. '92, Chicago.
 Mary F. Carpenter, Librarian, West Superior.
 Nora Culligan, Teacher, Madison.
 Emma L. Dowling, Madison.
 Margaret A. Foren, Teacher, Fifth Ward, Madison.
 Lelia M. Gile (Mrs. Liebenberg), Platteville.
 Rollin C. Hill, Madison.
 Frances A. Kleinpell, B. L., U. W. '90 (Mrs. C. W. Burr), Lancaster,
 Wis.
 Grace A. Lamb, B. L., U. W. '91 (Mrs. J. J. Schindler), St. Paul,
 Minn.
 Charles M. Mayers, Insurance Agent, Madison.
 Ben C. Parkinson, A. B., U. W. '90, Law '94, Hardwood, Mich.
 Henry G. Parkinson, U. W. '90, L. L. B. '94, Madison.
 Florence M. Smith (Mrs. A. M. Story), Hillsborough, N. Mex.
 Otilia Stein (Mrs. P. H. Brodesser), Milwaukee.
 Anna E. Tarnutzer, B. S., U. W. '95 (Mrs. A. J. Arn), New Lisbon.
 Zilpha M. Vernon, B. L., U. W. '90 (Mrs. Grant Showerman), Madi-
 son.

*Deceased.

CLASS OF 1887.

- Frederick Wm. Adamson, B. S., U. W. '91, Chicago Med. Col. '94, Madison.
- Andrews Allen, B. C. E., U. W. '91, Wellington Bridge Works, Chicago.
- Florence E. Baker, A. B., U. W. '91, Historical Library, Madison.
- Lewis A. Bender, Oconomowoc.
- Augusta J. Bodenstein (Mrs. Paul Findlay), Madison.
- Bessie Cox, Madison.
- Fayette Durlin, New York.
- Charles A. Dickson, B. L., U. W. '91, Lawyer, Sioux City, Iowa.
- John F. Donovan, L. L. B., U. W. Law, '94, Lawyer, Milwaukee.
- Thomas K. Erdahl.
- William F. Ellsworth, Chicago.
- Sarah E. Gallagher (Mrs. Nidlinger), Chicago, Ill.
- Elizabeth M. Henwood, Madison.
- Marion T. Janeck (Mrs. Richter), A. B., U. W. '91, Madison.
- Carl A. Johnson, B. Mech. En., U. W. '91, Mech. Eng., Madison.
- Daisy D. Lindley (Mrs. James Goldworthy), Prescott.
- Bertha M. Mayer (Mrs. G. H. Breitenbach), Madison.
- Oscar F. Minch, B. Mech. E., U. W. '93, Miller, Paoli.
- Rose M. Minch, Madison.
- Arthur F. Oakey, B. L., U. W. '91, Osceola Mills.
- Paul S. Richards, Yale '92, Lawyer, New York.
- Ella May Sanborn (Mrs. Robert Kyle), A. B., U. W. '91, Tomah.
- Carrie M. Smith (Mrs. Williamson), Madison.
- George G. Thorp, B. Mech. Eng., U. W. '91, Superintendent Iron and Steel Works, Pittsburg, Pa.
- Elsbeth Veerhusen, A. B., U. W. '91, Fellowship, U. W., Madison.
- Helen L. Winter, Teacher, Madison.
- Calvin Z. Wise, Madison.

CLASS OF 1888.

- Carletta Anderson (Mrs. Peter Vedel), Aarhus, Denmark.
- Annie Brewer (Mrs. J. H. Findorff), Madison.
- Mabel Fleming, Milwaukee.
- Henrietta Kleinpell, Teacher, Deerfield.
- Samuel Lamont.
- Henry H. Morgan, L. L. B., U. W. '93, Lawyer, Madison.
- John H. McNaught, C. E., Milwaukee.
- Samuel Piper, B. S., U. W., '92, with Piper Bros., Madison.
- Helen G. Thorp (Mrs. John Nicolson), U. W. '92, Pittsburg, Pa.

CLASS OF 1889.

- Mary B. Baker (Mrs. F. W. Dickinson), Detroit, Mich.
 Martha S. Baker, B. L., U. W. '93, Teacher, Baraboo.
 Frances M. Bowen, B. L., U. W. '93 (Mrs. Jesse Sarles), Caledonia,
 Ill.
 Catherine M. Brown, B. L., U. W. '95 (Mrs. Morton), Milwaukee.
 Theresa M. Byrne.
 Bertha Cassody (Mrs. C. A. Johnson), Madison.
 Wilfred E. Chase, Madison.
 Biondella R. Clark, Teacher, Cambridge.
 Margaret A. Cunningham.*
 Lucius H. Davidson, Madison.
 Ella Davis, B. L., U. W. '93 (Mrs. Alva S. Goodyear), Tomah.
 Elizabeth Donoughue (Mrs. Oakey), Madison.
 Myrtle H. Dow, Actress, London, England.
 Charles H. Doyon, B. L., U. W. '93, Doyon, N. D.
 Fred R. Estes, B. L., U. W. '93.
 Julia K. Fisher, Paoli.
 William Fitch, Madison.
 George Edward Gernon, U. W. Law '99, Madison.
 Alice E. Hawkins, Madison.
 Hannah Herfurth (Mrs. Murray), Madison.
 Sabena Herfurth, B. L., U. W. '93, Assistant in German U. W., Mad-
 ison.
 Robert E. Jonas.*
 Minnie Luebkehan, Madison.
 Mary H. Main, Madison.
 Helen L. Mayer, B. L., U. W. '93 (Mrs. Harry Hunt), Tucson, Ariz.
 Mary L. Murray, B. L., U. W. '93, Art Institute, Chicago, Ill.
 Emma A. Nelson (Mrs. Oyen), La Crosse, Wis.
 Anna I. Oakey, B. L., U. W. '93, Teacher.
 Grace V. Reynolds, Madison.
 Louis D. Sumner, B. L., U. W. '93, B. S. in Pharmacy '94, Druggist,
 Madison.
 Emma Sitterly, Teacher, Madison.
 Mary E. Smith, B. A., U. W. '93, Madison.
 William E. Swain, Madison.
 Charles Thuringer, B. C. E., U. W. '93, Milwaukee, Wis.
 Amy R. Young, Madison.

*Deceased.

CLASS OF 1890.

William W. Allen,* B. A., U. W. '94, L. L. B. '96.
Lizzie Armstrong, Madison.
May Belle Bryant, Teacher, near Madison.
Mary A. Cramer, B. L., U. W. '97, Madison.
Charles Davison, Lawyer, Beaver Dam.
Elizabeth Foran, Madison.
Theodore Herfurth, Insurance Agent, Madison.
Grace L. Hopkins, B. L., U. W. '94 (Mrs. Harry Kellogg), Milwaukee.
Mary A. Kelley, Teacher, Milwaukee.
Helen J. Kellogg, B. L., U. W. '94, Madison.
Louise Kingsley (Mrs. Parke), Lodi, Wis.
Irma M. Kleinpell, B. L., U. W. '94, Teacher H. S., Madison.
Walter Kleinpell, Chicago.
Cornelius Knudson, Bookkeeper, Madison.
Dena Lindley, B. L., U. W. '94, Teacher, Merrill.
Stephen A. Madigan, B. L., U. W. '94.
William C. McNaught, Madison.
Thomas Nelson, B. L., U. W. '94, L. L. B. '96, Madison.
Washington Oakey.
Susie P. Regan, B. L., U. W. '94 (Mrs. J. A. Pratt), Prairie du Chien.
Rudolph R. Rosenstengel, B. L., U. W. '94, Electrical Engineer Milwaukee.
Sidney R. Sheldon, U. W. '94, Professor La Fayette College, Easton, Penn.
Eugene A. Smith, Druggist, Milwaukee.
Alice Stephenson, B. L., U. W. '94, Teacher, Osceola, Wis.
Charles H. Tenney, L. L. B., U. W. '96, Madison.
Frank A. Vaughn, Electrical Engineer, B. S., U. W. '95.
A. Cleaver Wilkinson, Chicago.
Caroline M. Young, B. L., U. W. '94, Teacher, Richland Center.

CLASS OF 1891.

Jannette Atwood, Teacher, Milwaukee.
Alice Armstrong, Madison.
Wilbur S. Ball, B. A., U. W. '95.
Louise M. Bauman, Milwaukee.
Eleanor Boehmer, Teacher, near Madison.
Jessie Carnon (Mrs. Meyer), Madison.
Lucy Cosgrove (Mrs. James Reily), Fond du Lac.
Harry M. Curtis, Madison.
Josie Deming (Mrs. Hillyer), Floyd, Iowa.

Francis E. Doyle (Mrs. Joseph Schubert), Madison.
 Janette H. Doyon (Mrs. E. S. Main), Chicago.
 Geo. Herbert Greenbank, Madison.
 Anna C. Griffiths, B. A., U. W. '95, Madison.
 Caroline M. Hauk, Clerk, Madison.
 Ida E. Helm (Mrs. Dr. Hart), Madison.
 Lucy S. Jones, Minneapolis, Minn.
 Geo. A. Kingsley, B. A., U. W. '95, L. L. B. '97, Milwaukee.
 Helen I. Lancaster (Mrs. John Wright), Milwaukee.
 Vroman Mason, B. L., U. W. '95, L. L. B. '99, Lawyer, Madison.
 Sarah McConnell (Mrs. Ball), Marinette, Wis.
 Lydia E. Minch (Mrs. J. M. O'Brien), Oregon.
 Robert C. Montgomery, Hahnemann College '94, M. D., Madison.
 Oscar Felson, Chicago, Ill.
 Jennie O'Connell, Bookkeeper, Madison.
 Harry Potter, L. L. B., U. W. '96, Madison.
 Catherine Regan, B. L., U. W. '01.
 Martha Scheibel, B. L., U. W. '95 (Mrs. Nat. Crampton), Madison.
 Jessie Shephard B. L., U. W. '95, Teacher, Escanaba, Mich.
 Isabel Smith.
 Maud C. Smith, Milwaukee.
 Halbert Steensland, B. S., U. W. '95, Johns Hopkins University, '99.
 John J. Suhr, L. L. B., U. W. '96, German-American Bank, Madison.
 Mary J. Thorp, B. L., U. W. '96, Madison.
 Florence E. Vernon, B. L., U. W. '95.
 Fannie Walbridge, U. W. '95.
 Herman Winter, B. L., '95, L. L. B. '97, Madison.

CLASS OF 1892.

David Atwood, U. Penn.
 Henrietta Dorothy Billings (Mrs. Louis Holmes), Chicago.
 Maud Merrill Bixby, Milwaukee.
 Caro Louise Bucey (Mrs. Jas. M. Stevens), B. L., U. W. '96, Darlington.
 Herbert Brigham Copeland.
 Mary Lois Catlin.
 Emily H. Detloff, Teacher, Madison.
 Florence L. Drinker, Library School, Philadelphia.
 Charlotte Brockway Freeman, B. A., U. W. '96, Madison.
 Durante Carlyle Gile, B. A., U. W. '96, Teacher, Marshfield.
 Sadie Ellen Gallagher, B. L., U. W. '97, Madison.
 James A. Higgins, Mail Carrier, Madison.
 Rolland Frederick Hastreiter, B. S., U. W. '97, Johns Hopkins, '01.

- Annie Marie Keeley (Mrs. James Lawler), Fitchburg.
Charles Kenneth Leith, B. S., U. W. '97, Ph. D. '01, Madison.
Michael E. Lynch, Madison.
Rachel Catherine McGovern (Mrs. Geo. W. Markham), St. Paul.
Fred H. Morrell, Madison.
Augusta M. Nichols, B. L., U. W. '96 (Mrs. Irwin MacNichol), Merrill, Wis.
Annie Marie Pitman, A. B., U. W. '97 (Fellowship U. W.), Madison.
Stella Grace Pearce, Bookkeeper, Chicago.
Louis D. Rowell, B. S., U. W. '01.
John Charles Regan, Chicago.
Walter Hodge Sheldon, B. A., U. W. '96 (M. D. St. Luke's Hospital), Chicago.
Janette Catherine Smith, Milliner, Madison.
Carrie F. Smith.
Alma R. Sidell.
Eugene Sullivan, M. D., Chicago, Ill.
Martha Florence Torgerson, B. L., U. W. '95, Teacher, Sturgeon Bay.
Margarette Urdahl, U. W. '96, Teacher, Medford.
George P. Walker, Madison.
Iva Alice Welch, B. L., U. W. '96, Historical Library, Madison.
Bessie Wilson (Mrs. Victor Kaepfel), Los Angeles, Cal.
Addiemay Wootton, B. L., U. W. '96 (Mrs. Ladd) Madison.
Albert O. Wright, Jr., Teacher, Green Bay Reformatory.

CLASS OF 1893.

- John Armstrong.
Augusta Atwood.
Clarissa A. Cook (Mrs. S. W. Todd), Milwaukee.
Kate M. Corscot, B. L., U. W. '98, Teacher, Marshall.
Clara Comstock, Teacher near Madison.
Joseph M. Cantwell, U. W. '97.*
Bertrand H. Doyon, U. W. '98, Lumber Merchant, Madison.
Victoria Fish Madison.
Bertha R. Frautchie, Madison.
Bessie Gernon (Mrs. Horace Manning), London, England.
Edith Green (Mrs. Leslie Fletcher), Sioux Falls, S. D.
Iva Goodwin (Mrs. Smithyman), Milwaukee.
Mame E. Griffiths, Madison.
Annie Habich, Teacher, near McFarland.
Ella Heiltger, Teacher, Madison.
Isabel M. Holt, Madison.

*Deceased.

Benjamin A. Herrick, Dentist, Madison.
 Carl Jefferson, L. L. B., U. W. '96, Chicago.
 Alice Kerwin, Teacher, Madison.
 George Meyer.*
 Minnie Mayers (Mrs. Kenneth Leith), Madison.
 Mary Myrtle Miller, Wilmington Del.
 Minnie A. Olson (Mrs. Gulixon), Beloit, Wis.
 Eliza A. Pollard, U. W. '99, Madison.
 Martha E. Pound, Madison.
 Joseph M. Purcell, Clerk, Madison.
 James Patterson, Hahnemann Medical College, 1900.
 Charlotte E. Pengra, B. S., U. W. '97, Ph. D. '01 U. W.
 Maud Parkinson, A. C., U. W. '98, Teacher, Madison.
 Eva Parkinson, A. C., U. W. '98, Historical Library, Madison.
 George Riley, Insurance, Madison.
 Frank Riley, Boston Polytechnic School.
 Charles Riley, L. L. B., U. W. '96, Attorney, Madison.
 Ernest B. Smith, B. L., U. W. '97, Madison.
 Catherine Steinle, Madison.
 Alma Stock, U. W. '99, Teacher, H. S. Madison.
 Emma Schemerhorn, Madison.
 Nina Adna Smith.*
 Amanda Wallace.*
 Julia Wilkinson, Clerk, Madison.
 David Wright, Jr., Gisholt Machine Co.

CLASS OF 1894.

Earle Anderson, U. W. Law, '99, Clerk, Madison.
 May Bennett (Mrs. Jesse Edgren).*
 Frances Billings, Milwaukee.
 Helen Copp (Mrs. Wright).
 Elmore Elver, L. L. B., U. W. '01.
 Jesse Edgren, U. W. '99, Law, Dawson City.
 Gertina Erickson, Teacher, South Dakota.
 Mary Freeman, U. W. '98 M. C.
 Florence Gage, U. W. '98, Pharmacy '99, G. S.
 John Gregg, U. W. Law, '98, Milwaukee.
 Grace Greenbank, U. W. '98, M. C., Ashland.
 Arlene Grover, B. L., U. W. '98, Stenographer, Madison.
 Maud Gilbert, Madison.
 Mabel Lambertson (Mrs. Dr. Sippy), Chicago, Ill.

*Deceased.

Clarice Lytle, N. W. Univ. '97, M. C., Teacher.
 Max Mason, U. W. '98, C. H. (Math.) Teacher, Beloit.
 Jessie Montieth, Madison.
 Anton Malec, U. W. '98, M. E.
 Lillie Moesner, U. W. '98, G. S., Teacher, East Troy.
 William Munsell, Madison, Clerk in P. O.
 Stuart Sheldon, B. S., U. W. '00, Rush Medical.
 August Sauthoff, U. W. '98, G. S., Teacher, Sauk City.
 Harry Sheasby, Bookkeeper Madison.
 Florence Slightam (Mrs. Frank E. Rotchka), La Fayette, Ind.
 Mae Smith.
 Harriet Stephenson, U. W. '98, M. C., Madison, Wis.
 Edmund Suhr, U. W. '98, C. H., German American Bank, Madison.
 Louise Swenson, Madison.
 Lucy Thompkins, B. L., U. W. '98, Madison.
 Sena Troan, Madison.
 Grace Whare, (Librarian), Madison.
 May Whare, Madison Gas & Electric Co.
 Augusta Wood (Mrs. Raymond Frasier), Madison.
 John Young, U. W. '98, C. H., Madison.

CLASS OF 1895.

Lillian Boehmer, Madison.
 Bertha Louise Brown, Madison.
 Bertha Josephine Butler.*
 Ralph Milford Benson, Chicago, Ill.
 Emma Maria Bibbs, U. W. Eng. '99, Teacher, Madison.
 Raymond Eugene Brown.
 Clay Sumner Berryman, Spokane, Wash.
 Lillie Case, A. C., U. W. '99, Madison.
 Catherine Isabelle Cantwell (Mrs. Chas. O'Niell), Madison.
 Matilda Cook, B. L., U. W. '99, Madison.
 William Sylvester Darling, G. S., U. W. '99, P. & S., Milwaukee.
 Albert Ralph Denu, B. L., U. W. '99, U. S. Census Bureau, Washington, D. C.
 Helen Ada Fowler, U. W. '99, M. C.
 William Muzzy Fowler, Secy. U. W. School Music.
 Winifred Griffiths, Madison, Stenographer, Tracy, Gibbs & Co.
 Sibyl Adelaide Gale, Typewriter, Madison.
 Edith Van Slyke Gibson, U. W. '99, M. C., studying music, Chicago.
 Maurice Ingulf Johnson, U. W. '02, M. E., Madison.

*Deceased.

Fank Xavier Koltcs, U. W., B. S., '99.
 Florence Josephine Ketchum, B. L., U. W. '01.
 Minnie Magdalene Lueders, Madison.
 George Nels Lewis, Madison.
 Clara Helen Link, U. W. '99.
 Florence Mina Lanz, Madison.
 Jessie Winifred Martin (Mrs. Allen E. Cowles), Washington, D. C.
 Maria Malec, B. L., U. W. '99 (Mrs. Dr. Ochsner), Richland Center.
 Nettie Irene McCoy, U. W. '99 Eng.
 Thomas William Mitchell, B. L., U. W. '99.
 Edith Nelson, A. B., U. W. '99, Teacher, H. S., Madison.
 Minnie Irene Nichols, Madison.
 William O'Dwyer, Dane.
 Mabel Agnes Pengra, U. W. '99, A. C., Teacher, Park River Falls.
 William Fred Paunack, Architect, Janesville, Wis.
 Lily Agnes Regan, Madison.
 Annie Howe Regan, Madison.
 Alma Grace Rogers (Mrs. C. N. Putnam), Madison.
 Harry Gray Smith, U. W. '00, C. H., Teacher, Bayfield.
 Ralph William Stewart U. W. '99 C. E.
 De Ette Stemple, Madison.
 Fannie Straslipka, Madison.
 Clarence Howard Slightam, M. D., Madison.
 Thomas William Tormey, U. W. '99, B. S. Rush Medical.
 Stephen William Van Wie.
 Carrie Walbridge, Teacher, Sun Prairie.
 Paul Sherman Warner, Madison.
 Florence Maurine Warner, B. S., U. W. '00.
 Fannie Warner, B. S., U. W. '00.
 Minnie Comstock Westover, B. S., U. W. '99, Teacher, Mazomanie.
 Allen Orvis White, U. W. '99 M. C.
 Olive Leona Wise (Mrs. Wright), Madison.
 George Bartholomew Whare, B. S., U. W. '00, Rush Medical.

CLASS OF 1896.

Richard Henry Baus, B. S., U. W. 1900, Chicago.
 Lisle Victor Benson, Pullman Car Co., Chicago, Ill.
 Edward Albert Cook, B. S., U. W. 1900, Fellow in English, 1901.
 Nathan Curtis, U. W. '99, L. L. B. 1901.
 John William Dryer, B. S., U. W. 190, Rush Medical.
 Henry Clay Duke, Post Office, Register and Money Order Clerk.
 Frank Edward Darling, Jr., B. S., U. W. 1900, P. and S., Milwaukee.
 Jessie Ester Davis, B. S., U. W. 1901, Madison.

Emma Josephine Erickson, Madison.
Caroline Whellam Evans, B. S., U. W. 1901, Teacher, Sparta, Wis.
Millie Gath, Madison.
Morton Kay Green, Middleton.
John Goodwin, B. L., U. W. 1900, Madison, Wis.
Violet Gray, Windsor.
Claudia Hall, B. L., U. W. 1901.
Jennie Housel, Middleton, Wis.
Harry Hanson, Madison.
John Pettit Kelley.
Mable King (Mrs. Nelson), Madison.
Minnie Karstens, Madison.
Ena Kney, Madison.
Ward Lamberson.
John Thomas Stewart Lyle, B. L., U. W. 1900, Madison.
Ellen Ware Lamb, Madison.
Lillian Fidelia McCarthy.
Jean Monteith, Madison.
Walter Bernard Minch, B. S., U. W. 1900, Chicago.
Jeanette Maltby, Teacher.
Norman Nelson, B. S., U. W. 1900, Johns Hopkins Med. Sch.
Frank Nichols, Madison.
Edward Earl Parkinson, Accountant, Madison.
Lee Allen Parkinson, Washington, D. C.
Roy Erastus Pierce.
Miriam Keith Reid, B. L., U. W. 1900, Madison.
George Edward Schilling, U. S. Army.
Marie Antoinette Schneider, Madison.
Florence Sturm, Madison.
Goldwin Howard Smith, Clerk Groves-Barnes Co., Madison.
Eunice Wallace Welch, B. L., U. W. 1900, Teacher, Bayfield.
Addie Wilke, Superior Normal School, 1898, Teacher, Madison.
Paul Gernhard Winter, B. L., U. W. 1901, Madison.
Thomas Willett, B. S., U. W. 1900.

CLASS OF 1897.

Ida Matilda Anderson, Madison.
Magdalena Ellen Antisdell, Chicago, Ill.
Clara Victoria Bernhard, Madison Gas & Electric Co.
Harry Ernest Bradley, A. B., U. W. 1901, Madison.
Mary Eleanor Brahany, B. L., U. W. 1901, Madison.
Mary Fidelia Carroll, Co-operative Association.
Archy B. Carter, U. W.

Frank Draper Coyle, Teacher, near Madison.
James Joseph Conned, Clerk, Purcell Bros., Madison.
Margaret Elizabeth Cummings, B. L. 1901.
Dorothea Curtis, A. B., U. W. 1901.
Joseph Dean, Jr., College of P. and S., Chicago.
Augustus Theodore Martin Elver.
Thomas Olen Farness, Madison.
John Boggs Felker, U. M. Medical Student.
Flora Gilbert, Madison.
Emma Luella Gohlke (Mrs. Chas. H. Blanchar), Windsor.
Mary Lena Hessman, Madison.
Irving Raymond Hippenmeyer, U. W., M. E.
Clarence Charles Isaacs, Madison.
Katherine Kavanaugh, B. L., U. W. 1901, Madison.
Mabel Elizabeth Kentzler (Mrs. W. H. Hansen), Oklahoma City, O. T.
William Arthur Lee, U. W., C. H. 1902.
Arthur Warner Lewis, U. W., G. S. Sp.
Mary Josephine Link.
John August Lorch, U. W., C. E.
Mary Katherine Lynch, Operator Democrat Printing Office, Madison.
Mary Sheldon Morrison, Teacher, Morrisonville.
Archie Murray, Chicago, Ill.
Carl Bertolette Mutchler, U. W. 902, C. E.
Mark Humphrey Newman, A. B., U. W. 1901.
Ingewald Nelson, Clerk P. O., Madison.
Francis M. Nienaber, Madison.
Amy Huntley Nichols.
Thomas Mortimer Priestley, B. L., U. W. 1901.
Louis Mossop Pearson, Rush Medical.
August Herman Pfund, B. S., U. W. 1901.
August Oscar Paunack, Teller, Bank of Wisconsin, Madison.
Howard David Piper, Clerk, Piper Bros., Madison.
Edward John Reynolds, Law Student, U. W.
June Elizabeth Regan, Madison.
Lilian Alison Rendel, Stenographer, Madison.
Warren Du Pre Smith, U. W.
Julia Forster Smith, A. B., U. W. 1901.
Rose Marie Smith, Teacher, Westport.
Arthur Frank Smith, B. S., U. W. 1901.
Otto Carl Schmedeman, Dentist, Madison.
Mena Swenson, Copyist, Madison.
Percy Wheeler Tracy, A. B., U. W. 1901.
Lyndon Hickok Tracy, A. B., U. W. 1901.

Evan Charles Thomas.

Albert Nicholas Tandvig, Graduate in Pharmacy, U. W. 1900, Madison.

Minnie May Utter, Madison.

Katherine Porter Vilas, Madison.

John Martin Verberkmoes, B. S., U. W. 1901.

Eva Willett, Milwaukee Normal School, '99.

Helen Ernestine Wilke, Madison.

Bessie Francis Warren, Madison.

CLASS OF 1898.

Meltha Edith Andrus (Mrs. Orlando Cleveland), Pine Bluff.

Emma Lilian Bucey, Stenographer, Madison.

Augusta Billings, Cobb, Wis.

Floy Idella Bowers.

Maude Annette Benson, Chicago.

Catherine Meyers Cook, Madison.

Millicent May Coombs.*

Arthur Hale Curtis, U. W. 1902 G. S.

John Ward Coon, U. W. 1902, Eng.

Clarence Arthur Comstock, Gisholt Co., Madison.

Charles William Chech, U. W. Sophomore, Pharmacy.

Mary Elizabeth Cunneen.

Lucius Donkle, College of P. and S., Chicago.

Frederick Abraham DeLay, U. W. 1902, E. E.

Elizabeth Regina Dunn, Stenographer, Madison.

Magdalen Evans, Madison.

Henry Belden Freeman.*

Bessie Carolynn Ferguson, U. W. 1902, Eng.

Iva Lulu Gilbert, U. W. 1902, Eng.

Floyd Colby Gurnee, Madison.

Mary Elizabeth Gay.

Ada Lovisa Hawley, U. W. 1902, G. S.

Ena Henrietta Heuer, Stenographer M. H. School.

Edna Platte Huber.

Lilian Solvei Holland, Moscow.

Julia Christine Holland, U. W. 1902, E. E.

Gordon Alexander Helmicks, U. W. 1902, E. E.

Daisy Etta Hansen, Madison.

Maie Habich.

Joseph William Jackson, Stroud, S. D.

*Deceased.

Mida Louise Kennedy, U. W. 1902, Eng.
Margaret Kennedy, U. W. 1902, Eng.
Anna Lewis, Business College, Madison.
Mathew John Lynch, U. W. 1902, G. S.
Charles Benajah Mayer, Madison.
Karl Arno Minch, Clerk, Madison.
Louis Malec, U. W. 1902, M. E.
Nora McCue, U. W. 1902, C. H.
Selma Josephine Nelson, Madison.
Florence Eugenia Van Slyke Nelson, U. W. Sp., M. C.
Herman Adolph Nietert, Clerk, Madison.
Edith Noyes.
Arthur Carl Olsen, U. W. 1902, C. E.
Andrew Elmer Pearce, U. W. 1903, E. E.
Preston Winfield Pengra, U. W. 1902, E. E.
Marcia Grace Regan, Madison.
Philip Walker Rinder, Clerk, Madison.
George Roslyn Theobald Richards, Dentist, Madison.
Harry Sauthoff, U. W. 1902, C. H.
William Edward Smith, U. W. 1902, C. H.
Clarence Hazel Snyder, Racine.
Maud Martha Stephenson, U. W. 1902, M. C.
Sanford Putnam Starks, U. W. 1902, M. E.
George Brewster Smith, Madison.
Mabel May Slightam.
Bertha Beatrice Suhr (Mrs. William Hobbins), Madison.
Charles Marshall Stevens.
Elizabeth Goffe Ticknor, Madison.
Ella Francis Tormey, U. W. 1902, M. C.
Frank Bashford Taylor, Madison.
Clara Johnson Van Velzer, U. W. 1902, M. C.
Hattie Bertha Wilke, Stenographer, Madison.
Joseph Michael Welch, Rush Medical College.
Stanley Carpenter Welch, Northwestern Dental College.

CLASS OF 1899.

Andrew Theodore Anderson.
Benjamin Cullen Adams, U. W. 1903, E. E.
James Arthur Adamson, U. W. 1904, Engineer.
Edward Grant Birge, U. W. 1903, G. S.
Amanda Elsie Bodenius, Madison.
Alice Marie Brandel, Oshkosh.

Ina Lemanda Butler, Madison.
Irma Joanna Baus, Madison.
Bryangel Cornell Berg.
Mabel Josephine Bradley, U. W. 1903, M. C. Sp.
Francis Augustus Bradford, U. W. Engineering Student.
Walter William Brown Madison.
Grace Marie Bradley, U. W. 1903, Eng.
Frederick Arthur Chamberlain, U. W. 1903, E. E.
Matthew Francis Conlin, U. W. Junior Law.
Glen Cooper Corlie, U. W. 1903, E. E.
John Seabury Dean, U. W. 1903, M. E.
Thomas Aquinas Donovan, Madison.
Helen Dixon, Madison.
Harry Harrison Dodd, Madison.
Llewellyn Rhys Davies, Madison.
Verona Henritta Friederick, Clerk, Madison.
Edwin Gilbert Farness, Clerk, Madison.
Lucinda Elizabeth Flemming, Madison.
Anna Barbara Fischer, Fitchburg.
James Mosely Gilman, U. W. 1903, C. E.
Grace Gilbert, Madison.
Robert Oliver Gibbons, U. W. 1903, Eng.
Caroline Eleanor Gallagher.
Ethel Sumner Hatch, Teacher, Mt. Horeb.
Edward Everett Hatch, Clerk, Stenographer, Madison.
George Julius Heuer, U. W. 1903, G. S.
Florence Harrington, Madison.
Frederick William Hansen, U. W. 1903, E. E.
Mary Katherine Hobbins, U. W. 1903, Eng.
Frederick William Huels, U. W. 1903.
Maud Huntley.
William John Haganah, U. W. 1903, Eng.
Clarence Scott Hean, Historical Library.
Matthew Joseph Hoven, Jr., Madison.
Hattie Dean Jewett, Madison.
Oscar August Kampen, Merchant, Morrisonville.
Anna Belle King, U. W. 1902, Eng.
Anna Maud Lorigan.
Lena Gurine Lewis.
John Webster Langley.
Leora Lloyd Moore, Chicago.
John Ignatius Malec, Clerk, Madison.
Lora Emma Morley, Kindergarten, Madison.

Harry Kenneth Mackay, Bookkeeper Pollard & Taber Co., Madison.
Clara Edna Nelson, Madison.
Ruth Newman.
Nora Louise Olsen, Clerk, Washington, D. C.
Harry Emil Olsen, Luther College, Decorah, Iowa.
Lottie May Ogilvie, Teacher, McFarland.
Gerald O'Callaghan.
Jessie Ellen Perry, Milwaukee.
Ruth Mary Phillips, U. W. 1904, M. C.
Katherine Regina Purcell.
Amelia France Pyre, U. W. 1903, M. C.
Francis Welcome Pitman.
Minora Quammen, U. W. 1903, M. C.
Madina Thea Redel, Baraboo.
Selene Marguerite Reidy, U. W. 1903, M. C.
Amy Francis Regan, Stenographer, Madison.
William Bacon Roys, Princeton University.
Bertie M. Roybar, Teacher, Madison.
Eugene Warren Roberts, Albany.
Carolyn Stemple, U. W. 1903, M. C.
May Lillian Savage, U. W. 1903, A. C. Sp.
John Lucien Savage, U. W. 1903, C. E.
Angus Cameron Sykes, U. W. 1903, Eng.
Belle Salter, ——— U. W. 1903, Eng.
Rose Marie Toepfer, U. W. 1903, M. C.
Bessie Clair Tucker.
Grace Alberta Tyner, Indianapolis, Ind.
Edward Henry Toellner, Madison.
Hanna Regina Wilkinson, Bookkeeper, Madison.
Elizabeth Francis Wilkinson, Bookkeeper, Madison.
Mignon Wright, U. W. 1903, M. C.
David Plumly Wheeler, Chicago Dental College.

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Louis Marlin, Anderson.
Amelia Alice Askew, Student, U. W., M. C.
Herbert Roderick Bird, Jr.
James Augustus Brown.
Iva Brown, Kindergarten Training School, Grand Rapids, Mich.

Eyvind Bull, U. W., Engineering School.
Sarah Cassandra Bucey.
John Patrick Butler.
Francis May Baker, U. W., English.
Herbert Edgar Chynoweth, U. W., S. C.
John Charles Corscot, Madison.
Fred Robert Cummings, U. W., S. C.
Richard Cone Dudgeon, U. W., S. C.
Elsie Duen, Stenographer, Madison.
Myrtle Ella Downing, Madison.
John Raphael Doris, Madison.
Margaret Estella Duffy.
Wanda May Dudgeon, U. W., English.
Morris Fuller Fox, U. W., S. C.
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Minnie Evangeline Gath, U. W., A. C.
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Carrie Belle Louise Huggins, Teacher, Madison.
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Clara Alice Lea, City Library, Madison.
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Kate Mutchler, U. W., Engineering.
Sarah Roxey McKay, Clerk, J. E. Moseley, Madison.
Olaf Molvin Nelson, J., Milwaukee Dental College.
Otto Louis Prien, U. W., Agriculture Course.
Elizabeth Malinda Pyre, N. W., M. C.
Gertrude Amelia Parr.
Ruby Ethel Peck, Madison.
Delia Idell Pengra, U. W., Engineering.
George Gilbert Post, U. W., Engineering.
Leslie W. Quirk, U. W., Engineering.
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