

REPORT OF THE UNIVERSITY OF MINNESOTA, 1878
AND 1879-80.

THE UNIVERSITY OF MINNESOTA,
MINNEAPOLIS, MINN.,
November 1st, 1880.

To the Honorable David Burt, Superintendent of Public Instruction
for the State of Minnesota:

SIR:

I have the honor in accordance with law, to transmit a
report of the condition and progress of the University for the year
ending June 3d, 1880, being the fourteenth annual report.

I am Sir, very respectfully,

Your obedient servant,

WILLIAM W. FOLWELL,

President.

*Education Dept. Biennial
Reports
of the
University of
Minnesota
for the year
ending June 3d,
1880.*

The thirteenth annual report was made in accordance with the law of Nov. 1, 1879, and placed at your disposition. In order to preserve the continuous history of the University, through the medium of your printed reports, as suggested by yourself, this fourteenth report will contain the statistical portions of the previous years.

The Board of Regents is composed at this date of the following members:

| | | |
|-----------------|---|------|
| By the Governor | RICHARD CHUTE, Minneapolis..... | 1881 |
| | WM. R. MARSHALL, St. Paul..... | " |
| | A. J. EDGERTON, M. A., Kasson..... | " |
| | HENRY H. SIBLEY, St. Paul..... | 1882 |
| | THOS. S. BUCKHAM, M. A., Faribault..... | " |
| | GREENLEAF CLARK, M. A., St. Paul..... | 1883 |
| | O. V. TOUSLEY, M. A., Minneapolis..... | " |

and Ex-officiis

By the Governor of the State,

The Hon. JOHN S. PILLSBURY, Minneapolis.

By the Superintendent of Public Instruction,

The Hon. D. BURT, M. A., St. Paul.

By the President of the University,

WILLIAM W. FOLWELL, M. A., Minneapolis.

THE OFFICERS OF THE BOARD ARE:

President—The Hon. H. H. SIBLEY.

Recording Secretary and Treasurer—The Hon. RICHARD CHUTE.

Corresponding Secretary—Wm. W. FOLWELL.

THE STANDING COMMITTEES ARE:

Finance Committee—Regents PILLSBURY, CHUTE and MARSHALL.

Faculty and Courses of Study—Regents SIBLEY, MARSHALL, BURT, BUCKHAM and EDGERTON.

College of Agriculture—Regents MARSHALL, BUCKHAM and EDGERTON.

Printing Committee—Regents MARSHALL and CLARK.

MEETINGS.

The annual meeting is fixed by law for the second Tuesday in September. Other meetings occur in the spring recess and on Commencement Day.

The executive committee meets regularly near the close of each year.

Several changes have been made in the personnel of the Board since the last report in 1878.

In November, 1878, Hon. A. A. Harwood, of Austin, after more

than ten years of faithful and laborious service, resigned his office and the Hon. A. J. Edgerton, of Kasson, was appointed by Governor to fill the vacancy. During the session of the Legislature of 1879, Regents Sibley and Buckham were re-appointed for the term of three years.

On the 9th day of April, 1879, the Hon. Morris Lamprey, a member of the Board of Regents in the third year of his office, suddenly died. At a meeting of the Board of Regents held April 18, 1879, suitable resolutions of regret and condolence were adopted.

The Hon. Greenleaf Clark, of St. Paul, was appointed by Governor on the _____ of _____, 1879, to fill the vacancy occasioned by the death of Regent Lamprey.

The Hon. Paris Gibson resigned on the 27th of December, 1879, when near the end of his second term of service. On the 2nd of February, 1880, the Hon. O. V. Tousley was appointed for the term of three years and the Board thus became full.

THE GENERAL FACULTY.

WILLIAM W. FOLWELL, INSTRUCTOR,
Political Science.

JABEZ BROOKS, D. D., PROFESSOR,
Greek, and in charge of Latin.

NEWTON H. WINCHELL, PROFESSOR,
State Geologist.

CHAS. N. HEWITT, M. D., PROFESSOR, (non-res.),
Public Health and Hygiene.

JOHN G. MOORE, PROFESSOR,
German.

MOSES MARSTON, PH. D. PROFESSOR,
English.

CHRISTOPHER W. HALL, PROFESSOR,
Geology, Mineralogy and Biology.

JOHN C. HUTCHINSON, ASS'T PROFESSOR,
Greek and Mathematics.

JOHN S. CLARK, ASS'T PROFESSOR,
Latin.

MATILDA J. CAMPBELL, INSTRUCTOR,
German and English.

MARIA L. SANFORD, ASS'T PROFESSOR,
Rhetoric and Elocution.

WM. A. PIKE, C. E., PROFESSOR,
Engineering and Physics.

JOHN F. DOWNEY, PROFESSOR,
Mathematics and Astronomy.

JAMES A. DODGE, PH. D., PROFESSOR,
Chemistry.

ALEXANDER T. ORMOND, PROFESSOR,
Mental and Moral Philosophy and History.

CHAS. W. BENTON, PROFESSOR,
French.

Military Science.

Agriculture.

The changes in the corps of instruction since the last printed report are the following:

At the annual election of the Faculty in the spring of 1879, the Board of Regents, acting in pursuance of plans of retrenchment adopted at the preceding annual meeting (in December, 1878,) whereby the work of the departments of French and History and of Physics was divided up and assigned to other departments, Professors Richard W. Laing, L. L. D., and Louis W. Peck, were not re-elected. They accordingly retired at the close of the year

Notices: This material may be used for educational purposes only.

1878-9. This action of the Board was accompanied with demonstrations of respect and confidence on the part of the Board.

Assistant Professors R. H. Tripp and C. W. Hall were at the same time elected as full professors.

At the close of the year 1877-8 1st Lieut. John A. Lundora, U. S. A., whose three years' term of service as professor of Military Science had expired, was ordered to join his proper command. The vacancy thus occasioned has not up to this date been filled, notwithstanding active and prolonged efforts on the part of the Board. The nature of the duties being such that they cannot easily be devolved on the heads of other departments, the Board has been constrained to leave them in abeyance, until the War Department shall be able to detail an officer as heretofore.

At the annual election of the Faculty in the spring of 1880, a number of changes occurred:

Professor G. Campbell, M. A., having offered his resignation in consequence of a disagreement upon the matter of compensation, the same was accepted.

The following officers, not receiving a majority of the ballots, were not re-elected to their positions and accordingly retired at the close of the year 1879-80: Professors E. J. Thompson, S. F. Parkham, R. H. Tripp, Chas. Y. Lucy, and Mrs. A. N. Smith, preceptor.

Mr. John C. Hutchinson, instructor, was elected assistant Professor of Greek, and Mr. John S. Clark, instructor, assistant Professor of Latin.

Since the close of the year, at a meeting of the Board held on the 8th day of August, the following elections were made to fill vacancies in the Faculty:

Maria L. Sanford, Ass't Professor, Rhetoric and Elocution.

Wm. A. Pike, C. E., Professor, Engineering and Physics.

John F. Downey, Professor, Mathematics and Astronomy.

James A. Dodge, Ph. D., Professor, Chemistry.

Alex. T. Ormond, Professor, Mental and Moral Philosophy and History.

Charles W. Benton, Professor, French.

Great exertions were made to secure the most eligible and suitable persons to fill these important chairs, and the Board congratulate themselves on apparent good success.

Up to the present date the most vigorous effort to fill the chair of Agriculture with a person of the best qualifications, have not been successful. The department of Military Science is also vacant, as already noted.

In pursuance with a resolution of the Board to offer a course of instruction in Vocal Music, Prof. W. H. Leib has been engaged and has entered upon his duties.

The Board have also decided to employ a suitable person to deliver a course of lectures annually upon the Theory and Practice of Teaching, for which arrangements will be made in due time.

EMPLOYEES.

- THOMAS BUDDS, Farmer.
- CHARLOTTE A. ROLLIT, Assistant Librarian.
- CLARENCE L. HERRICK, Assistant, Museum, 1878-9.
- FRED. C. BOWMAN, Assistant in Chemical Laboratory, 1878-9.
- ALBERT W. RANKIN, Assistant in Chemical Laboratory, 1879-80.
- FRANK BRYANT, Janitor, Main Building.
- W. M. H. CHAMBERS, Fireman, Main Building.
- HORACE B. GREELEY, Janitor, Main Building.
- W. M. H. SAVIDGE, Carpenter.

All of the above except the first were or had been students. List of other students were employed by the month, day or hour on the Experimental Farm and elsewhere.

INSTRUCTION.

The customary tables, showing what subjects were taught, by whom and by what means, to what classes and to what number of students, are submitted:

WORK OF THE YEAR 1878-9.

| Subjects. | Text Books. | Instructor. | No. of Exercises | Classes. | No. of Students. | Term. |
|---------------------|-----------------------------|-------------|------------------|----------|------------------|------------|
| ASTRONOMY. | | | | | | |
| Practical | Loomis. | Thompson. | 55 | Senior. | 14 | I. |
| Practical | Snell. | " | 35 | First. | 30 | III. |
| Practical | Kiddle. | " | 57 | Fourth. | 28 | III. |
| MATHEMATICS. | | | | | | |
| Algebra, Int. | Olney. | Thompson. | 68 | Junior. | 10 | I. |
| Algebra, Int. | " | " | 53 | " | 6 | II. |
| Geometry | " | " | 35 | Second. | 24 | II. |
| Theory of Equations | Todhunter. | " | 50 | Junior. | 70 | III. |
| Geometry | Olney. | " | 165 | Second. | 84 | I. |
| Plane Geometry | " | " | 82 | Fourth. | 24 | II. |
| " | " | Hutchinson. | 62 | " | 19 | II. |
| " | " | " | 62 | " | 19 | II. |
| " | " | " | 68 | Third. | 27 | I. |
| " | " | " | 58 | " | 28 | I. |
| " | " | Lundeen. | 58 | " | 24 | I. |
| " | " | Hutchinson. | 58 | " | 68 | III. |
| CHEMISTRY. | | | | | | |
| General Chemistry | Barker & Peckham. Lectures. | Peckham. | 55 | Second. | 85 | I. |
| Advanced Chemistry | " | " | 51 | " | 25 | III. |
| Practical Chemistry | " | " | 56 | First. | 13 | II. & III. |
| " | " | " | 56 | Senior. | 3 | I. |
| " | " | " | 56 | Junior. | 4 | I. |
| " | " | " | 56 | Special. | 1 | I. |
| " | " | " | 54 | Senior. | 4 | II. |
| " | " | " | 54 | Junior. | 2 | II. |
| " | " | " | 54 | Special. | 6 | II. |
| " | " | " | 47 | Senior. | 4 | III. |
| " | " | " | 53 | Junior. | 1 | III. |
| " | " | " | 53 | Special. | 2 | III. |
| Physics of Sciences | Lectures. | " | 10 | Seniqr. | 20 | III. |

3 hrs. 3 hrs. 2 hrs.

| Subjects. | Text Books. | Instructor. | No. of Exercises | Classes. | No. of Students |
|-------------------------------|--------------|-------------|------------------|----------|-----------------|
| PHYSICS. | | | | | |
| Mechanics..... | Snell. | Peck. | 54 | First. | 18 |
| Natural Philosophy..... | Ganot. | " | | | 25 |
| Practical Physics..... | Laboratory. | " | 54 | Fourth. | 53 |
| Sound and Heat..... | Atkinson. | " | 53 | Senior. | 3 |
| Mechanics..... | Peck. | " | 53 | Third. | 40 |
| Light and Electricity..... | Atkinson. | " | 20 | First. | 18 |
| General Physics..... | Ganot. | " | 59 | Second. | 33 |
| | | | 59 | Second. | 21 |
| GEOLOGY. | | | | | |
| Dynamical Geology..... | Dana. | Hall. | 53 | Third. | 45 |
| Historical Geology..... | Lectures. | " | 52 | " | 38 |
| Mineralogy..... | " | " | 56 | Junior. | 11 |
| Blowpipe Analysis..... | Brush. | " | 53 | " | 9 |
| | | | 50 | " | 9 |
| ZOOLOGY. | | | | | |
| Comparative..... | Orton. | Hall. | 56 | First. | 23 |
| BOTANY. | | | | | |
| Lessons and Analysis..... | Gray. | Hall. | 56 | Third. | 66 |
| | " | Herrick. | 58 | " | 86 |
| PHYSICAL GEOGRAPHY. | | | | | |
| | Cornell, &c. | Lacy. | 50 | Fourth. | 29 |
| PHYSIOLOGY. | | | | | |
| | Dalton. | Lacy. | 58 | Fourth. | 37 |
| ENGLISH. | | | | | |
| Criticism..... | Goodrich. | Marston. | 55 | Senior. | 5 |
| | Lectures. | " | 30 | " | 8 |
| Anglo-Saxon..... | Carpenter. | " | 30 | First. | 8 |
| " | " | " | 53 | " | 8 |
| English Literature..... | Sweet. | " | 40 | " | 1 |
| Rhetoric..... | Lectures. | " | 55 | Junior. | 10 |
| Logic..... | Hepburn. | " | 55 | First. | 42 |
| Historical Grammar..... | Jevons, &c. | Folwell. | 55 | " | 38 |
| Critical Readings..... | Morris. | M'sCampbell | 54 | Second. | 14 |
| Higher Grammar..... | Shaksp're &c | " | 51 | " | 12 |
| Readings, &c..... | Whitney. | " | 54 | Third. | 11 |
| American Literature..... | Burns, &c. | " | 51 | " | 13 |
| Old English History..... | Freeman. | " | 56 | 2d & 3d. | 9 |
| English Composition..... | Gilmore. | Mrs. Smith. | 51 | Fourth. | 29 |
| | " | " | | 2 secs. | |
| English Words..... | Haldeman. | " | 57 | Fourth. | 61 |
| | " | " | | 2 secs. | |
| RHETORICAL EXERCISES. | | | | | |
| Orations..... | | Marston. | 25 | Senior. | 25 |
| Essays..... | | " | 25 | " | 25 |
| Orations and Essays..... | | " | 48 | " | 24 |
| Commencement Parts..... | | " | 24 | " | 24 |
| Orations and Essays..... | | " | 36 | Junior. | 18 |
| " | | " | 40 | " | 20 |
| " | | " | 40 | " | 20 |
| Essays (with Rhetoric)..... | | " | 80 | First. | 40 |
| Declamations..... | | " | 80 | " | 40 |
| Essays (with Logic)..... | | " | 80 | " | 40 |
| Essays (with Eng. Comp.)..... | | " | 107 | " | 54 |
| Declamations..... | | Folwell. | 120 | " | 60 |
| Vocal Culture..... | | Mrs. Smith. | | Fourth. | 61 |
| Essays (with Chemistry)..... | | Mr. Reeve. | | Second. | 61 |
| Essays (with Geology)..... | | | 10 | Third. | 61 |
| Essays (with History)..... | | Peckham. | 170 | Second. | 61 |
| | | Hall. | 150 | Third. | 61 |
| | | Ladng. | 63 | Fourth. | 21 |
| | | Mrs. Smith. | 141 | " | 67 |

| Subjects. | Text Books. | Instructor. | No. of Exercises | Class. | No. of Students. | Term. |
|---|--------------------|-------------|------------------|----------|------------------|-------|
| GERMAN. | | | | | | |
| German Literature..... | Adler. | Moore. | 58 | Sen&Jun | 17 | I. |
| German von Barnhelm..... | Buchhelm. | " | 58 | Second. | 40 | I. |
| German Course..... | Comfort. | " | 56 | Third. | 28 | I. |
| Poet and Hist. Lit..... | Whitney. | MJCampbell | 56 | Jun. &c. | 12 | I. |
| German and Reader..... | " | Moore. | 55 | Sen&Jun | 12 | II. |
| German W. Dorothea, } with term. Hist..... | Hart. | " | 55 | Junior. | 13 | II. |
| German Course..... | Comfort. | " | 55 | Second. | 36 | II. |
| German and Reader..... | Whitney. | MJCampbell | 55 | Third. | 28 | II. |
| German Lyrik and Hist..... | Moore. | " | 59 | " | 25 | II. |
| German Tell..... | MJCampbell | " | 59 | " | 27 | III. |
| | Whitney. | Moore. | 59 | " | 20 | III. |
| | Buchhelm. | MJCampbell | 59 | Sen&Jun | 11 | III. |
| | " | Moore. | 59 | Second. | 16 | III. |
| | " | " | 59 | " | 24 | III. |
| FRENCH. | | | | | | |
| French..... | Classical Theater. | Laing. | 60 | Senior.. | 13 | I. |
| French and Reading..... | Principia. | " | 60 | First. | 44 | I. |
| French Literature..... | Demogeot. | " | 53 | Senior. | 12 | II. |
| French, &c..... | Principia, &c | " | 50 | First. | 47 | II. |
| French Literature..... | Demogeot &c | " | 38 | Senior. | 9 | III. |
| French, &c..... | Souvestre. | " | 50 | First. | 26 | III. |
| LATIN. | | | | | | |
| Latin..... | Lincoln. | Tripp. | 52 | First. | 19 | I. |
| Latin Essays and History..... | " | " | 24 | " | 19 | I. |
| Latin Orations, 1\$..... | Chase & Stewart. | " | 55 | Third. | 25 | I. |
| Latin History..... | Liddell. | " | 5 | " | 25 | I. |
| Latin Orations, 2\$..... | Chase & Stewart. | " | 55 | " | 22 | I. |
| Latin History..... | Liddell. | " | 5 | " | 22 | I. |
| Latin Commentaries, 1\$..... | Chase & Stewart. | Clarke. | 53 | Fourth. | 13 | I. |
| " " 2\$..... | " | " | 53 | " | 17 | I. |
| " " 3\$..... | " | " | 53 | " | 22 | I. |
| Latin De Amicitia..... | Tripp. | " | 52 | Junior. | 6 | II. |
| Latin (Latin)..... | " | " | 6 | " | 6 | II. |
| Latin (Latin)..... | " | " | 55 | Third. | 21 | II. |
| Latin History..... | Liddell. | " | 6 | " | 21 | II. |
| Latin (Latin)..... | Searing. | " | 55 | " | 24 | II. |
| Latin History..... | Liddell. | " | 6 | " | 24 | II. |
| Latin History..... | Lincoln. | Clarke. | 51 | Second. | 18 | II. |
| Latin History..... | Liddell. | " | 10 | " | 18 | II. |
| Latin History..... | Lincoln. | " | 51 | " | 26 | II. |
| Latin History..... | Liddell. | " | 10 | " | 26 | II. |
| Latin History..... | Chase & Stewart. | " | 51 | Fourth. | 27 | II. |
| Latin History..... | " | " | 51 | " | 27 | II. |
| Latin History..... | " | Tripp. | 58 | Junior. | 6 | III. |
| Latin History..... | Lectures. | " | 2 | " | 6 | III. |
| Latin History..... | Essays. | " | 6 | " | 9 | III. |
| Latin History..... | " | " | 21 | Senior. | 5 | III. |
| Latin History..... | Searing. | " | 58 | Third. | 18 | III. |
| Latin History..... | Liddell. | " | 7 | " | 18 | III. |
| Latin History..... | Searing. | " | 58 | " | 20 | III. |
| Latin History..... | Liddell. | " | 7 | " | 20 | III. |
| Latin History..... | Chase & Stewart. | Clarke. | 50 | Fourth. | 19 | III. |
| Latin History..... | " | MJCampbell | 58 | " | 22 | III. |
| Latin History..... | Tyler. | Clarke. | 54 | First. | 13 | III. |
| Latin History..... | Lincoln. | " | 55 | Second. | 13 | III. |
| Latin History..... | Liddell. | " | 10 | " | 13 | III. |
| Latin History..... | Lincoln. | " | 55 | " | 35 | III. |
| Latin History..... | Liddell. | " | 10 | " | 35 | III. |

| Subjects. | Text Books. | Instructor. | No. of Exercises. | Class. | No. of Students. | Term. |
|-------------------------------|----------------------|-------------|-------------------|---------|------------------|-------|
| GREEK. | | | | | | |
| Greek Literature..... | Lectures. | Brooks. | 21 | Senior. | 8 | I |
| Exam. and Reviews..... | | " | 21 | " | 8 | I |
| Plato, Apology and Crito.... | Tyler. | " | 50 | Junior. | 8 | I |
| " Papers..... | | " | 18 | " | 8 | I |
| Homer..... | Boise. | " | 53 | Second. | 21 | I |
| " Papers..... | | " | 60 | " | 21 | I |
| Anabasis..... | Boise. | Hutchinson. | 54 | Third. | 10 | I |
| Grammar and Reader..... | { Hadley & Boise. | " | 54 | Fourth. | 14 | I |
| Plato, Phædo..... | Dayles. | Brooks. | 54 | Senior. | 8 | II |
| Demosthenes..... | { Heslop & Tyler. | " | 56 | First. | 13 | II |
| Homer..... | Boise. | " | 50 | Second. | 10 | II |
| Anabasis..... | | Hutchinson. | 50 | Third. | 10 | II |
| Grammar and Reader..... | { Hadley & Boise. | " | 50 | Fourth. | 14 | II |
| New Testament..... | | Brooks. | 20 | Senior. | 2 | III |
| Æschylus..... | Woolsey. | " | 55 | First. | 11 | III |
| " Papers..... | | " | 33 | " | 11 | III |
| Herodotus..... | Mather. | " | 56 | Second. | 16 | III |
| Grammar and Reader..... | { Hadley & Boise. | Hutchinson. | 52 | Fourth. | 11 | III |
| COMPAR. PHILOLOGY. | | | | | | |
| Philology, (theoretical)..... | Lectures. | Campbell. | 24 | Junior. | 16 | I |
| MENTAL PHILOSOPHY. | | | | | | |
| Anthropology..... | Hickok. | Campbell. | 10 | Junior. | 20 | III |
| Psychology, (empirical)..... | " | " | 45 | " | 20 | III |
| " Essays..... | | " | 3 | " | 20 | III |
| History of Philosophy..... | Lectures. | " | 30 | Senior. | 20 | III |
| Ontology..... | " | " | 15 | " | 20 | III |
| Psychology, (rational)..... | " | " | 15 | " | 20 | III |
| Essays..... | " | " | 3 | " | 20 | III |
| MORAL PHILOSOPHY. | | | | | | |
| Practical Ethics..... | Lectures. | Campbell. | 10 | Second. | 70 | III |
| History of Ethics..... | " | " | 18 | Senior. | 24 | III |
| Philosophy of Ethics..... | " | " | 22 | " | 24 | III |
| Evidences of Christianity.. | " | " | 9 | " | 24 | III |
| Discussions..... | " | " | 5 | " | 24 | III |
| Essays..... | " | " | 3 | " | 24 | III |
| History of Nat. Theology... | " | " | 10 | " | 20 | III |
| Philosophy of Nat. Theology | " | " | 10 | " | 20 | III |
| HISTORY. | | | | | | |
| History of Civilization..... | Gulzot. | Lang. | 33 | Junior. | 16 | I |
| Mediaeval History, 2 secs.... | Greene. | " | 23 | Second. | 72 | I |
| Modern History..... | Thalheimer. | " | 25 | First. | 20 | I |
| General History..... | Swinton. | " | 56 | Fourth. | 10 | I |
| " 2 secs..... | | Mrs. Smith. | 54 | " | 47 | I |
| SOCIAL SCIENCE. | | | | | | |
| Civil Government..... | DeTocquev'e | Folwell. | 33 | Senior. | 20 | III |
| " "..... | Papers. | " | 100 | " | 20 | III |
| " "..... | Const. U. S. | " | 8 | " | 20 | III |
| " "..... | Const. Minn. | " | 4 | " | 20 | III |
| Political Economy..... | Lectures. | " | 48 | " | 20 | III |
| International Law..... | Woolsey, &c. | Lang. | 20 | Senior. | 20 | III |
| SANITARY SCIENCE. | | | | | | |
| Public Health..... | Lectures. | Hewitt. | 8 | Senior. | 24 | III |

| Subjects. | Text Books. | Instructor. | No. of Exercises | Class. | No. of Students. | Term. |
|---|-------------|-------------|------------------|-----------|------------------|-------|
| INDUSTRIAL DRAWING. | | | | | | |
| Isometrical Drawing..... | No book. | Rhame. | D. H. | Third. | 41 | I. |
| Linear Geom. & Perspective. | Church, &c. | " | 54 | First. | 12 | II. |
| Descriptive Geometry, &c.. | " | " | D. H. | Second. | 22 | II. |
| Free Hand Drawing..... | W. Smith. | " | 54 | Fourth. | 41 | III. |
| FINE ARTS. | | | | | | |
| Theory and Principles..... | Lectures. | Campbell. | 10 | Senior. | 17 | III. |
| AGRICULTURE. | | | | | | |
| Agricultural Chemistry..... | Johnson. | Lacy. | 56 | Special. | 1 | I. |
| Practical Agriculture..... | " | " | 31 | " | 1 | I. |
| " | Lectures. | " | 25 | " | 1 | I. |
| Botany..... | Barry. | " | 40 | " | 1 | I. |
| " | Lectures. | " | 15 | " | 1 | I. |
| CIVIL ENGINEERING. | | | | | | |
| Mechanics..... | Welsbach. | Rhame. | 54 | Senior. | 2 | I. |
| Practical Engineering and Drawing..... | " | " | D. H. | " | 3 | I. |
| Ship Building..... | Wood. | " | 20 | " | 1 | II. |
| Building Materials..... | " | " | 57 | " | 3 | III. |
| Surveying..... | Oral. | Peck. | 36 | Second. | 23 | II. |
| MILITARY SCIENCE. | | | | | | |
| Band Drill..... | Upton. | Lundeen. | 25 | 3d & 4th. | 54 | I. |
| Small Arms..... | Lectures. | " | 4 | 1st & 2d. | 31 | I. |
| Company & Battalion Drill. | Upton. | " | 16 | First. | 14 | III. |
| " | " | " | 14 | Second. | 31 | III. |
| " | " | " | 18 | Third. | 26 | III. |
| " | " | " | 43 | Fourth. | 24 | III. |
| " | " | " | 48 | " | 15 | III. |

WORK OF THE YEAR 1879-80.

| | | | | | | |
|---|---|-------------|----|------------|----|------------|
| ASTRONOMY. | | | | | | |
| Practical..... | Loomis. | Thompson. | 50 | Senior. | 10 | I. |
| Observatory..... | Snell. | " | 53 | Soph. | 30 | III. |
| History..... | Loomis. | " | 50 | Junior. | 13 | III. |
| MATHEMATICS. | | | | | | |
| Differential Calculus..... | Olney. | Thompson. | 56 | Junior. | 15 | I. |
| Integral Calculus, 1 st | " | Clarke. | 19 | Fresh. | 20 | I. |
| " 2 nd | " | " | 14 | " | 22 | I. |
| " 3 rd | " | " | 14 | " | 20 | I. |
| Plane Trigonometry, 1 st | Olney. | Thompson. | 17 | " | 20 | I. |
| " 2 nd | " | Clarke. | 20 | " | 22 | I. |
| " 3 rd | " | " | 20 | " | 20 | I. |
| Spherical Trigonometry, 1 st | " | Thompson. | 15 | " | 20 | I. |
| " 2 nd | " | Clarke. | 20 | " | 22 | I. |
| " 3 rd | " | " | 20 | " | 22 | I. |
| Algebra..... | " | Hutchinson. | 52 | Subfresh | 72 | I. |
| Differential Calculus..... | " | Thompson. | 53 | Junior. | 7 | II. |
| Integral Calculus, 1 st | " | " | 33 | Fresh. | 33 | II. |
| " 2 nd | " | Hutchinson. | 30 | " | 20 | II. |
| Theory of Equations..... | Fodhunter. | Thompson. | 50 | Junior. | 8 | III. |
| Conic & Spherical Geometry | Wentworth. | Hutchinson. | 52 | Subfresh | 50 | III. |
| CHEMISTRY. | | | | | | |
| Practical..... | Lectures. | Peckham. | 55 | Fresh. | 68 | I. |
| Association of Sciences..... | " | " | " | Senior. | 14 | II. |
| Applied Chemistry..... | " | " | " | Fresh. | 32 | III. |
| Practical Chemistry..... | Manuals of Appleton, Presentius & others. Lab- oratory work. Double hrs. | " | " | S'n J'n &c | 16 | I. |
| " | " | " | " | " | 12 | II. |
| " | " | " | " | " | 8 | III. |
| " | " | " | 60 | Soph. | 12 | II. & III. |

| Subjects. | Text Books. | Instructor. | No. of Exercises | Class. | No. of Students. | Term. |
|---|-------------|-------------------|------------------|----------|------------------|-------|
| PHYSICS. | | | | | | |
| Mechanical..... | Olmsted. | Rhame, | 56 | Soph. | 15 | I. |
| Mechanics..... | Peck. | Thompson. | 20 | " | 36 | II. |
| Sound and Heat..... | Ganot. | Hall & Rhame. | 55 | Subfresh | 41 | II. |
| Light and Electricity..... | " | Rhame. | 57 | Fresh. | 34 | III. |
| Physics..... | " | " | 57 | " | 32 | III. |
| MINERALOGY. | | | | | | |
| Mineralogy..... | Lectures. | Hall. | 54 | Junior. | 17 | II. |
| " Laboratory Work | Brush. | " | 45 | " | 17 | II. |
| ZOOLOGY. | | | | | | |
| | Orton. | " | 52 | Soph. | 46 | III. |
| BOTANY. | | | | | | |
| | Gray. | " | 52 | Subfresh | 50 | III. |
| ENGLISH. | | | | | | |
| Criticism..... | Goodrich. | Folwell. | 56 | Senior. | 3 | I. |
| Logic..... | Jevons. | Marston. | 57 | Soph. | 62 | I. |
| Anglo-Saxon..... | Carpenter. | " | 55 | " | 22 | I. |
| | " | " | 50 | " | 24 | II. |
| Historical Grammar..... | Morris. | Mrs. Smith. | 59 | Fresh. | 16 | II. |
| Critical Readings..... | Goldsmith. | " | 57 | Subfresh | 10 | II. |
| English Literature..... | Lectures. | Marston. | 45 | Junior. | 31 | II. |
| Rhetoric, 1..... | Hepburn. | Clarke. | 55 | Soph. | 30 | II. |
| " 2..... | " | Hutchinson. | 50 | " | 29 | II. |
| Shakspeare..... | Rolfe. | Mrs. Smith. | 59 | Fresh. | 14 | II. |
| Critical Readings..... | Hudson's | " | 58 | Subfresh | 11 | II. |
| | Addison. | " | 55 | Junior. | 5 | II. |
| Criticism..... | Goodrich. | Marston. | 54 | Fresh. | 4 | III. |
| Milton..... | Boyd. | Mrs. Smith. | 54 | Subfresh | 7 | III. |
| American Authors..... | Shaw. | " | 38 | Senior. | 19 | III. |
| Rhetoricals..... | " | Marston. | 62 | Junior. | 31 | III. |
| " | " | " | 118 | Soph. | 56 | III. |
| " | " | " | 136 | Fresh. | 60 | III. |
| Elocution..... | " | Peckham. | 12 | Subfresh | 70 | III. |
| " | " | Miss Child-ester. | 36 | Senior | 18 | III. |
| Rhetoricals..... | " | Marston. | 72 | Junior | 36 | III. |
| " 1..... | " | Clarke. | 60 | Soph. | 30 | III. |
| " 2..... | " | Hutchinson. | 58 | " | 29 | III. |
| " | " | Marston. | 132 | Fresh. | 66 | III. |
| Essays..... | " | Mrs. Smith. | 66 | Subfresh | 33 | III. |
| Rhetoricals..... | " | Marston. | 17 | Senior | 11 | III. |
| " | " | " | 50 | Junior | 25 | III. |
| " | " | " | 100 | Soph. | 50 | III. |
| GERMAN. | | | | | | |
| Scientific Prose, 3 per week | Hodge. | " | Daily. | Sen&Jun | 16 | I. |
| Lit. Geschichte, 2 per week | Mobins. | Moore. | " | Junior | 16 | I. |
| Grammar and Reader..... | Whitney. | " | " | Fresh. | 47 | I. |
| Schiller's Prose..... | Buchheimer. | " | " | " | 47 | I. |
| Grammar..... | Comfort. | MissCampbell. | " | Subfresh | 34 | I. |
| Faust, (3)..... | Hart. | " | " | " | 34 | I. |
| Lit. Gesch., (2)..... | Mobins. | Moore. | " | Sen&Jun | 17 | II. |
| Grammar and Reader..... | Whitney. | " | " | Junior | 14 | II. |
| Minna von Barnhelm, (3)..... | Buchheim. | " | " | " | 14 | II. |
| German History, (2)..... | Kohlrausch. | " | " | Fresh. | 34 | II. |
| Grammar and Reader..... | Whitney. | MissCampbell. | " | Subfresh | 37 | II. |
| Deutsche Poesie, &c..... | Klemm. | Moore. | " | Sen&Jun | 15 | III. |
| Hermann w. Dorothea & German Composition..... | Hart. | " | " | Junior | 15 | III. |
| Wilh. Tell, (3)..... | Buchheim. | " | " | " | 15 | III. |
| German History, (2)..... | Kohlrausch. | " | " | Fresh. | 34 | III. |
| Grammar and Reader..... | Whitney. | MissCampbell. | " | Subfresh | 37 | III. |

| Subjects. | Text Books. | Instructor. | No. of Exerols's | Class. | No. of Students | Term. |
|---------------------------------|------------------|---------------|------------------|----------|-----------------|-------|
| FRENCH. | | | | | | |
| Gram. Lit..... | Knapp. | Campbell. | Daily. | Senior | 8 | I. |
| Grammar..... | Fasquelle. | MissCampbell. | " | Soph. | 48 | I. |
| Gram. Prose..... | Knapp. | Campbell. | " | Senior | 8 | II. |
| Grammar and Reader..... | Fasquelle. | MissCampbell. | " | Soph. | 50 | II. |
| Philosophie de l'Art..... | Taine. | Campbell. | 3 per week. | Senior | 7 | III. |
| Sermons in Prose & Verse | Knapp. | MissCampbell. | Daily. | Soph. | 24 | III. |
| LATIN. | | | | | | |
| Seneca..... | Chase & Stewart. | Tripp. | 54 | Soph. | 25 | I. |
| Caesar's temporary History..... | " | " | " | " | 25 | I. |
| Caesar's temporary History..... | Sundry. | " | 55 | Subfresh | 22 | I. |
| Caesar's temporary History..... | " | " | 55 | " | 11 | I. |
| Caesar's temporary History..... | " | Clarke. | 52 | " | 16 | I. |
| Caesar's temporary History..... | " | " | " | " | 16 | I. |
| Caesar's temporary History..... | Chase & Stewart. | Tripp. | 56 | Junior | 17 | II. |
| Caesar's temporary History..... | Lincoln. | " | 57 | Fresh. | 23 | II. |
| Caesar's temporary History..... | " | " | 57 | " | 23 | II. |
| Caesar's temporary History..... | " | " | " | " | 24 | II. |
| Caesar's temporary History..... | " | " | " | " | 24 | II. |
| Caesar's temporary History..... | Searing. | Clarke. | 54 | Subfresh | 17 | II. |
| Caesar's temporary History..... | " | " | 54 | " | 17 | II. |
| Caesar's temporary History..... | " | " | " | " | 20 | II. |
| Caesar's temporary History..... | " | " | " | " | 20 | II. |
| Caesar's temporary History..... | Chase & Stewart. | Tripp. | 57 | Junior | 15 | III. |
| Caesar's temporary History..... | " | " | 12 | " | 12 | III. |
| Caesar's temporary History..... | " | Clarke. | 55 | Soph. | 15 | III. |
| Caesar's temporary History..... | " | Tripp. | 56 | Fresh. | 10 | III. |
| Caesar's temporary History..... | Liddell. | " | " | " | 10 | III. |
| Caesar's temporary History..... | Chase & Stewart. | " | 58 | " | 28 | III. |
| Caesar's temporary History..... | Liddell. | " | " | " | 28 | III. |
| Caesar's temporary History..... | Searing. | Clarke. | 55 | Subfresh | 11 | III. |
| Caesar's temporary History..... | " | " | 55 | " | 22 | III. |
| GREEK. | | | | | | |
| Plutarch..... | Lectures. | Brooks. | 22 | Senior. | 5 | I. |
| Plutarch..... | " | " | 22 | " | 5 | I. |
| Plutarch..... | Tyler. | " | 56 | Junior. | 11 | I. |
| Plutarch..... | Original. | " | 33 | " | 11 | I. |
| Plutarch..... | Boise. | " | 57 | Fresh. | 15 | I. |
| Plutarch..... | Original. | " | 45 | " | 15 | I. |
| Plutarch..... | Boise. | Hutchinson. | 52 | Subfresh | 15 | I. |
| Plutarch..... | Davies. | Brooks. | 53 | Senior. | 4 | II. |
| Plutarch..... | Hilsops. | " | 56 | Soph. | 14 | II. |
| Plutarch..... | Boise. | " | 54 | Fresh. | 13 | II. |
| Plutarch..... | " | Hutchinson. | 50 | Subfresh | 13 | II. |
| Plutarch..... | Brooks. | " | 20 | Senior. | 3 | III. |
| Plutarch..... | Woolsey. | " | 53 | Soph. | 13 | III. |
| Plutarch..... | Original. | " | 39 | " | 13 | III. |
| Plutarch..... | Hilsops. | " | 58 | Fresh. | 13 | III. |
| GENERAL PHILOLOGY. | | | | | | |
| Philology, theoretical..... | Lectures. | Campbell. | 22 | Junior. | 36 | I. |
| GENERAL PHILOSOPHY. | | | | | | |
| Philosophy..... | Hickok 1/2h | Campbell. | 55 | Junior. | 36 | III. |
| Philosophy..... | Lectures 1/2h | " | 40 | Senior. | 17 | I. |
| Philosophy..... | Lectures. | " | 15 | " | 17 | I. |

| Subjects. | Text Books. | Instructor. | No. of Exercises | Class. | No. of Students. | Term. |
|---|--------------|-------------|---------------------|-------------------|---------------------|-------|
| MORAL PHILOSOPHY. | | | | | | |
| Practical Ethics..... | Lectures. | Campbell. | 10 | Fresh. | 73 | II. |
| History of Ethics..... | " | " | 20 | Senior. | 17 | II. |
| Philosophy, Ethics..... | Hickok. | " | 15 | " | 17 | II. |
| Evidences of Christianity..... | Lectures. | " | 20 | " | 17 | II. |
| Natural Theology..... | " | " | 20 | " | 17 | III. |
| HISTORY. | | | | | | |
| History of Civilization..... | Gutzot. | Folwell. | 33 | Junior. | 20 | I. |
| Medieval History, 1 st | " | Clarke. | 21 | Fresh. | 57 | II. |
| " 2 ^d | " | " | 21 | " | 52 | II. |
| Ancient History..... | Rawlinson. | Mrs. Smith. | 57 | 2 sec. | 33 | II. |
| Modern History..... | " | " | 30 | Subfresh Soph. | 20 | III. |
| POLITICAL SCIENCE. | | | | | | |
| Civil Government..... | DeTocquev'e | Folwell. | 25 | Seniors. | 13 | II. |
| " "..... | Const. U. S. | " | 9 | " | 13 | II. |
| " "..... | Const. Minn. | " | 5 | " | 13 | II. |
| " "..... | Lectures. | " | 2 | " | 13 | II. |
| Political Economy..... | " | " | 35 | " | 17 | III. |
| SANITARY SCIENCE. | | | | | | |
| Public Health..... | Lectures. | Hewitt. | 7 | Senior. | 10 | III. |
| INDUSTRIAL DRAWING. | | | | | | |
| Geometrical Drawing..... | Oral. | Rhame. | D. H. 56 | Subfresh | 47 | I. |
| Drawing..... | " | " | D. H. 55 | Fresh. | 23 | II. |
| Descriptive Geometry..... | Church. | " | 55 | Soph. | 14 | II. |
| FINE ARTS. | | | | | | |
| Philosophy of Art..... | Lectures. | Campbell. | 2 | Senior. | 15 | III. |
| Architecture..... | " | " | 4 | " | 15 | III. |
| Sculpture..... | " | " | 2 | " | 15 | III. |
| Painting..... | " | " | 2 | " | 15 | III. |
| AGRICULTURE. | | | | | | |
| Agricultural Chemistry..... | Johnson. | Lacy. | 50 | Special. | 1 | I. |
| Agriculture..... | " | " | 50 | " | 1 | I. |
| Horticulture..... | " | " | 50 | " | 1 | I. |
| Agricultural Chemistry..... | Johnson. | " | 50 | " | 1 | I. |
| Agriculture..... | " | " | 50 | " | 1 | I. |
| Arboriculture..... | " | " | 50 | " | 1 | I. |
| Farm Drainage & Accounts | " | " | 50 | " | 1 | I. |
| Agriculture..... | " | " | 50 | " | 1 | I. |
| Horticulture..... | " | " | 50 | " | 1 | I. |
| CIVIL ENGINEERING. | | | | | | |
| Mechanics..... | Todhunter. | Rhame. | 55 | Junior. | 2 | II. |
| Surveying..... | " | " | 20 | Fresh. | 24 | II. |
| ANTHROPOLOGY. | | | | | | |
| | Topnard. | Hall. | 9 | Senior. | 2 | III. |

ATTENDANCE.

The following tables exhibit the enrollment and classifications of the students :

SUMMARY, 1878-9.

| COLLEGE OR DEPARTMENT. | CLASS. | Gentlemen. | Ladies. | Total. |
|-----------------------------------|-------------------|------------|------------|------------|
| Science, Literature and Arts..... | { Senior | 18 | 6 | 24 |
| | { Junior | 11 | 4 | 15-30 |
| Mechanic Arts..... | { Senior | 8 | ..... | 3 |
| | { Junior..... | 0 | ..... | 0-3 |
| Agriculture | { El. Course..... | 1 | ..... | 1 |
| | { Special | 3 | ..... | 3-4 |
| Collegiate Department | { First..... | 19 | 12 | 31 |
| | { Second | 37 | 20 | 57-88 |
| | { Third | 53 | 33 | 85 |
| | { Fourth | 73 | 32 | 105-190 |
| | { Special | 38 | 24 | 62-63 |
| Total | | 253 | 133 | 386 |

OR BY CLASSES ONLY.

| | |
|---|------------|
| Students of all departments..... | 27 |
| ..... | 15 |
| ..... | 31 |
| Students - First Class, Collegiate Department | 31 |
| Students - Second Class, Collegiate Department..... | 57-130 |
| ..... | 85 |
| ..... | 105-190 |
| ..... | 62-63 |
| Total | 386 |

COLLEGE OF SCIENCE, LITERATURE AND THE ARTS.

| CLASS. | COURSE. | Gentlemen. | Ladies. | Total. |
|--------------------|--------------------|------------|----------|-----------|
| ..... | { Classical | 7 | 1 | 8 |
| | { Scientific | 6 | 4 | 10 |
| | { Modern | 3 | 3 | 6 |
| Total | | 16 | 8 | 24 |
| ..... | { Classical | 5 | 1 | 6 |
| | { Scientific | 4 | 2 | 6 |
| | { Modern | 2 | 1 | 3 |
| Total | | 11 | 4 | 15 |

PUBLIC INSTRUCTION.

COLLEGE OF MECHANIC ARTS.

| CLASS. | COURSE. | Gentlemen. | Ladies. | Total. |
|-------------|------------------------|------------|---------|--------|
| SENIOR..... | Civil Engineering..... | 2 | | 2 |
| | Mechanical Engineering | 1 | | 1 |
| Total..... | | 3 | | 3 |

COLLEGE OF AGRICULTURE.

| | |
|----------------------------------|--|
| Elementary Course—Gentlemen..... | |
| Specials..... | |
| Total..... | |

COLLEGIATE DEPARTMENT.

| CLASS. | COURSE. | Gentlemen. | Ladies. | Total. |
|-----------------------|-----------------|------------|---------|--------|
| FIRST..... | Classical..... | 11 | 1 | 12 |
| | Scientific..... | 7 | 3 | 10 |
| | Modern..... | 1 | 8 | 9 |
| | | 19 | 12 | 31 |
| SECOND..... | Classical..... | 12 | 4 | 16 |
| | Scientific..... | 15 | 2 | 17 |
| | Modern..... | 10 | 11 | 21 |
| | | 37 | 20 | 57 |
| THIRD..... | Classical..... | 18 | 2 | 20 |
| | Scientific..... | 31 | 8 | 39 |
| | Modern..... | 3 | 23 | 26 |
| | | 52 | 33 | 85 |
| FOURTH..... | Classical..... | 22 | 2 | 24 |
| | Scientific..... | 47 | 16 | 63 |
| | Modern..... | 4 | 14 | 18 |
| | | 73 | 32 | 105 |
| SPECIAL STUDENTS..... | | 38 | 21 | 59 |
| Total..... | | 219 | 121 | 340 |

Three hundred and forty-seven (347) students were registered as students of Minnesota, the following counties being represented :

Anoka, 2; Becker, 2; Brown, 4; Blue Earth, 14; Carleton, 1; Carver, 4; Cass, 2; Dakota, 4; Dodge, 6; Fillmore, 19; Freeborn, 6; Goodhue, 21; Houston East, 58; Hennepin West, 79; Houston, 3; Le Sueur, 6; Lincoln, 1; Lyon, 1; McLeod, 5; Meeker, 3; Mower, 3; Nicollet, 10; Olmsted, 7; Ramsey, 14; Rice, 6; Scott, 2; Sibley, 1; Stearns, 11; Steele, 10; Stevens, 1; Wabasha, 3; Wabasha, 13; Waseca, 3; Washington, 10; Winona, 5; Wright, thirty-six counties.

Thirty-nine were registered from other States and counties, as follows :

Georgia, 1; Illinois, 2; Iowa, 9; Maine, 3; Massachusetts, 1; Montana, 1; New York, 3; Nova Scotia, 2; Ohio, 3; Pennsylvania, 3; Sweden, 1; Vermont, 2; Wisconsin, 7; Wyoming, 1.

SUMMARY, 1879-80.

| COLLEGE OR DEPARTMENT. | CLASS. | Gentlemen. | Ladies. | Total. |
|-----------------------------------|-------------------|------------|---------|---------|
| Science, Literature and Arts..... | { Senior | 13 | 6 | 19 |
| | { Junior..... | 12 | 7 | 19-38 |
| Scientific Arts | { Senior | 0 | 0 | 0 |
| | { Junior | 1 | 0 | 1 |
| | { Special | 1 | 0 | 1-2 |
| | { El. Course..... | 1 | 0 | 1 |
| | { Special | 1 | 0 | 1-2 |
| Collegiate Department..... | { Sophomore.... | 30 | 19 | 50 |
| | { Freshman..... | 37 | 25 | 62-120 |
| | { Sub-freshman | 78 | 30 | 108-108 |
| | { Special | 28 | 10 | 38-38 |
| | | 211 | 97 | 308 |

OR BY CLASSES ONLY.

| | |
|---------------------------------------|---------|
| Science of all Departments..... | 19 |
| Science of all Departments | 20 |
| Science - Collegiate Department | 59 |
| Science - Collegiate Department | 62-150 |
| Science of Freshmen | 108-108 |
| Science and Agricultural | 41- 41 |
| Total | 308 |

COLLEGE OF SCIENCE, LITERATURE AND THE ARTS.

| CLASS. | COURSE. | Gentlemen. | Ladies. | Total. |
|-------------|-------------------|------------|---------|--------|
| Senior..... | { Classical..... | 4 | 2 | 6 |
| | { Scientific..... | 7 | 2 | 9 |
| | { Modern..... | 2 | 2 | 4 |
| Total..... | | 13 | 6 | 19 |
| Junior..... | { Classical..... | 9 | 0 | 9 |
| | { Scientific..... | 3 | 2 | 5 |
| | { Modern..... | 0 | 5 | 5 |
| Total..... | | 12 | 7 | 19 |

COLLEGE OF MECHANIC ARTS.

| | | | | |
|-------------|--------------------------|---|---|---|
| Junior..... | Mechanical Engineering.. | 1 | 0 | 1 |
| | Special..... | 1 | 0 | 1 |
| Total..... | | 2 | 0 | 2 |

COLLEGE OF AGRICULTURE.

| | |
|----------------------------------|--|
| Elementary Course—Gentlemen..... | |
| Special Students—Gentlemen..... | |
| Total..... | |

COLLEGIATE DEPARTMENT.

| CLASS. | COURSE. | Gentlemen. | Ladies. | Total. |
|---------------------|-----------------|------------|---------|--------|
| Latin. | Classical..... | 15 | 4 | 19 |
| | Scientific..... | 10 | 2 | 12 |
| | Modern..... | 8 | 13 | 21 |
| | | 33 | 19 | 52 |
| German. | Classical..... | 9 | 3 | 12 |
| | Scientific..... | 24 | 4 | 28 |
| | Modern..... | 4 | 18 | 22 |
| | | 37 | 25 | 62 |
| Frenchman. | Classical..... | 28 | 2 | 30 |
| | Scientific..... | 47 | 13 | 60 |
| | Modern..... | 3 | 15 | 18 |
| | | 78 | 30 | 108 |
| Great Students..... | | 28 | 10 | 38 |
| Total..... | | 182 | 84 | 266 |

Two hundred and seventy-nine (279) students were registered as students of Minnesota, the following counties being represented:

Becker, 14; Brown, 3; Carver, 3; Dakota, 4; Dodge, 3; Douglas, 1; Fillmore, 18; Freeborn, 5; Goodhue, 19; Grant, 1; Hennepin East, 49; Hennepin West, 66; Houston, 2; Le Sueur, 5; Lincoln, 1; Lyon, 1; McLeod, 5; Meeker, 1; Mower, 7; Nicollet, 11; Olmsted, 7; Polk, 2; Ramsey, 10; Rice, 4; St. Louis, 1; Scott, 2; Sibley, 1; Stearns, 8; Steele, 6; Wabasha, 7; Waseca, 1; Wabasha, 4; Winona, 2; Wright, 5.—Thirty-three counties.

Twenty-nine were registered from other States and counties as follows:

Alabama, 4; England, 1; Illinois, 1; Iowa, 7; Maine, 3; Massachusetts, 1; Missouri, 1; New York, 1; Nova Scotia, 2; Ohio, 3; Pennsylvania, 1; Vermont, 1; Wisconsin, 3.

ADMISSIONS.

The plan of holding "local examinations" in different parts of the State, authorized by the Board of Regents as early as 1873, was put into operation in the summer of 1877. The results may be seen in the previous report. In June, 1878 and 1879, such examinations were again held under well ordered regulations of the

General Faculty, which were stated in detail in the report to the Superintendent of Public Instruction for 1878.

The record for 1878-9 gives the following results:

Southeast district, Professor Edwin J. Thompson in charge. Applicants examined: Lake City, 6; Zumbrota, 9; Rochester, 16; Winona, 9; Rushford, 4; Spring Valley, 6; Austin, 11; Owatonna, 5; Faribault, 9; Dodge Center, 6; Wabasha, 2.

Southwest district, Professor John G. Moore in charge. Applicants examined: Chaska, 8; Le Sueur, 6; Albert Lea, 2; Wells, 7; Mankato, 4; New Ulm, 1; Marshall, 1; Excelsior, 6, (by Prof. Thompson.)

Northwest district, Prof. Richard W. Laing in charge. Applicants examined: St. Cloud, 6; Alexandria, 2.

At the University, in June there were examined 28; in September, 55; in the course of the year, 33. The whole number of examinees was 242. Of this number 41 did not complete the work and received no mark. Of the 201 fully examined 125 were passed and 76 were found deficient. Sixteen of the last number were afterward re-examined and passed. Total passed 141.

Six gentlemen were admitted to pursue special studies in chemistry or agriculture without examination.

The whole number of new students admitted to instruction in the year 1878-9 was 124. They selected their courses of study as follows:

| | Gentlemen. | Ladies. | Total. |
|-----------------------|------------|---------|--------|
| Classical..... | 27 | 3 | 30 |
| Scientific..... | 43 | 13 | 56 |
| Modern..... | 5 | 7 | 12 |
| Selected Studies..... | 17 | 0 | 17 |
| Total..... | 92 | 32 | 124 |

The record for 1879-80 is as follows:

Southeast district, Professor Jabez Brooks in charge. Applicants examined: Red Wing, 4; Lake City, 5; Wabasha, 4; Winona, 7; Eyota, 4; Rochester, 13; (Duluth, 2)—39.

Southwest district, Professor Edwin J. Thompson in charge. Applicants examined: Faribault, 6 and 19; Owatonna, 3; Austin, 10; Spring Valley, 15; Mankato, 3; Le Sueur, 8; Chutfield, 10; Lanesboro, 4; Wells, 7; Blue Earth City, 7.—97.

Northwest district, Prof. John G. Moore in charge. Applicants examined: St. Cloud, 2; Sauk Center, 3; Alexandria, 1; Verona Falls, 1; Glencoe, 2; Willmar, 3.—12.

At the University there were examined, in June—; in September—; and in the course of the year—more. Total—; The whole number of examinees was 204. One hundred of these examining themselves of the regulations of the Faculty permitting the division of examinations, underwent only those of the common branches with the occasional addition of those of higher studies. Fifteen took examinations in continuation of those of previous

Of the remainder, 89, not one was able to obtain admission entirely free of conditions. Thirty-three were admitted with conditions.

There were admitted as special students without examination: 1 gentleman in Agriculture, 2 for Draughting and 2 in other studies. Total, 5.

The whole number of new students admitted to instruction in 1879-80 was 38, and they selected their courses of study as follows:

| | Gentlemen. | Ladies. | Total. |
|--------------------|------------|----------|-----------|
| Classical..... | 6 | | 6 |
| Scientific..... | 19 | | 19 |
| Modern..... | 2 | 4 | 6 |
| Agricultural..... | 1 | | 1 |
| Special..... | 4 | 2 | 6 |
| Total | 32 | 6 | 38 |

The immense decrease in the number of students admitted from that of previous years is explained by the fact that at the close of the previous year (1878-9) the Fourth Class of the Collegiate Department was discontinued, leaving the Third or Sub-freshman Class then as the lowest. Accordingly, the requirements for admission were increased by a full year's work in all the courses.

GRADUATIONS.

Since the last printed report the number of graduate alumni has been materially increased.

At the seventh annual Commencement, held June 5, 1879, the largest class, 26 in number received the degrees indicated below.

1879.

COLLEGE OF SCIENCE, LITERATURE AND THE ARTS.

Bachelors of Arts.

| | |
|-----------------------------|--------------|
| John Franklin Collom..... | Minneapolis. |
| John Nelson Elliot..... | " |
| John Dudley Goodnow..... | " |
| Frank Smith McKean..... | Lakeland. |
| Robert William Rhames..... | Rochester. |
| Thomas Joseph Rockwood..... | Garden City. |
| George Burt Thompson..... | Minneapolis. |
| William Mason West..... | St. Cloud. |

Bachelors of Science.

| | |
|------------------------------|----------------|
| Walter Barrett..... | Wasioja. |
| David Edwin Bowman..... | Litchfield. |
| Elizabeth Amelia Burnes..... | Minnertonka. |
| James Edward Byrnes..... | Kingston. |
| James May Champlin..... | Maple Grove. |
| William George, Jr..... | Anoka. |
| John J. Geyer..... | Lake City. |
| James Therta Linton..... | Cook's Valley. |
| George Henry Partridge..... | Winona. |
| John Thompson..... | Minneapolis. |

Bachelors of Literature.

| | |
|--------------------------------|--------------|
| William Lincoln Bassett..... | Minneapolis. |
| Alvin Hildreth..... | Sumner. |
| William Winchester Keyser..... | Mankato. |
| Marion Hooker Roe..... | Atton. |
| Caroline Rollit..... | Minneapolis. |
| Martha Isabel West..... | " |

COLLEGE OF MECHANIC ARTS.

Bachelors of Civil Engineering.

| | |
|-----------------------------|----------------|
| William Sanborn Dawley..... | Lake City. |
| Pierce Power Furber..... | Cottage Grove. |

1880.

The graduations at the eighth annual commencement, held June 3, 1880, were as follows :

COLLEGE OF SCIENCE, LITERATURE AND THE ARTS.

Masters of Arts.

| | |
|--------------------------|--------------|
| Graham Cox Campbell..... | Nova Scotia. |
|--------------------------|--------------|

Bachelors of Arts.

| | |
|---------------------------------|-------------------|
| James Francis Bryant..... | St. Peter. |
| Cora Inez Brown..... | Minneapolis. |
| Albert William Rankin..... | St. Peter. |
| William Wadsworth Williams..... | Line Springs, Ia. |

Bachelors of Science.

| | |
|------------------------------|--------------|
| Frederic Gerald Berry..... | Brooklyn. |
| Horace Burnham Greeley..... | Mapleton. |
| Clarence Luther Herrick..... | Minneapolis. |
| Robert Peter Andrew Nix..... | New Ulm. |
| Minnie Aurora Reynolds..... | Crookston. |
| Alva Lucius Roe..... | Atton. |
| Gilman Walter Smith..... | Red Wing. |
| Harvey Page Smith..... | " |
| Lillian Sanborn Todd..... | Minneapolis. |

Bachelors of Literature.

| | |
|------------------------------|--------------|
| Andrew Holt..... | Carver. |
| Joseph Elisha Horton..... | Preston. |
| Lizzie Augusta House..... | Minneapolis. |
| Beattie Sumner Lawrence..... | " |

The following table shows the number and kinds of degrees which have been conferred by the University :

| | 1873 | 1874 | 1875 | 1876 | 1877 | 1878 | 1879 | 1880 | Tot. |
|--------------------------------------|------|------|------|------|------|------|------|------|------|
| Doctor of Arts..... | 2 | 1 | 3 | 4 | 9 | 5 | 8 | 4 | 36 |
| Doctor of Science..... | | 1 | 2 | 5 | 3 | 8 | 10 | 9 | 38 |
| Doctor of Literature..... | | | 1 | | 3 | 2 | 6 | 4 | 16 |
| Doctor of Civil Engineering..... | | | 3 | 3 | | | 2 | | 8 |
| Doctor of Mechanical Engineer'g..... | | | | | | 1 | | | 1 |
| Doctor of Architecture..... | | | | | 1 | | | | 1 |
| Doctor of Agriculture..... | | | | | | | | | |
| Doctor of Arts..... | | | | | | | | 1 | 1 |
| Total..... | 2 | 2 | 9 | 12 | 16 | 16 | 26 | 18 | 101 |

The whole number of Alumni is 94, six persons having received the degrees, those in Science and Civil Engineering, and one, Mr. Gordon C. Campbell, B. A., of 1877, the Master's degree as above stated. It is proper to remark here that this degree was conferred upon examinations according to the regulations adopted by the Board of Regents in 1878, which may be seen on pages 215-7 of the report of the State Superintendent for that year. No honorary degrees are conferred by this University. There are candidates who enrolled for Masters' degrees and it is known that several of the Alumni are engaged in their studies for the same.

The whole number of women who have been graduated is 21, or 2 B. A.; 9 B. S.; 10 B. L.

THE COURSES OF STUDY.

A revision of the courses of study having become necessary through the consolidation of departments and the dropping of the fourth class, the Board of Regents at the last annual meeting instructed the General Faculty to undertake such revision. This duty was duly performed and the result laid before the Board. Several changes in the personnel of the Faculty taking place near the close of the last year, the Board deemed the time opportune for making some further modifications in the departments of instruction and the courses of study.

Although these changes are extensive, and in some particulars at first radical, and might therefore justify the insertion of the new course in full in this place, it may be sufficient to refer to the catalogue for 1879-80, in which they will be found.

The dropping of the Fourth class has had the effect to increase the requirements for admission by one full year's work in the three courses of study in the collegiate department. They now stand as follows :

Required for any Course.—English Language (including Writing, Spelling and the Elements of Grammar and Composition), Geography, Arithmetic, U. S. History, Elementary Algebra, General History, Physiology, Plane Geometry and either Latin Grammar and Reader or English Grammar and Analysis complete.

Required in addition to the above for each course :

Classical Course.—Greek Grammar and Reader, Cæsar (3 books), Cicero (1 oration.)

Scientific Course.—Physical Geography, Natural Philosophy, Elementary Astronomy, English Composition, English Word-Analysis and English History, or, in place of the last three, the same Latin as in the classical course.

Modern Course.—English Composition, English Word-Analysis, English History, Cæsar (3 books), Cicero (1 oration); or, in place of the Latin : Physical Geography, Natural Philosophy, Elementary Astronomy.

For further details respecting the requirements for admission reference is made to page 79 of the calendar for 1879-80.

The General Scheme of Professorships, as modified by recent action, shows the scope of the work contemplated by the Board as now or soon to be feasible. New departments and new chairs await the accumulation of larger revenues.

I. ACADEMIC.

1. Mathematics with Astronomy ; 2. Chemistry ; 3. Physics ; 4. Botany ;
5. Zoology, with Biology ; 6. Geology, with Mineralogy ; 7. English Language and Literature, with Rhetoric ; 8. German Language and Literature ; 9. French Language and Literature ; 10. Latin Language and Literature, with Roman History and Antiquities ; 11. Greek Language and Literature, with Greek History and Antiquities ; 12. Mental and Moral Philosophy, with History of Philosophy, Logic ; 13. History ; 14. Political Science, with International Law, History of Civilization, Comparative Philology ; 15. Elocution and Vocal Culture ; 16. Public Health ; 17. Industrial Drawing, with Descriptive Geometry ; 18. Fine Arts, with Aesthetics.

II. PROFESSIONAL.

19. Theory and Practice of Agriculture, with Horticulture and Arboriculture ;
20. Veterinary Science, Stock-breeding, &c. ; 21. Civil Engineering ; 22. Mechanical Engineering ; 23. Architecture ; 24. Education ; 25. Business ; 26. Music.

The following consolidations and assignments are now in force :

1. Physics is attached to the department of Mechanical Engineering
2. Botany, Zoology and Biology are in charge of the professor of Zoology
3. History is attached to the department of Mental and Moral Philosophy
4. Elocution and Vocal Culture are in charge of the professor of English
5. Public Health is in charge of the Secretary of the State Board of Health

4. Industrial Drawing and Descriptive Geometry are in charge of the professor of Mechanical Engineering.

1. No instruction is offered in Fine Arts or Business.

2. Civil Engineering and Architecture are attached to the department of Mechanical Engineering.

3. In the department of Education an annual course of lectures on the Theory and Practice of Teaching will be offered.

4. Instruction in Vocal Music will be offered once a week.

The changes made in the above courses consist mainly in transpositions of studies from term to term to enable the Faculty to be evenly employed and in transfers of some work as logic, physics and geology to later years in the University courses proper. There has been a slight increase in the amounts of chemistry and botany given to the scientific students.

The changes in the courses of the College of Science, Literature and the Arts have been extensive. The required studies are reduced to one per term in each course and the electives correspondingly increased. The ancient languages are not offered after the Junior year. Mechanical Physics, Logic and Geology, heretofore given in the Collegiate Department, have been added. Great care was taken to unduly increase the list of elective studies and to embrace branches which can not be effectively taught.

The changes in the courses in the College of Mechanic Arts consist chiefly in such transpositions as have been necessary to make the work of this department "dovetail" into that of the literary and scientific courses.

The course in Mechanical Engineering is the one to which greatest prominence is given, for the reason that it promises to be more in demand in our State than the other two. The course in Architecture are might however with sufficient means be developed and extended and be made very useful and popular.

No material changes have been made in the courses in the College of Agriculture. Great care has been taken at all times to make them varied and liberal so as to suit the wants of as many as possible. The demand, however, of the agricultural population for technical instruction remains inconsiderable.

EQUIPMENT.

The library has received but small additions since the report of 1875. The claim that this is the best and largest library in the State cannot long be maintained unless larger means are provided for its enrichment.

The chemical laboratory has been maintained in a state of efficiency and has been a most useful adjunct of instruction.

The biological laboratory opened last year has necessarily occasioned a considerable outlay because it had to be built up from the beginning.

The mineralogical laboratory has been extended materially from the fact that it occupies the same room with the biological laboratory and uses the same furniture, though with separate apparatus.

The physical laboratory, as well as the astronomical observatory are things of the future.

The General Museum has been greatly enlarged. In fact the rooms now occupied are much too small for the display of the material already collected.

The museums of Technology and Agriculture have also grown into considerable dimensions and serve a useful purpose in illustrating the work of the class-room.

The plant house has been maintained in active and successful operation and forms an object of much interest to all who visit the institution.

The experimental farm has been mainly devoted to series of experiments on cereals, vegetables, fruits and other productions. The results of these experiments, except those of 1879, have been printed with the annual report of the Board of Regents, and should be consulted by all who are interested in advancing the agricultural interests of the State.

The fruit farm on Minnetonka merely needs mention as a branch of the University equipment, although as yet it serves no immediate purpose as an appliance of instruction.

The geological survey has been prosecuted by the State Geologist, Prof. N. H. Winchell, and his assistants, with unremitting industry. The annual report for 1879 has been printed. This together with that for the year now closing, will fully exhibit the progress which has been made. It was the expectation of Prof. Winchell to complete the first volume of his final report in time to be laid before the next legislature.

THE UNIVERSITY AND THE HIGH SCHOOLS.

The University is conducted steadily according to the principle that this is a co-ordinate member of the State system of public instruction. It is her part to carry on the superior education of those who as children have been trained in the common schools and instructed in the high schools.

In common with most of the colleges and universities of the new States, this institution for many years carried on the usual preparatory classes, in which pupils were fitting for college work. Anticipating, however, the time when this preparatory work should be taken up by the high schools, the first preparatory year was dropped in June, 1877, and the second in June, 1878. There now remains attached to the Collegiate Department but one Sub-freshman class. The requirements for admission to this class have already been stated. The discontinuance of the first preparatory year was agreed to quite unanimously. Upon the question of dropping the second year, (called the Fourth Class of the Collegiate Department,) there was a difference of opinion. It was urged by a minority that the high schools of the State, with few exceptions, had not reached the stage at which they could take up the work thus relegated to them and that a chasm would result between the

University and the common schools. The opinion, however, which prevailed was that unless the University should renounce the preparatory work and throw it on to the high schools, they would be taking it up indefinitely. It therefore was thought best to act with vigor and confidence, especially as the State, through the law, the encouragement of higher education, was stimulating and in a better manner organizing the secondary education.

This law, although it proved to be defective, in that the appropriation referred to as annual, was not really made so, has already by its judgment performed a useful service. It has directed the attention of a large body of the people to the fact that the State may have a complete system of public instruction, offering to the youth of the State a course of studies reaching from the elementary to the degree of Master of Arts. The people are thus organizing their own education, and are not to accept any part of it from the hands of contending sects and orders. Under the operation of this law a large number of our high schools have been reorganized and extended. Better buildings and more competent teachers have been provided and more competent teachers have been employed.

The law has been in operation too short a time to show any success in filling up the lower classes of the University. After one year some considerable results should appear. It is greatly to be hoped that the legislature will continue the law in operation, making such modifications as experience may justify.

The Minneapolis Academy, under the principalship of Chas. Johnson, M. A., established in the near neighborhood of the University, promises to do a good work in preparing students for admission.

In conclusion I desire to remark that if the present prospects of the University are fulfilled, they may fully justify the expectations of the Board of Regents in thus dropping off the preparatory work and making considerable changes in the Faculty and the courses of study.

This report is respectfully submitted.