ANNUAL REPORT

OF

THE BOARD OF REGENTS

OF THE

UNIVERSITY OF MINNESOTA,

TO THE GOVERNOR OF MINNESOTA,

FOR THE FISCAL YEAR ENDING NOVEMBER 30, 1873.

TRANSMITTED TO THE LEGISLATURE OF THE SIXTEENTH ANNUAL SESSION,
1874.

SAINT PAUL:
SAINT PAUL PRESS COMPANY.
1874.

THE UNIVERSITY OF MINNESOTA,
MINNEAPOLIS, Dec. 22, 1873.

To His Excellency, Hon. Horace Austin,
Governor of Minnesota:

SIR:—In accordance with the requirements of law, I have the honor to hand you herewith the report of the Board of Regents of the University of Minnesota, for the fiscal year ending December 22d, 1873.

I have the honor to be,
Your obedient servant,
J. S. PILLSBURY,
President of the Board of Regents.

REPORT.

To His Excellency, Hon. Horace Austin:

The most important matter concerning the University since our last report has been the appropriation by the legislature of fifty thousand dollars for University buildings.

PLANS AND CONTRACTS.

The Board of Regents proceeded at once to utilize this appropriation. They advertised for plans for a main building for the University, and also for a building for the Agricultural College. The plans chosen for the latter were presented by Mr. J. W. Bassford, of St. Paul, those for the main building by Messrs. Alden & Long, of Minneapolis. The two buildings are to cost fifty thousand dollars; the agricultural building twelve thousand five hundred, and the principal building thirty-seven thousand five hundred. After advertising the required time for bids for the erection of these buildings it was found that all the proposals overran these amounts. The plans were accordingly cut down and new proposals called for. The reduction and perfecting of the plans and specifications consumed so much time that it was not until the —— day of August that the building committee were able to close a contract with Mr. Michael O'Brien, of St. Paul, being the lowest responsible bidder. The conditions of the contract required the Agricultural building to be enclosed and the foundation of the main building laid before the present winter. By reason of

unaccountable delays, however, the contractor has only laid the foundations of these buildings. The main building is to be 90 feet in length by 75½ feet in extreme breadth, and three stories high, besides basement. It will contain, in addition to recitation rooms, a chapel, library and reading room, President's room and ladies parlor. The agricultural building is to be two stories high and 54 feet in length, by 54 feet in width, with basement, and to have two wings, one for a chemical laboratory, 46 feet in length by 25 feet in breadth, the other for a plant-house of same dimensions. It will also contain recitation rooms for Chemistry, Botany, etc.

LOCATION OF THE BUILDINGS.

After having the buildings now in use carefully examined by experienced architects the Regents decided to continue as far as possible the original design and erect a main building as a continuation of the present section. In this way we secure one central academic building around which may be put up, from time to time, such others for special purposes as cannot properly stand in connection with the central building. The Agricultural College is located upon the University grounds about 25 rods to the south east of the main building. The position was chosen with a view to its being accessible to students from other departments as well as to the experimental farm.

FURNISHING AND HEATING THE BUILDINGS.

These new buildings are to be finished and ready for occupancy at the opening of the next college year in September, 1874. As the appropriation was intended exclusively for the erection of buildings, it becomes necessary to ask the Legislature to set apart a further sum sufficient to enable the Regents to provide the same with the necessary heating apparatus and furniture.

THE FACULTY.

The following changes have been made in the faculty during the past year:

Mr. W. C. Sawyer, a graduate of Harvard University, has been appointed assistant Professor in charge of the German Language and Literature.

Professor N. H. Winchell, graduate of the University of Michigan, has been made Professor of Geology, Zoology and Botany in addition to his duties as State Geologist.

Mr. Dalston P. Strange, a graduate of the Michigan State Agricultural College, has been appointed assistant Professor and placed in charge of the department of Agriculture.

Mr. M. D. Rhame, a graduate of Yale College, has been made assistant Professor in charge of the department of Civil Engineering.

Mr. Samuel F. Peckham, a graduate of Brown University, is appointed Instructor in charge of the department of Chemistry, and Chemist of the Geological Survey.

Mr. Andrew M. Williamson and Mr. Hiram W. Slack were employed as general instructors for a portion of the year.

The General Faculty is at present constituted as follows:

WILLIAM W. FOLWELL, M. A., PRESIDENT,
and Professor of Political Economy.

GABRIEL CAMPBELL, M. A., B. D., VICE PRESIDENT.
and Professor of Mental and Moral Philosophy.

VERSAL J. WALKER, M. A.,
Professor of the Latin Language and Literature.

JABEZ BROOKS, M. A., D. D.,
Professor of the Greek Language and Literature.

ARIS B. DONALDSON, M. A.,
Professor of the English Languge and Literature.

EDWIN J. THOMPSON, M. A.,
Professor of Mathematics and Astronomy.

HELEN SUTHERLAND, M. A.,
Preceptress and Assistant Professor of Latin.

ELI L. HUGGINS, 1st. Lieut. U. S. A.,
Professor of Military Science and Instructor in French.

NEWTON H. WINCHELL, M. A.,
Professor of Geology.

DALSTON P. STRANGE,
Assistant Professor of Agriculture.

MITCHELL D. RHAME, B. A.,
Assistant Professor of Civil Engineering.

WESLEY C. SAWYER, M. A., B. D.,
Assistant Professor of the German Language and Literature.

SAMUEL F. PECKHAM, B. S.,
Instructor of Chemistry.

WALTER E. FIELD,
Superintendent of the Experimental Farm.

NUMBER OF STUDENTS.

The entire enrollment of Students for the Academical year ending June 19th, 1873, is as follows:

Senior Class,	2
Junior Class,	6
First Class, (Sophomore),	10
Second Class, (Freshman),	26
Third Class,	66
Fourth Class,	88
Civil Engineering, (Junior),	3
Latin School,	62
Unclassified,	15
	278

THE FIRST COMMENCEMENT.

The University conferred its first degrees in June last. Two young men had completed the full classical course. The graduating exercises were held in the Academy of Music. The occasion called together a large number of citizens from all parts of the State. An excellent address was given by the Hon. A. S. Welch, President of the Iowa State Agricultural College, and the orations of the graduates were of a character that reflected honor on themselves and their instructors.

After the literary exercises, the Regents, Faculty and Alumni of the University, together with a numerous company of citizens, representing nearly every county in the State, sat down to a hospitable dinner tendered to them, at the Nicollet House, by the citizens of Minneapolis. All seemed to unite in expressions of gratification at the prosperity of the University.

THE LIBRARY.

Rev. Dr. H. P. Tappan, formerly President of the University of Michigan, has recently accepted the long standing proposals of the Board of Regents to purchase his private library. The catalogue of his collection has been carefully examined by the Faculty. It is the opinion of those who know anything of this library that it is one of the finest in the country, and will be an exceedingly valuable addition to the reading matter of the University. The Tappan Library contains twenty-five hundred volumes. This will make the number of volumes in the University Library about ten thousand. Numerous donations of books have also been received from other sources, especially public documents through Senator Ramsey and Representative Dunnell, and from the Smithsonian Institution. A list of these will be found in the accompanying report of President Folwell.

GEOLOGICAL SURVEY.

The Geological Survey has been continued by the State Geologist with good results. His voluminous report will show the value and extent of his investigation in different parts of the State, particularly with reference to the peat deposits, which were carried on in accordance with the law enacted by the last Legislature. A large number of valuable specimens have already been collected by Professor Winchell. The Board hope to be able to provide for the display of these minerals, peats, fossils, etc., etc., so soon as the building now being erected shall have been completed.

AGRICULTURAL COLLEGE.

The superintendent of the experimental farm has during the past year cultivated 35 acres of the arable land under the direction of the Regents committee. A considerable variety of fruit trees has been set out and good crops of wheat, corn and oats secured. The amounts produced have been about the same as last year. The Regents do not think it judicious to expend a large amount on experimental farming until students present themselves who are desirous of instruction in agriculture and who shall be directly benefited by the moneys appropriated to that purpose.

FINANCIAL RESOURCES OF THE UNIVERSITY.

The permanent University Fund consists of lands granted by Congress for the use and support of a State University and the lands granted to the State under the act of July 2d, 1862, donating lands for the benefit of agriculture and mechanic arts.

Whole number of acres granted by Congress, - - - -		202,000
Acres sold to pay debts, - -	14,000	
Acres sold for Permanent Fund, - -	29,950	
Acres unsold, - - -	158,050	
		202,000

PERMANENT FUND.

The permanent fund of the University consists of moneys received from the University lands, sold by the State Land Commissioner.

Whole amount received from sale of lands,		$168,681
Paid for purchase of experimental farm,	8,500	
Actual fund at interest November 30, 1873,	160,181	
		$168,681

EXPERIMENTAL FARM FUND.

Balance on hand as per last report, -	$671 87

UNIVERSITY LAND FUND.

Balance on hand as per last report, -	$39 42
Feb. 12, Cash received on Canfield's note,	275 00
Interest on same, - - -	45 00
Total, - - - -	$359 42

RECEIPTS AND DISBURSEMENTS, CURRENT EXPENSES FROM DEC. 22, 1872, TO DEC. 22, 1873.

Receipts.

Balance on hand as per last report,	$1,633 80
Received from State Treasurer on account of interest on Permanent Fund and Pine Stumpage, -	16,500 00
Received on Regents' orders drawn on State Auditor, - -	9,000 00
	$27,133 80

Disbursements.

For Salary of Faculty, - -	$19,907 50	
For Expense of Regents, -	569 93	
For Printing, - - -	406 83	
For Surveying and Mathematical Instruments, - - -	130 00	
For Library, Books, etc., -	627 43	
For Salary of Farmer, -	600 00	
For Incidental Expenses, - -	2,336 11	
Balance on hand, - -	2,556 00	
		$27,133 80

The report of the Treasurer in detail is appended.

GEOLOGICAL SURVEY.

To Balance on hand as per last report,	$69 08
Received from State Treasurer on account of State Appropriation, -	2,000 00
Received from State Treasurer on account of Appropriation for Apparatus, - - - -	500 00
Deficiency, - - - -	559 93
	$3,129 01

Disbursements.

For Salary of State Geologist, -	$2,400 00	
For Apparatus, - - - -	416 51	
For Expenses in field, - -	312 50	
		$3,129 01

PRESENT CONDITION OF UNIVERSITY FUND.

Up to the present time the current expenses of the University have been largely met by the moneys received for pine stumpage. This use of the funds is in accordance with a law passed by the Legislature, authorizing the Board of Regents to employ the receipts from sales of pine stumpage to defray the current expenses of the University. The stumpage fund is now nearly exhausted. It was the expectation of the Regents that by this time the sales of the University lands would be more than sufficient to produce a fund whose interest would equal the current expenses of the University. These sales, however, have not been sufficient to secure this result. The great amount of public lands offered to the State by the railroad companies and other corporations has prevented the sale, to any large extent, of the University lands. Such being the case, the Board of Regents find themselves called upon to set forth clearly the amount needed to pay the expenses of the coming year, and to urge upon the Legislature the necessity of making an appropriation adequate to meet the deficit until the sales of lands shall be sufficient, and thus preserve the credit and honor of the institution. It is well to mention that up to this date the Legislature has been called upon to meet no part of the current expenses of the University.

ESTIMATED CURRENT EXPENSES FOR YEAR 1873–74.

The following is an estimate of the amount needed for current expenses for the year commencing Dec. 22, 1873, and ending Dec. 22, 1874:

Disbursements.

For Salaries of Faculty, - - - -	$26,400
For Expenses of Regents, - - -	800

For Insurance, - - - - -	150
For Library, - - - - -	800
For Fuel, - - - - -	750
For Incidental Expenses, - - -	1,200
Total, - - - - -	$30,100

Receipts.

Interest on Productive Fund, - -	$11,200	
Amount of Deficit - - -	18,900	
		$30,100

GENERAL PROGRESS.

All the departments of the University are giving evidence of commendable progress. At the beginning of the present year the Latin school was dropped, and by this means the requirements for admission raised one year. The character and general appearance of the students have improved. The growth of the Library and Museum and the completion of the buildings now in process of erection, and other considerations, indicate the rapid development of the State University, and call upon us to stand by this, our highest school of learning, and see that it is made an honorable competitor among the universities of our country.

At a meeting of the Board, at which the foregoing report was agreed to, the following resolutions introduced by Regent Sibley were unanimously adopted:

Resolved, That the Board deeply deplore the recent death of Hon. John Nicols, one of its most efficient and honored members.

Resolved, That the University and the State at large have suffered an almost irreparable loss by the demise of Mr. Nicols, who for many years labored faithfully and earnestly to advance the interests of the State University, and in other

positions proved himself to be an able, honest and industrious officer, and a true friend of Minnesota.

Resolved, That these resolutions be entered on the records of the Board, and that a copy thereof, duly certified by the Secretary, be presented to the family of the lamented deceased.

TREASURER'S REPORT.

JOHN NICOLS, TREASURER, IN ACCOUNT WITH BOARD OF REGENTS OF STATE UNIVERSITY.

1872.	DR.	
Dec. 5,	To balance on hand	$1,633 00
20,	To cash from State Treasurer	2,000 00
1873.		
Jan. 13,	To cash from State Treasurer	2,500 00
Feb. 15,	To cash from State Treasurer	2,000 00
Mch. 4,	To cash from State Treasurer	2,000 00
April 12,	To cash from State Treasurer	2,000 00
29,	To cash from State Treasurer	2,000 00
July 14,	To cash from State Treasurer	2,000 00
		$16,133 00

1872.	CREDIT.	DR.	CR.
Dec. 20,	By cash, President Folwell and faculty, voucher 1		$1,770 00
20,	By cash, J. S. Pillsbury & Co., advances on 18 vouchers, voucher 2		591 36
21,	By cash, Regent Bryant, voucher 3		9 00
30,	By cash, Regent Harwood, voucher 4		19 48
1873.			
Jan. 4,	By cash, Regent Bryant, voucher 5		13 50
	By cash, Treas. salary 1872, voucher 6		300 00
15,	By cash, 14½ c'ds wood and hauling, v. 7.		104 13
18,	By cash, Ramaley, Chaney & Co., vouch. 8.		42 06
22,	By cash, Regent Bryant, voucher 9		4 20
25,	By cash, D. Ramaley, voucher 10		11 25
Feb. 5,	By cash, President Folwell and faculty, voucher 11		1,920 00
7,	By cash, Prof. Sawyer, voucher 12		100 00
Mch. 4,	By cash, President Folwell and faculty, voucher 13		2,020 00
7,	By cash, Chas. Hill, voucher 14		15 00
8,	By cash, Pres. Folwell, travel'g exp. v. 15		165 71
28,	By cash, J. S. Pillsbury & Co., advances on 7 vouchers, voucher 16		138 56
	By cash, Chas. Graves, voucher 17		259 88
April 3,	By cash, President Folwell and faculty, voucher 18		2,020 00

	10, By cash, Regent Bryant, voucher 19.....		12 00
	12, By cash, Tribune Print'g Co., voucher 20.		150 40
	30, By cash, President Folwell and faculty, voucher 21.....		1,920 00
May	2, By cash, Prof. Thompson, purchase of instruments, voucher 22.....		75 00
	2, By cash, J. S. Pillsbury & Co., advances on 7 vouchers, voucher 23.....		380 61
	10, By cash, Prof. Williamson, April salary, voucher 24.....		100 00
	14, By cash, Dr. C. N. Hewitt, voucher 25....		50 00
	20, By cash, Stone & Parker, voucher 26.....		60 00
	By cash, G. W. Ford, voucher 27.....		66 38
	31, By cash, President Folwell and faculty, voucher 28.....		1,920 00
June	2, By cash, surveying Campus, voucher 29..		58 05
	9, By cash, Tribune Print'g Co., voucher 30.		18 00
	19, By cash, President Folwell and faculty, voucher 31.....		1,920 00
July	1, By cash, Treas. salary 6 mos. voucher 32..		150 00
	2, By cash, E. M. Herrick, voucher 33.....		50 00
	7, By cash, Regent Bryant, voucher 34.....		12 00
	10, By cash, President Folwell and faculty, voucher 35.....		50 00
	15, By cash, Pres. Folwell, incidental ex., v. 36		190 83
	20, By cash, Pres. Folwell. house rent, v. 37..		400 00
	21, By cash, Prof. Campbell, voucher 38.....		400 00
	23, By cash, Regent Harwood, voucher 39....		24 75
	29, By cash, Prof. Huggins, voucher 40.....		500 00
	By cash, Press Print'g Co., voucher 41....		6 25
	By cash, Publishing Almanac, voucher 42.		50 00
	By cash, Treas. salary 1 mo., voucher 51..		25 00
Aug.	5, By cash, Prof. Winchell, voucher 48.....		200 00
	5, By cash, Pres. Folwell, voucher 49.....		100 00
	8, By cash, G. P. Randall, voucher 50.....		50 00
	19, By cash, J. S. Pillsbury & Co., advances on 6 vouchers, voucher 52.....		538 90
	To balance.....	$2,849 30	
		$18,982 30	$18,982 30
	By balance due Treas.....		$2,849 30

GEOLOGICAL SURVEY ACCOUNT.

1872.		
Dec. 31,	To balance on hand.....	$69 08
1873.		
June 16,	To cash from State Treasurer.....	$2,500 00
		$2,569 08

CREDIT.

July	11, By cash, Prof. Winchell, voucher 43.....		$104 25
	" J. S. Pillsbury, voucher 44.....		301 26
	17, " Prof. Winchell, voucher 45.....		100 00
	17, " Prof. Winchell, voucher 46.....		112 50
Aug.	4, " Prof. Winchell, voucher 47.....		100 00
	By balance.....		1,851 07
		$2,569 08	$2,569 08
	To balance due Geo. Survey account.....	$1,852 07	

EXPERIMENTAL FARM FUND.

1871.		
Dec. 21,	To balance on hand.....	$671 87

LAND SALES FUND.

1871.		
Dec. 20,	To balance on hand.....	39 42
1873.		
Feb. 12,	To cash, Canfield note.....	275 00
	To cash, interest on Canfield note.....	45 00
		$359 42

SUMMARY OF ACCOUNTS.

	TREAS. DR.	
	To balance on Geol. Survey account.....	$1,851 07
	To balance on Experimental Farm.....	671 87
	To balance on Land Sales.....	359 42
		$2,882 36
	TREAS. CR.	
	By balance on General account.....	$2,849 30
		$33 06

PARIS GIBSON, TREASURER, IN ACCOUNT WITH THE REGENTS.

GENERAL FUND FOR CURRENT EXPENSE.

		DR.	CR.
1873.			
Oct. 25,	To cash received on order drawn by Regents on State Auditor.....	$3,000 00	
Nov. 13,	To cash received from State Treasurer....	2,000 00	
20,	To cash received on order drawn by Regents, on State Auditor.....	4,000 00	
Dec. 4,	To cash received on order drawn by Regents, on State Auditor.....	2,000 00	
	To Prof. Winchell's salary, charged in Treasurer Nicols' report to Current Expense account, now transferred to Geological Survey account.....	1,600 00	
	By balance from Treasurer Nicols' report.		$2,849 30
Sept. 20,	By cash, Farmer's Union, Voucher No. 1..		30 00
27,	" Geo. Hollister, repairs, voucher No. 2.....		24 52
Oct. 10,	By cash, Faculty, in voucher No. 5.....		2,035 00
10,	" Peckham & Field, voucher No. 4.		200 00
16,	" Times, voucher No. 6.....		10 50
28,	" for Chemical Laborat'y, v. No. 10		27 84
Nov. 4,	" Spafford, wood, voucher No. 11..		20 00
6,	" Faculty, voucher No. 12.....		2,035 00
15,	" John Wiley & Son, books, vouch. No. 14.....		22 25

	18,	By cash, Farmer's Union, voucher No. 15..		25 00
Dec.	2,	" A. R. Cass, Janitor, voucher No. 17		47 50
	3,	" Faculty, in voucher No. 18.....		2,110 00
	3,	" Tribune, voucher No. 19.....		36 80
	3,	" Tribune, voucher No. 21.....		16 50
	6,	" Johnson & Smith, voucher No. 22		18 00
	6,	" Chem. Laboratory, vouch. No. 23		33 71
	9,	" Chem. Laboratory, vouch. No. 24		25 60
	9,	" Armstrong, wood, vouch. No. 25.		435 28
	17,	" A. R. Cass, Janitor, v. No. 26....		41 20
			$12,600 00	$10,044 00
		Balance.....		2,556 00
			$12,600 00	$12,600 00

GEOLOGICAL SURVEY ACCOUNT.

		To balance from Treasurer Nicols' report.	$1,851 07	
		By Prof. Winchell's salary transferred....		$1,600 00
Sept.	20,	By cash for Mackinaw blankets, voucher No. 9.....		11 00
	29,	By cash, Prof. Winchell, voucher No. 27..		200 00
Oct.	10,	" Prof. Winchell, in voucher No. 5.		200 00
Nov.	6,	" Prof. Winchell, in voucher No. 12		200 00
Dec.	3,	" Prof. Winchell, in voucher No. 18		200 00
			$1,851 07	$2,411 00
		To balance.....	559 93	
			$2,411 00	$2,411 00

EXPERIMENTAL FARM FUND.

	To balance from Treasurer Nicols' report.	$671 87

LAND SALES FUND.

	To balance from Treasurer Nicols' report.	$359 42

THE UNIVERSITY OF MINNESOTA,
MINNEAPOLIS, Dec. 1st, 1873.

Hon. J. S. Pillsbury, President of the Board of Regents:

SIR:—I have the honor herewith to transmit the seventh annual report of the condition and progress of the University.

I have the honor to be, sir,

Very respectfully,

Your obedient servant,

WILLIAM W. FOLWELL,

President.

REPORT OF THE

PRESIDENT OF THE UNIVERSITY.

To the Honorable, the Board of Regents:

GENTLEMEN:—The institution opened under your auspices as a preparatory school in October, 1867, celebrated its attainment to college rank by its first commencement, held on the 19th day of June, 1873. The degree of Bachelor of Arts was conferred upon the following persons:

Warren Clarke Eustis, of Hennepin County;
Henry Martyn Williamson, of Nicolet County.

A statement of the aims and organization of the University will furnish a standard by which to estimate its "condition and progress."

The University, by virtue of the organic law, embraces theoretically the following colleges or departments, to wit:

A department of Elementary Instruction;
A College of Science, Literature and the Arts;
A College of Agriculture;
A College of the Mechanic Arts;
A College of Law;
A College of Medicine.

The governing board is further empowered to establish additional departments. Of the above Colleges or Departments the first four have been organized. It is a general principle that each College is a distinct member of the University federation, having its own faculty, buildings and equipment. The Agricultural College, for instance, exists

as an independent department and not as a mere alternative course of studies in a general scientific and literary college. The Department of Elementary Instruction, otherwise known as the "COLLEGIATE DEPARTMENT," however, being temporary in its character, and so long as retained, the common feeder of the higher departments, is placed under the care of the General Faculty, composed of all the professors at large. As regards the other departments now in operation, the general principle stated cannot be fully carried out. The work of all departments is as yet crowded into one uncomfortable and inconvenient building; the professors are, in some instances, obliged to do duty in two or more departments, and the whole instruction is given upon a consolidated programme. This state of things is by no means peculiar to our own State and can be endured for any reasonable time. Most new colleges are forced into the same policy. The chief peculiarity of the organization is the including the work of the Freshman and Sophomore years in the department of Elementary Instruction, with the expectation of ultimately dropping it off to the secondary schools. This feature has received the endorsement of a large number of the best educational thinkers and workers in the country. The process of dropping of this preparatory or secondary work is to be gradual and to be so managed that the University may at all times begin wherever the High Schools leave off. In this way the University will maintain a close and vital articulation with the system of public instruction.

It was on account of this enforced intermingling of functions that the Board of Regents lately adopted, instead of a classified scheme, a schedule of professorships at large. This schedule, here inserted, however far it may be from ideal completeness, is adapted to the present circumstances and prospects.

A SCHEME OF DEPARTMENTS OF INSTRUCTION AT LARGE FOR THE VARIOUS "COLLEGES OR DEPARTMENTS" OF THE UNIVERSITY OF MINNESOTA.

I. Academic or General.	*Associated Subjects.*
1. Mathematics.	
2. Astronomy.	
3. Chemistry.	
4. Physics.	
5. Geology.	Mineralogy.
6. Botany.	
7. Zoology.	
8. Physical Geography.	

9. English Language and Literature.	Rhetoric, Logic, Anglo-Saxon.
10. German Language and Literature.	North European Languages.
11. French Language and Literature.	South European Languages.
12. Latin Language and Literature.	Roman History and Antiquities.
13. Greek Language and Literature.	Greek History and Antiquities.
14. Comparative Philology.	
15. Mental and Moral Philosophy.	History of Philosophy.
16. History.	History of Civilization. Philosophy of History.
17. Social Science.	The Civil Government. International Law.
18. Elocution and Vocal Culture.	Music, Gymnastics.
19. Public Health.	Anatomy and Physiology.
20. Industrial Drawing.	Descriptive Geometry.
21. Fine Arts.	Æsthetics.

II. Professional.

22. Theory and Practice of Agriculture.	Horticulture and Arboriculture.
23. Civil Engineering.	Architecture.
24. Mechanical Engineering.	Mechanics.
25. Military Science.	
26. Veterinary Science.	Stock Breeding.
27. Education.	
28. Business.	

It being manifestly impracticable to fill all the professorships given in the above list, the following dispositions have been made:

Astronomy has been assigned to the Professor of Mathematics; Botany, Zoology and Physical Geography to the Professor of Geology. French is taught by the Professor of Military Science. The Professor of Mental and Moral Philosophy gives the instruction in Comparative Philology. The department of History has been distributed to various officers, chiefly to the Professor of English Language and Literature. The Professor of Civil Engineering has control also of Mechanical Engineering and Industrial Drawing. The department of Public Health is under the direction of the Secretary of the State Board of Health. Social Science, including Political Economy, has been committed to the President. Elocution is associated with the department of English.

For the following departments and subjects no stated provision can be made: Anglo-Saxon, North European Languages except the Scandinavian, South European Languages except Italian, Philosophy of History, Vocal Culture, Music and Gymnastics, Fine Arts and Æsthetics, Veterinary Science and Stock Breeding, Education, Business. The Executive Committee are authorized to procure such occasional lectures on these subjects as may be feasible.

After all these eliminations there remains for so young an institution a liberal array of professorships; and when the amount of work actually performed by the Faculties is taken into account, it must be admitted that no trifling opportunities are offered to the youth of Minnesota. The following tables exhibit in detail the instruction given in the various departments during the year 1872–73. From these, some opinion can be formed as to what progress has been made toward the objects aimed at in the charter.

THE WORK OF THE YEAR.

The following is a statement in detail of the kinds and amounts of work performed in the various departments at large:

1. DEPARTMENT OF MATHEMATICS AND ASTRONOMY.

Subject.	Class.	No. Exercises.	No. Students.
Higher Arithmetic	Lat. Sch.	65	52
Algebra	Lat. Sch.	92	43
Higher Algebra	IV. & II.	92	112
Plane Geometry	III.	61	30
Solid Geometry	II.	30	32
Plane Trigonometry	II.	31	33
Spherical Trigonometry	II.	20	18
Surveying	II.	12	18
Analytical Geometry	I.	62	11
Differential Calculus	Junior.	45	4
Integral Calculus	Junior.	25	3
Modern Geometry	Junior.	20	3
Descriptive Astronomy	I.	30	10
Practical Astronomy	Senior.	35	2

2. DEPARTMENT OF CHEMISTRY AND PHYSICS.

Subject.	Class.	No. Exercises.	No. Students.
General Chemistry	II.	61	35
General Chemistry, continued	II. Sci.	61	15
Analytical Chemistry	Junior.	60	3
Natural Philosophy	IV. Sci.	130	55
Mechanical Physics	I.	65	10
Chemical Physics	I. Sci.	61	

3. DEPARTMENT OF NATURAL SCIENCES.

Subject.	Class.	No. Exercises.	No. Students.
Elements of Geology	III. Sci.	32	21
Advanced Course in Geology	Junior.	65	5
Structural Botany	III. Sci.	33	24
Systematic Botany	III. Sci.	32	15
Elements of Zoology	I. Sci.	32	11
Physical Geography	III. Sci.	61	16

4. DEPARTMENT OF ENGLISH LANGUAGE AND LITERATURE.

Subject.	Class.	No. Exercises.	No. Students.
Hart's Composition	IV.	61	70
Rhetoric	I.	28	6
Logic	I.	60	8
English Literature	Junior.	60	4
Rhetorical Exercises, Oral	4 upper.	54	34
Rhetorical Exercises, Written	4 upper.	65	34
Rhetorical Exercises, Rehearsals	4 upper.	300	34
English Grammar	Lat. Sch.	60	55
English Analysis	Lat. Sch.	28	49

5. DEPARTMENT OF GERMAN LANGUAGE AND LITERATURE.

Subject.	Class.	No. Exercises.	No. Students.
Grammar and Reader	Jun. etc.	65	55
Grammar and Reader Continued	Jun. etc.	65	26
Grammar and Reader	IV. etc.	65	30
Grammar and Reader	IV. etc.	32	23
Iphigenie auf Tauris	Sen. etc.	65	33
Evans' Abriss	Sen. etc.	65	23
Jungfrau von Orleans	Jun. etc.	32	14
	III. etc.	32	18

6. DEPARTMENT OF FRENCH LANGUAGE AND LITERATURE.

Subject.	Class.	No. Exercises.	No. Students.
Fasquelle's Method, &c	II.Sc.&Lt.	190	18

7. DEPARTMENT OF LATIN LANGUAGE AND LITERATURE.

Subject.	Class.	No. Exercises.	No. Students.
Grammar and Reader	Lat. Sch.	190	63
Cæsar's Commentaries	IV.	125	50
Cicero's Orations	III.	129	29
Virgil's Æneid	III.	90	31
Livy, History of Rome	II.	75	12
Horace, Odes, Satires and Epistles	I.	75	7
Plautus' Captives	Senior.	75	2
Juvenal, Satires	Junior.	35	1
Tacitus, Germania and Agricola	Junior.	75	1
Latin Compositions	3 Lower.	.....	.....
Roman History and Geography	II.	35	12
Roman Antiquities	I.	35	7
Roman Literature, Lectures	Junior.	8	1

8. DEPARTMENT OF GREEK LANGUAGE AND LITERATURE.

Subject.	Class.	No. Exercises.	No. Students.
Grammar and Reader	IV.	170	19
Xenephon, Anabasis	III.	136	15
Herodotus, History	III.	32	12
Homer, Iliad	II.	130	10
Grecian Antiquities	II.	30	10
Grecian History and Geography,	II.	10	10
Essays	II.	5	10
Demosthenes, Philippics	I.	63	5
Aristophanes' Clouds	I.	33	5
History and Geography	I.	15	5
Plato	Junior.	63	1
Aristotle	Junior.	17	1
Essays	Junior.	3	1
History	Junior.	5	1
Greek Literature, Lectures	Senior.	12	2
Greek Literature, Reviews	Senior.	12	2

9. DEPARTMENT OF COMPARATIVE PHILOLOGY.

Subject.	Class.	No. Exercises.	No. Students.
Science of Language, Lectures	Senior.	26	2
Science of Language, Lectures	Juniors.	26	6

10. DEPARTMENT OF MENTAL AND MORAL PHILOSOPHY.

Subject.	Class.	No. Exercises.	No. Students.
History of Philosophy..... } Ontology ..... }	Senior.	63	3
Psychology.....	Junior.	63	4

11. DEPARTMENT OF HISTORY.

Subject.	Class.	No. Exercises.	No. Students.
United States History.....	Lat. Sch.	60	62
Outlines of General History.....	II.	60	40

12. DEPARTMENT OF SOCIAL SCIENCE.

Subject.	Class.	No. Exercises.	No. Students.
Political economy.....	Senior.	60	3
Story on the Constitution.....	Senior.	35	3
International Law, Woolsey.....	Senior.	25	3

13. DEPARTMENT OF ELOCUTION.

See English Language and Literature.

14. DEPARTMENT OF PUBLIC HEALTH.

Subject.	Class.	No. Exercises.	No. Students.
Physiology	II &IV.Sc.	32	48
Lectures.....	all.	12	all

15. DEPARTMENT OF INDUSTRIAL DRAWING.

Subject.	Class.	No. Exercises.	No. Students.
Use of Instruments and Materials.....	III.	65	31
Plane Problems.....	II Sci.	65	16
Elementary Projections.....	II.	65	13
Descriptive Geometry.	I.	65	4
Linear Perspective.....	I.	30	3

16. DEPARTMENT OF CIVIL ENGINEERING.

Subject.	Class.	No. Exercises.	No. Students.
Farm Surveying and use of Instruments.	Junior.	30	4
Leveling and use of Instruments.....	Junior.	35	4
Topographical Drawing.....	Junior.	65	4
Analytical Mechanics.....	Junior.	50	1
Triangular Surveying.....	Junior.	30	1

17. DEPARTMENT OF MILITARY SCIENCE.

Subject.	Class.	No. Exercises.	No. Students.
Squad, Company and Battalion Drill...	all male.	28	107

18. DEPARTMENT OF AGRICULTURE.

In regard to Agriculture, it must be noted that all the scientific studies, nearly all the mathematics, and many other branches, are directly related both to Agriculture and the Mechanic Arts, and that consequently the Institution has been at all times fulfilling both the letter and the spirit of the Act of Congress which donated public lands to endow the "National Schools of Science." It is a grave mistake to regard these institutions as exclusively "Agricultural Colleges." The national bounty was granted to endow "colleges" in which should be taught "such branches as are *related to* Agriculture *and* the Mechanic Arts, without excluding *other* classical aud scientific studies and including military tactics,

for the benefit"—not of farmers exclusively,—but "of the *industrial classes* in the *several* pursuits and professions of life." The University is, therefore, constantly engaged in teaching the required studies to the persons entitled to receive instruction, for the purposes prescribed.

If no special technical work has been done in Agriculture, it is simply and solely for the reason that there has been no demand for it. So far as I am aware, not a single young man has come here desiring to learn the Science of Farming, in order to practice it. A large number of students desire instruction in Civil Engineering, Industrial Drawing and the related studies, with a view to professional practice. A regular junior class was taught during the whole year in the College of Mechanic Arts. I expect this College to take the lead of the Agricultural College for some years, although the completion of the special building for the latter may change the present aspect. The time will, however, come soon, and sooner than will be wished, when the Agricultural College, as yet not indispensable in the new States, will become so. Our soils now being robbed to feed the millions of other regions, will too soon need the aid of science to enable them to yield paying returns. Meantime, let the precious endowments be wisely husbanded. The professor of Agriculture is excellently employed in teaching the sciences related to his department.

REMARKS.

The course of lectures upon "Public Health" was delivered weekly in the Assembly Hall, during the winter term. They were numerously attended not only by the members of the University but by others. The subjects were:

1. Public Health as a condition of national education and culture, with an historical review.
2. The Atmosphere, its relations to man.
3. Water, its sources, composition and relations to man; also methods of storing, purifying and distributing water.
4. The Soil, its relations to public health, with the uses and methods of drainage.
5. The House, as the physical centre of the home; the relations of the family to public health.
6. Light in the house.
7. Heating and ventilation.
8. The use and abuse of food.
9. Brain work.

10. The prevention of disease.
11. Diseases resulting from accidents and injuries.
12. General resume of the course, with a statement of the objects and claims of the department.

If I do not mistake, the Univerity of Minnesota may announce herself as the first American College to offer systematic instruction to the whole body of students on the subject of public health. We have scores of institutions devoted to instructing a class of professional persons in the science of healing others; much has been done in many quarters in teaching individuals how to preserve their health; but I know of no previous instance in which the attempt has been made to inform a whole body of under-graduates, as to what families, neighborhoods, municipalities and states are bound to do, to promote the "public health." It is proper to add that the course was without expense to the Board, except a small sum for the traveling expenses of the professor.

To the officer in charge of the department of Civil Engineering, Mr. M. D. Rhame, and to the gentlemen under his instruction, the University is indebted for a minute and accurate topographical survey of the Campus.

The professor of Military Science formed at the beginning of the third term a corps of volunteers desiring extra instruction, which he has already brought into a commendable condition of skill and discipline.

STUDENTS.

The following table shows the attendance and classification for the year, (1872-3.)

Department.	Class.	Gentlemen.	Ladies.	Total.
Coll. Sci. Lit. and Arts.....	Senior.	2	.....	2
	Junior.	6	.....	6
College of Mech. Arts.....	Senior.	.....	.....	.....
	Junior.	3	.....	3
Collegiate Department.....	First.	6	4	10
	Second.	21	5	26—47
	Third.	51	15	66
	Fourth.	67	21	88
	Special.	10	5	15
Latin School.....	.....	40	22	62
Total Enrollment.....	.....	206	72	278

The total enrollment exceeds the total of actual attendance by seventeen.

Two hundred and fifty-five were registered as residents of Minnesota; twenty-one, of other States and provinces; two, unknown.

The following States and provinces were represented: Illinois, Indiana, Iowa, Maine, Michigan, Missouri, Montana, New York, Ohio, Wisconsin, Ontario and Nova Scotia.

The attendance from the State was distributed by counties as follows: Anoka, 1; Blue Earth, 4; Brown, 1; Dakota, 14; Dodge, 1; Douglas, 1; Fillmore, 25; Freeborn, 4; Goodhue, 4; Hennepin East, 72; Hennepin West, 62; Houston, 1; Kandiyohi, 2; LeSueur, 6; Meeker, 3; Mille Lacs, 4; Mower, 5; Nicollet, 2; Olmsted, 3; Ramsey, 8; St. Louis, 3; Scott, 1; Stearns, 4; Steele, 2; Wabashaw, 3; Washington, 8; Winona, 4; Wright, 6.

In regard to the attendance from Hennepin county, it is proper to remark that of the total, 32 students were from the country, and 23 sons or daughters of transient city residents. There remain but 77 to be accredited to the University town.

The following items will not be without interest. 101 students depended wholly or partly upon their own earnings for support, and 57 are believed to have earned a maintenance.

The average expenses of 20 students, boarding in a club for a year, as derived from confidential statements, are as follows:

Room rent,	$4 00
Board, 38 weeks,	76 18
Washing,	13 00
Fuel,	8 20
Lights,	2 43
Books and stationery,	16 84
Incidentals,	6 00
Society expenses,	1 88
Travel,	13 69
Clothing,	59 14
Average of total expenses,	$198 89

107 students have been teachers of common schools. My opinion is, that the proportion is below that of previous years.

ADMISSION.

The whole number of applicants for admission was 140; 35 failed to pass the examinations, being just 25 per cent.; 33 were admitted with conditions. Leaving out of account the higher branches, the examinations in the elementary studies show a slight improvement over those of the previous year. The per cent. of merit was as follows: Reading, 77; Writing, 77; Spelling, 71; Arithmetic, 70; Geography, 63; English Grammar, 79.

I desire in this place to call attention to the dropping of the Latin School at the close of the year. In consequence of this, the following studies will not hereafter be taught, viz.: Higher Arithmetic, English Analysis, United States History and Latin Grammar. Applicants for admission at the beginning of the year will accordingly be examined in these studies, in addition to those named in the foregoing paragraph.

It is proper also to give notice that the requisites for admission will be still further increased from and after the close of the year 1874–5, at which time, by virtue of a resolution of the Board of Regents, another year's work will be cast off. This includes the following studies, viz.: Elementary Algebra, Natural Philosophy, English Composition, Physiology, Greek Grammar, Cæsar's Commentaries and Cicero. Applicants for admission will, after the time named, be examined in these branches according to their courses of study. Classical students only, will be required to pass on both Greek and Latin. No time has yet been set for the relinquishment of the remaining preparatory work, nor for that of the classes commonly called Freshman and Sophomore, as contemplated in the plan of organization.

BUILDINGS.

I congratulate myself that it is not necessary to represent in this report the need of additional buildings. The extension of the main building and the special structure for the Agricultural College which you are now putting under contract will answer most of the immediate necessities and will immensely increase the power of the institution. Still three departments, those of Science, Literature and the Arts, the College of Mechanic Arts, and the Collegiate Department will be assembled under the same roof. The College of Mechanic Arts or Engineering Department will at no distant

day require its separate buiding in which its special work may be carried on. I do not deem it advisable to enter upon a description of the new buildings in this report. It will be better to describe them as they actually stand when completed. Ample as the time may now seem, I am convinced that there is great danger that they may not be ready for occupancy by the opening of the year 1873–4. The contractor ought therefore to be strictly bound to punctuality as well as to substantial and tasteful performance of the work. An early day should be fixed upon for determining the repairs and modifications necessary to unite and harmonize the present structure with the new addition. The estimates for heating apparatus need to be made at once.

THE CAMPUS.

The location of the Agricultural College building has made it necessary to assume a provisional disposition of these grounds, which has been done under the professional advice of Messrs. Cleveland and French, landscape architects. The topographical map made from a careful survey by students of the Engineering classes under the direction of Professor Rhame has been very useful. In the present circumstances when so many things are needed for the proper execution of our work, I could not advise any large expenditure on landscape decorations. It will, however, be indispensable, so soon as the plans can be settled upon, to lay out and grade some approaches to the buildings. I have expended a small amount from the incidental fund in keeping the grounds clear of undergrowth and rubbish. Such are their natural advantages that without any expense or artificial improvements, they are considered very attractive.

THE EXPERIMENTAL FARM.

In regard to this part of the property I have no information not already accessible to you. I take occasion to remark that the separation of the farm by a wide stretch of unfenced territory difficult to traverse by reason of drifting sand, renders it practically impossible to employ student labor. Many young men would be glad to work on the farm if they were not obliged to consume time and strength in getting to and from it. If any kind of manual labor system is at any time to be introduced into the Agricultural

College the farm and the College must be approximated, or other experimental grounds provided which shall be more accessible.

THE LIBRARY.

Important donations have been made to the Library since the last report. The annual appropriation of $500 had not been expended at the close of the academic year. The printed catalogue of authors has been the occasion of a largely increased use of the Library by students. This will doubtless be still more marked when the index of subjects, now in preparation, shall be published. The liberal policy of allowing students to borrow books for home use, has not resulted unfavorably, and I would recommend its continuance. Books of reference, however, maps, and all rare and costly work are excepted and accordingly "starred" in the catalogue. Attention is respectfully called to the appended tables showing the donations, the number and kinds of books borrowed by students, and the list of periodicals supplied to the reading room, etc. The usual appropriation is asked for the reading room and for binding. A stated salary ought also to be voted for the Assistant Librarian, whose services have become indispensable.

It is important that the Board understand that the suitable storage of the Library in the new building, even without hoped-for additions, will involve considerable expense. The books now stand on temporary open shelves, in a room selected because not otherwise available. In the new rooms there should be closed presses, with wire screen doors, which leave the books clearly in view while preventing their disarrangement. I would respectfully renew my recommendation that so soon as possible the standing annual appropriation for the Library be fixed at a sum not less than the salary of a professor.

APPARATUS.

With the exception of some indispensable supplies to the chemical laboratory, no additions were made during the year. Impossible as it is to display and to even conveniently use what we have, the Faculty have refrained from asking for new apparatus. The attention of the Board is called to the statements of professors in relation to the wants of their various departments. I do not think any of the

claims are excessive. The remarks made above apply also to the Natural History and other collections, in regard to which the Curator's report should be referred to.

THE GEOLOGICAL SURVEY.

The report of Professor Winchell upon the progress of the survey is herewith transmitted. I think the University may congratulate herself upon the good fortune of having the great enterprise entrusted to her, and upon the progress which has been made in so short a time. While leading scientific journals in the East are laboring to demonstrate the propriety of States employing their Universities in such enterprises, this young institution on the frontier, is already actively engaged in the survey. Our students have and improve the opportunity of assisting in actual scientific work. The preliminary report published last winter has been called for from many quarters. The edition being exhausted, I deem it important that action be taken for issuing a new one.

I have already represented to the board the importance of employing a Chemical Professor, competent to carry on the chemical investigations of the survey.

No great length of time should elapse before the botanical and zoological, including the entomological, investigations are systematically undertaken.

In regard to the topographical operations I have the pleasure of acknowledging the friendly assistance, both promised and actual, of Maj. Gen. A. A. Humphreys, chief of engineers, United States Army, and the officers of this Lake survey, under his direction. The following documents have been received:

Tracings of the surveys of the Mississippi River from above the Falls of St. Anthony to the Iowa line.

A map of Duluth harbor and vicinity.

A map of Dakota Territory.

The results of measurements to determine the latitude and longitude of the University made under the orders of Brig. Gen. Comstock, chief of the Lake survey, will probably be received before this report is printed.

The results of the operations of the joint commission to locate the Northern Boundary will by the courtesy of Major Wm. Twining will become accessible as soon as the reductions shall have been finally reported.

I trust that no obstacle may be interposed to the ultimate

completion of a map of the State as complete and reliable as the means of science can render it. Many States are losing taxes enough to more than pay the interest on the cost of a correct map. I trust that the general Government will consent to expend a reasonable sum in covering the whole settled portion of the country with a network of astronomical stations. These would form the basis of further trigonometrical operations at the expense of states, counties and municipalities.

THE FUTURE.

The present appears to me to be one of those epochs, when those charged with the guardianship of the University, should, after a careful review of the present situation and resources, take grave and earnest counsel together in regard to the future. The institution is no longer a preparatory school. The extension of our buildings will give us the external apperance of a College. The appropriation of a liberal sum of money for these buildings may be taken as the announcement on the part of the State that she means to have a University and to have it here. This resolution has been taken none too soon. Further delay would have justified the establishment of other institutions, as rendered necessary by the negligence of the State. As it is, we must expect competition, since there is no law—and rightly so—against the foundation of private schools along side the public ones. It were a shame, however, if the State should ever permit competition to amount to rivalry. Enjoying no monopoly in the business of superior education the State University must abide by the rule of the market. She must offer better instruction, more thorough discipline,

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OFFICE OF U. S. LAKE SURVEY,
DETROIT, Sept. 10, 1873.

Pres. W. W. Folwell, University of Minnesota, St. Anthony Falls:

DEAR SIR: * * * * I send the results of a preliminary reduction giving for latitude of the cupola of the University building 44 degrees 58 minutes, 39.22 seconds, and for longitude 93 degrees 14 minutes 8.6 seconds west from Greenwich.

This longitude was obtained as follows:

	Deg.	*Min.*	*Sec.*
Naval observatory, Washington, D. C. west from Greenwich.....	77	03	00.
Detroit—observatory west from Washington, D. C.....	5	59	59.85
S. E. corner Custom House, St. Paul, west from Detroit.....	10	02	32.25
Cupola of University west from St. Paul Custom House.....		8	36.50
Cupola of University west from Greenwich.....	93	14	08.60

Should the final reduction change the above values you will be notified of the fact.

Very respectfully,
Your obedient servant,
C. B. COMSTOCK,
Maj. of Engrs. and Brevet Brig. Gen.

ampler opportunities for culture than others, or see the youth of Minnesota passing by her doors. The following quotation states the matter at least vigorously: "The same agencies that are so effective in other departments of progress, need to be taken into consideration in building colleges * * * The best equipped railroad carries the most passengers and freight. * * * The college furnished with a corps of trained teachers; the college * * * * enjoying the prestige of new discoveries; the college whose very atmosphere is literary, and whose name is synonymous with the most recent scientific researches; *that* is the college to which students will always throng and which will lead the intellectual life of the State."

If the people do not intelligently and resolutely purpose to have their State University take the position thus indicated, the sooner they abandon the whole field of higher education to private agencies the better. The conclusive argument for State Universities is that the people may thereby provide their children with better opportunities than the colleges of numerous competing religious communities can possibly offer. It is almost a crime for a State to add to the number of small and ill-appointed colleges. This is not said in any spirit of complaint or petulance or disappointment, but as a prelude to this clear fact, which had better be faced now, that if the State of Minnesota wishes to have a University worthy of the name, and of her name, she must, within a few years, put into it a great deal of money. A little money, and even large sums thrown in at wide and uncertain intervals, would be worse than wasted, because a starveling concern, plac arded with the magnificent title of "University of the State of Minnesota," would be a disgrace to the Commonwealth, and a stumbling-block in the way of more enterprising institutions. This question, then, is imminent and vital: From what sources can a large and steadily increasing revenue be drawn? To say nothing of building, furniture, libraries and apparatus, the University needs to-day the sure prospect of an annual income of $30,000 for the next three years, and thereafter for the remainder of the decade, of $50,000. After 1880 the annual income ought to be raised to $100,000 as rapidly as possible. Meantime such dispositions should be made as will ensure, before the middle of the next century, a productive capital of not less than five millions of dollars. So much would ensure the permanence

of an institution of high rank; further endowments might be left to coming generations. The sums named will seem large to those who have not informed themselves as to the expenses of Universities. Harvard University expends annually a sum about equal to the interest on $5,000,000 at six per cent. The estimated expenses of Michigan University, for the current year, are $106,000.

In connection with this subject I will, with your indulgence submit the following suggestions:

(1.) That the whole remainder of University lands not yet located be located in the pine districts. If I am correctly informed 400,000 acres of pine lands are held in this and an adjoining State for the benefit of an Eastern Institution. It ought to be possible for the Board to secure the location of a few thousand acres in our own State for the endowment of our own University.

(2.) In order that this may be accomplished, and that the whole business may be in the hands of those best informed and most nearly concerned, I do not hesitate to recommend that the Legislature do immediately entrust the Board of Regents with the custody and disposition of all the University lands. The chief business of Boards of Regents or Trustees is the safe keeping and judicious investment of the property and endowments. If, however, they are to be reduced to the position of mere disbursing commissions, it were as well to dispense with them altogether, leaving the Faculty to fill vacancies in their number and to draw their salaries directly from the State Treasury.

(3.) The State has in her possession certain public lands which might, in my opinion, be better appropriated for the education of the people than divided among corporations, whether formed for transportation or for other purposes. In no way can the real wealth and prosperity of the State be so effectually increased and insured as by judicious expenditures for education.

(4.) The State of Minnesota is one of a number having just claims against the General Government for an equalization of the land grant of 1862 for the benefit of the "National Schools of Science." That grant, it will be remembered, was apportioned to the States then represented in Congress at the rate of 30,000 acres to each Senator and Representative. New York received 990,000 acres; Minnesota, a State nearly double in area, 120,000 acres. Each succeeding census will magnify the injustice of the allotment. Eleven States and Territories have as yet received

nothing under the act. Various attempts have been made to secure from Congress the much needed redress. The so-called "Morrill Bill" which failed to become a law last winter, because its friends consented to let it go to a conference committee near the close of the session, had this for its main object. Instead, however, of proceeding directly to right the old wrong, it proposed by a new distribution in equal amounts to the States at once to silence clamors for justice, and to disarm the opposition of those already in possession of the lion's share. The passage of the Morrill Bill, while it would have given much immediate relief and satisfaction, would in my opinion, have proved a mere placebo. The old injustice would not have been remedied. The sentiment of justice is strong in the American people. Should the General Government, impelled by them, at length resolve to remedy this unequal distribution, our State would receive a handsome addition to its educational endowments. I would respectfully suggest that the Board request the Governor and Legislature to demand of Congress an immediate investigation of this subject.

(5.) Pending the accumulation of productive funds from the sales of the University lands, the example of the State of Michigan might be followed in assigning to the support of the University a small proportion of the tax for educational purposes.

IMPENDING NEEDS.

It would serve no practical purpose to discuss at this time the remote and ultimate demands of the University which may grow up from the present beginnings. I confine myself to a statement of such as seem to require immediate or early attention.

I place first among our needs, a competent instructor in Elocution and Vocal Culture. The instruction in these subjects has been cheerfully given by the Professor of Rhetoric and English Literature, but who can not longer carry it on without injury to his own department. If the person to be employed should be competent to assist in teaching History and in Rhetoric, it would be possible to delay the appointment of other officers. Provision, however, should be made for filling the chair of History at no distant day.

With the completion of the new buildings, while our literary and classical work will be none the less, will come a large increase and development of our general scientific

work. Apparatus of various sorts, in large amounts, will be needed. The time has gone by when the teacher of science can sit in his easy chair and hear his pupils relate what certain text-books state as to the alleged behavior of substances and forces. He has got to teach the thing itself, on the spot, by means of actual materials and appropriate apparatus. If we do not equip our scientific departments with the proper means of illustration, we must not complain if our young men emigrate to Troy, New Haven, Boston or Hoboken, to study general and applied science.

The Chemical Laboratory will need a complete outfit of furniture and a large addition of apparatus and supplies.

The Physical Laboratory will need almost everything. The Library must, if possible, be supplied with scientific and mathematical books, of which the present stock is very meagre. The Engineering department ought to be provided with the indispensable machines, instruments, models, and with steam or other motive power. The Museum will need a large expenditure for cases to contain specimens. What demands the agricultural college will, after receiving its outfit, make for instruction and means of instruction cannot now be foreseen. The plan for a course of technical instruction to be given to young farmers during the winter months, which I have heretofore had the honor to suggest, I still believe feasible, and to be the best way to begin the proper professional work in that College. I trust it may be possible to assemble, after the close of the working season, a class of young men, either already engaged in farming or about to enter upon that profession, to whom such instruction may be given during the winter, as they will be able to put to practical use on returning to their farms in the spring. It was in a manner similar to this that our American law and medical schools began their work, and still carry it on.

The plant house attached to the College will doubtless be stocked, according to agreement, by members of the State Horticultural Society. A gardner will have to be employed to attend it. If experiments in stock breeding or in fruit and forest culture are to be undertaken, funds in considerable amounts will be needed.

The Department of Military Science needs a drill hall and a parade ground. The University year begins in September and ends in June. No outdoor drills can be had after October 31st nor before May 1st. The Vacation lasts from June 20th to September 10th. There remain thus less than three months (say 50 working days,) during which the

department can be in actual operation. A drill hall is therefore indispensable, if there is any real desire to have the department succeed. The University of Wisconsin has provided a very comfortable building at a cost of $3,000. Two boys' schools in this State have drill halls of sufficient dimensions. It is simple justice to say that, under all existing disadvantages, that such has been the zeal of our young men and the diligence of their instructor, that we could furnish to-day 75 gentlemen competent to take command of volunteer companies. I am still in favor of the organization of the Department of Military Science as a separate College.

ASTRONOMICAL OBSERVATIONS.

I deem it important that the department of Astronomy be provided with a working observatory. Fortunately, such have been the improvements in instrument-making and in the methods of observing, that no enormous expense will be needed. I have the estimates of two practical astronomers, according to which $7,500 will buy the essential instruments and erect a building to shelter them. Three objects are to be attained in such an enterprise: (1) The instruction of our students; (2) the stimulation of interest in science generally within the University; (3) contributions to the stock of astronomical knowledge. One Western University has already placed both the Old World and the New under obligations for brilliant discoveries.

NEW DEPARTMENTS.

While I do not regard it indispensable, nor even desirable, that departments of Law and Medicine be immediately opened in the University, it is still important that they be taken into account in planning for the future. It is a consideration which largely compensates for enforced delay that much needed reforms in the organization and management of such schools are in progress. Three medical colleges, at least, now require an examination on elementary studies, as a requisite for admission, and the authorities of two law schools are seriously proposing the same thing. For my own part I would say, better never open such departments here than to swell the number of existing low grade, mercenary professional schools. Our people, furthermore, are more concerned in learning how all may keep

well and out of litigation than in gratuitously instructing a few persons how to cure diseases and argue in the courts.

NORMAL WORK.

A very large percentage of our students are teachers and many expect to devote themselves to that work. While I am of the opinion that after some years it will be desirable to open in the University, as the proper place, a Normal Department for training teachers of high schools. I do not think such an undertaking to be now feasible. I would, however, recommend, and that earnestly, that a Normal professor be appointed at an early date whose duty shall be to give general instruction in methods of teaching higher branches. Under the new law requiring County Superintendents to have first grade certificates, several persons have applied for instruction and one was actually instructed by a member of the faculty during the vacation. The officer above referred to, might be useful in instructing such candidates.

NON-RESIDENT PROFESSORSHIPS.

The University has done but little in providing lectures. Means have been wanting; the assembly hall is not attractive nor convenient; and the University building has been difficult of access. The completion of the lower bridge now building across the Mississippi river, and that of the contemplated street railway will remedy the last named diffiulty. The new assembly hall will be a commodious and cheerful audience room. The question of means remains for the consideration of the Board. So soon as these can be provided it will be very desirable to offer our students and the public a liberal assortment of lectures by non-resident professors of established reputation and approved competency. The experiment of last winter in the lectures of Dr. Charles N. Hewitt on Public Health affords much encouragement to increase this kind of opportunities. I have already had the honor to recommend the holding of Agricultural Institutes in different parts of the State, at which lectures should be delivered by distinguished professional persons employed for the purpose.

POST-GRADUATE COURSES.

The new catalogue ought not to be issued without con-

taining the outline of one or more courses of post-graduate studies. The General Faculty have already been requested to furnish a draft embracing their suggestions.

LODGINGS.

The question of lodgings, which has at all times presented its difficulties, is at length solving itself. The set of lodging houses projected by a member of the Board, will be completed by the beginning of the year 1873-4, and will furnish shelter to about fifty young men. Other persons have rooms to let at reasonable rates. Those students who are able to pay for regular boarding, have no difficulty in finding accommodations. There are two occasions upon which the interference of the Board may be necessary—the first to provide additional lodgings for young men who need to board in clubs; the second, to secure suitable rooms for young ladies sent from distant parts of the State. A Ladies' Boarding Hall is an immediate necessity. No large sum of money need be expended at once. $10,000 would, in my opinion, put up a wooden building of sufficient capacity for present needs and of becoming appearance. Dormitory buildings, like hospitals, had better be rebuilt at intervals of a few years. A young ladies' hall, conducted on the "South Hadley" plan, would put the advantages of the University within the reach of a great number of young women, desiring to enjoy them, and who are now practically debarred from them.

Such are the chief demands now impending upon your honorable body, to whose wisdom I confidently refer them. It will, perhaps, be said that we are making undue requisitions upon the public purse. To this there are two answers; The first, that we really demand nothing, but merely apprise the people that they cannot have a University without money in large amounts and at proper times; the second, that if the generous policy be now adopted, the institution will receive other than public benefactions. It has become almost a fashion for wealthy friends of education to make large donations to institutions of established reputations and assured permanence. Let it become apparent that the people are resolved to endow and sustain a "genuine University," officered and equipped in the most liberal manner, and our prosperous capitalists will at length vie with one another in their contributions.

There are two subjects to which I especially desire the

early attention of the Honorable Board, which, owing to the length of this report, I refrain from discussing. They are, (1,) the matter of Preparatory schools; (2,) that of Latin as a requisite for admission to all regular courses. I content myself with respectfully referring the Board to my annual report to the State Superintendent for the year (1872–3,) in which these subjects are brought forward.

Your attention is called to the accompanying reports of my respected colleagues, which, of themselves sufficiently attest the industry and fidelity of those officers.

All of which is respectfully submitted,

WILLIAM W. FOLWELL.

APPENDIX A.

AN ACCOUNT OF THE FIRST COMMENCEMENT OF THE UNIVERSITY, CONDENSED FROM THE MINNEAPOLIS DAILY TRIBUNE OF JUNE 20, 1873.

Although it is now twenty-two years since the charter of the University was granted, the institution was only first opened as a preparatory school in 1867. Yesterday she celebrated her first commencement. She now has her alumni, and consequently is entitled to a place among the colleges and universities of the land. Her past has been stormy, and attended with many hardships; her future is full of promise and hope.

A very large audience of ladies and gentlemen assembled in the Academy of Music, Friday, to witness the Commencement exercises. On the stage were Governor Austin, Ex-Governor Sibley, Ex-Governor Marshall, the Regents of the University, the Faculty, the graduating class and the University choir. The splendid regimental band of twenty-three pieces, of the 20th Infantry, under the leadership of Prof. C. Wolf, was stationed in the gallery, and played several pieces in excellent style.

The exercises were opened by prayer by Rev. Professor Jabez Brooks, D. D., after which the University choir sang an anthem.

Mr. Henry Martin Williamson, one of the graduating class, then delivered an able address on "the University," opening with a brief "salutatory," and concluding as follows: "From present indications, I trust, however, that already the people of Minneapolis are taking greater interest in the University, and that from here the infection may spread until the whole State feels a proper enthusiasm for their Uni-

versity. Our climate, and the fact that we are not like most of our sister States—cursed with a dozen starving institutions disgracing the name University—are circumstances peculiarly favorable for building up here a great University; and if we concentrate all our means and affections upon our University, we shall make it one which will be worthy of the name, and an honor to the State."

The next address was delivered by the other member of the class of '73, Mr. Warren Clark Eustis, which was full of thought and earnestness. * * * The oration was concluded with the following farewell words:

"Fellow students, preserve untarnished the fair name of our rising University. Frown down all distinctions that are not based upon moral and intellectual worth. Make our Alma Mater all that an intelligent and progressive State has a right to expect, the true centre of her educational system, the source of her richest blessings, and the mightiest agent in promoting her intellectual and material advancement."

The Hon. A. S. Welch, L. L. D., President of the Iowa State Agricultural College, then delivered an able address upon "Higher education in its transition state." The following paragraph contains the keynote of the performance:

"The learned professions and literary callings were long ago fully provided for. I would not pluck one leaf from the laurels they have gained, nor cut a single branch from their established courses. I would simply ask for the grand industrial sciences and the useful arts, which have so quickened the civilization of our era, co-ordinate opportunities and co-ordinate rank. While the learning which finds its home in our universities lends effective utterance to the sublime truths of the pulpit, and logical acumen to the labors of the bar, let it also help every industrial enterprise whose object it is to restore the earth to the beauty and the glory of its primeval paradise. Let it feed and clothe millions with more healthful food and warmer fabrics. Let it repeat everywhere the miracle of the loaves and fishes. Let it furnish the mechanic with better tools, better methods and better machinery. Let it stimulate industry and cleave the wave of every sea with its traffic. Let it beautify the surrounding landscape, crown the hills with nobler dwellings, cover the fields with more nutritious grasses and finer herds, replace the wilderness with the waving harvest, bring every farm to the topmost limit of its producing capacity, and preside over every process by which the dead mold is hanged into the marketable product.

"For when it shall have done all this, and much more, with detailed completeness, then will the University, from which it emanates, have accomplished the ends of a universal philantrophy."

CONFERRING THE DEGREES.

Hon. J. S. Pillsbury, President of the Board of Regents, then spoke as follows:

REGENT PILLSBURY'S REMARKS.

LADIES AND GENTLEMEN:—You are aware of the object for which we are gathered together. The citizens of Minnesota have watched with warm hearts the growth of their young University. After much waiting we rejoice to hear on this auspicious morning the voices of her first-born sons. They bear proof of diligent study and thorough instruction. We congratulate the gentlemen of the faculty upon this living testimony of their ability and zeal. The Board of Regents accept from them these candidates for the honors of graduation, and in behalf of this governing board, I now officially direct the President of the University to confer upon each of these young men the proper diploma of the University of Minnesota.

President Folwell then conferred the degree of Bachelor of Arts on each of the graduating class in turn, speaking in the customary Latin.

As it may be interesting to many to know the form of the first diploma given by the University, we copy it:

UNIVERSITATIS MINNESOTENSIUM PROCURATORES, OMNIBUS HAS LITERAS PERLECTURIS, SALUTEM:

Sciatis, quod N. M., studiis omnibus quæ ad gradum primum spectant, peractis, usitato more a professoribus tentatis, comprobatusque, Titulo, Graduque Baccalaurei, in Artibus, nobis auctoribus propalam adornatus est condecoratusque; simulac ei data sunt fruenda, jura, privilegia, honores, atque dignitates, quæ hic aut usquam gentium ad eundem gradum pertinent.

Cujus in rei testimonium, hasce literas, Sigillo Universitatis atque Præsidis necnon Professorum quorum refert chirographis muniendas curavimus.

Datum ex Ædibus Universitatis die — Junii, Anno Domini,— Reipublicæ Americanæ—Universitatis—

[L. S.] ——— ———, *Præses.*

——— ———, *Procuratores.*

——— ———, *Professores.*

The President then addressed the graduating class, concluding as follows:

"Do not leave college hoping for or expecting any grand career or brilliant success; but go, resolved simply to take your honest share of the work of your generation, to obey ever the call of duty, and to 'keep innocency, for that shall bring a man peace at the last.'

"Suffer me to remind you that your instruction in the University has been at large public expense, both State and national. You will not forget this benefication, but your gratitude will increase with your ages, and your ability to make returns for it. The State and the nation expect every man to do his duty, but they have especial claims upon such as you. Neglect therefore no duty of citizenship, nor refuse any clear call to public service. I ask that you will remain loyal to this University which has not been unkind nor illiberal to you. And so your Alma Mater bids you God speed."

After music by the choir, Vice President Campbell pronounced the benediction, and the exercises closed.

THE BANQUET.

The banquet tendered by citizens of Minneapolis to the Regents, Faculty, Alumni, and other friends of the University of Minnesota, was very largely attended by prominent gentlemen from all parts of the State. The presence of so many public men showed what a deep interest the whole State takes in this their chief institution of learning.

Ex-Mayor E. M. Wilson, presided, and after the excellent dinner had been amply discussed, opened the literary exercises of the banquet. He tendered to the guests present greeting in behalf of the citizens of Minneapolis, and asked the President of the Board of Regents to respond to the toast of the Regents and Faculty of the University.

Hon. J. S. Pillsbury then made a few remarks as follows:

MR. PILLSBURY'S SPEECH.

In reference to the sentiment of this toast, Mr. Chairman, I would beg leave to express my gratification at the hospitable manner in which the friends of the University are today entertained. It is a great pleasure to see on the part of the people of Minneapolis, a desire to encourage and honor the highest of the institutions of our State, and in behalf of the University, Regents, Faculty and Alumni, I would ten-

der to the citizens of this community, for the handsome banquet here afforded, our warmest thanks; indeed, I sincerely hope that the good will shown here to day may be the forerunner of many benefactors in the future. Other communities in this and in other States have given substantial evidence of their appreciation of a University in their midst. Shall not the citizens of Minneapolis follow their example and silence the rising complaints that she is no promoter of the interests of the University?

Mr. Pillsbury then referred to what the towns in which were the leading colleges of the country, had done for them, and recommended this city to do the same.

THE PRESIDENT'S REMARKS.

MR. CHAIRMAN:

* * * * * * *

Permit me, in behalf of my colleagues, the Faculty, to return our most hearty thanks through you to the citizens who have provided this sumptuous entertainment. We make a great account of this demonstration on the part of the University town, because we know that the interest felt and thus manifested here will spread throughout the whole State.

I will engage for the Regents and the Faculty that they will spare no efforts to deserve your support. It is their fixed and declared resolution to build up an institution in which there shall be high and sound scholarship. They will stand firmly by their announcements, that no diploma shall be given which does not mean just what it says. I will say for the graduates of to-day that they *are in fact* Bachelors of Arts, entitled to be recognized as such anywhere in the civilized world. * * * * * *

Thus, Mr. Chairman, we intend to deserve your encouragement. Had we pursued a different policy heretofore, we could have shown you a larger number of graduates to-day. We prefer to fall back on the principle of the old Greek fable, familiar to all the college bred men here. A wolf upbraided a lioness for bringing forth but one at a time. "Yes," said the lioness, "one—*one, but a lion!*" We present you twin lions, of whom we have no reason to be ashamed.

Finally, Mr. Chairman, permit me to repeat our thanks, and to wish for my colleagues and the alumni "many happy returns" of this occasion.

SPEECH OF GOVERNOR AUSTIN.

Governor Austin said:

MR. CHAIRMAN: * * * * I am glad to see so many here to-day, from all parts of the State, for I feel that this is, indeed, a great occasion. I look upon this University as the first institution of the State, and one which is to reflect greater honor upon the State than any other. The Faculty of the University need not be ashamed of their work. They need not endorse their graduates of this day as sharp business men do doubtful paper, "without recourse." I would like to see the wealthy men all over the State rally around this institution and make its cause their own. I would like to see them add to its endowments. I fear the citizens of Minneapolis do not appreciate the great advantage of this University. It is established here now for all time. You did not pay a cent to get it here. If it was in the market, looking for a location, how much would you bid? The city would now give $100,000 to secure it; and St. Paul would give $200,000. [Applause.]

You have it located here by a constitutional provision; but if you are not generous towards this favorite child of the State of which you have been made the guardian, you may sometime find that constitutional prop knocked from under, and then you will have to pay roundly if you get it. [Applause.]

* * * * * * * * *

Mr. Wilson then said that all would be interested in hearing from the first Board of Regents, and he would call on Judge Atwater, Secretary of that Board, to respond:

WHAT JUDGE ATWATER SAID.

He said that it was twenty-two years ago last February since the legislature passed the charter of the University, and that then the strife came for the location of the public buildings. St. Anthony was satisfied to get the University. There was great difficulty experienced in finding a site, and after several had been proposed and rejected, the present one was decided on. That was not obtained without trouble. Col. George obtained part of the land from Mr. Cheever, and it was not until Calvin A. Tuttle came forward and donated nine acres adjoining, that the grounds were secured. The next thing was to erect buildings. It was thought best to have them, even though they had no money. Some of

the Regents thought it best to build at once, to which Senator Ramsey objected. However, the plans were drawn up in style, and the present buildings were put up. Gov. Ramsey's plan was to put up a frame building about 15x20 feet in size, but his plan did not prevail. Some of the Regents remembered the maxim, "*Timeo Danaos et dona ferentes.*" They suspected that Gov. Ramsey must be a Greek as he came from St. Paul. In 1856–7 the building was enclosed, and then came the killing frost which nipped our glowing hopes in the bud, and it was not till the suns of 1863 and '64 came that we recovered ourselves.

SENATOR RAMSEY'S SPEECH.

Senator Ramsey said thas the pleasantest recollection of the olden time that still lingered with him, was his connection with the old Board of Regents. He was one of the most ardent supporters of the ancient triple compact, wherein it was agreed that St. Paul should have the capital, that St. Anthony should have the University, and that Stillwater should have the privilege of having all the rascals of the State. [Laughter.] * * * * * * I advocated keeping all the University lands, foreseeing that they would become very valuable, and waiting till we got rich before we built. I was overruled; the stone building was put up, and we had to sell off our lands at half price to pay off our premature debt. I do not say this to cast any reflection on my companions or on that old Board, [laughter,] but simply to explain my own position. It is all right now. These other men had more enterprise than I had, and they were better men. * * * *

I never advocated building a wooden tent. [Laughter.] That's a mistake. I *was* conservative, though. I did not advocate building at all at that time. I said "Preserve all these lands till they are valuable, and then sell them."

I am glad that the building was put up at last. The great State of Minnesota ought to be able to invite here, because of the salubriousness of our climate, students from all the less healthy States to be educated. [Applause.] And we all know that all other parts of the globe are sickly. [Laughter.] I look forward to the time when this University will compare in numbers, as it will in character, with the great University of the West at Ann Arbor. [Applause.] Minneapolis won the choicest of the favors in the ancient

division in the reputation it will give, and the wealth and fame it will bring.

The common schools of Minnesota also have the largest endowment in the West. And our civilization is worth very little without the common schools supplemented by the higher institutions. The professors and the teachers are entitled to inconceivable gratitude, working, as they do, on small salaries, in the hope of doing good and planting more firmly the foundations of the future. You are not under obligation to any set of men in society as much as you are to these men and women. [Applause.] Without the influences of our schools, all the Fourth of July talk about the beauty of flag and the glory of free government, would be hollow and worthless, and would not live a year. [Applause.]

Mr. Wilson then called on Professor O. V. Tousley to speak, as a representative of the common schools.

Prof. Tousley made an exceedingly able and forcible speech in favor of the common school system, and universal education at the public expense.

Mr. Wilson then called on Hon. Ara Barton, as a representative of the rural districts, who responded in a short and facetious address.

Speeches were then made by Hon. A. S. Welch, Rev. E. D. Neill, Ex-Gov. Sibley and Senator Talbot, which were full of good things, and we regret exceedingly that we have not the space to reproduce them.

Thus ended the exercises.

APPENDIX B.

LIST OF DONATIONS

To the Library of the University of Minnesota from June 29th, 1872, to June 21st, 1873.

Hon. Alex. Ramsey, U. S. Senator,
1 vol. Congressional Globe.
1 vol. Ninth Census, Population.
1 vol. Report of Commissioner on Education.
1 vol. Treaties of U. S. since 1776.
5 vols. Naval Observatory Publications.
7 vols. Congressional Globe.
1 vol. Ninth Census, Social Statistics.
46 miscellaneous pamphlets.

J. Ramaley, State Printer,
1 vol. Mortality—8th Census.
1 vol. Hone & Co.'s Catalogue.
18 vols. Misc. Public Documents.

Hon. C. C. Andrews, U. S. Minister to Sweden,
6 vols. Swedish Agricultural Journal.

Prof. J. H. C. Coffin, Supt. of the Nautical Almanac,
20 vols. Nautical Almanac.
1 vol. Star Tables.
9 Pamphlets. Ephemeris of Various Plants.

Hon. H. H. Oliver, Chief of Bureau Statistics and Labor, Massachusetts,
2 vols. Reports for 1871, 1872.

Maj. Gen. A. A. Humphreys, Chief of Engineers, U. S. A.,
1 vol. Explorations in Nevada and Arizona.
1 vol. Report of 1872.

Rev. E. D. Neill (author) Provost Macalester College,
1 vol. History of Virginia Company of London.
1 vol. History of Minnesota, quarto, Illustrated.
1 vol. English Colonization of America.

Charles S. Bryant, Esq., (author),
1 vol. Indian Massacre in Minnesota.

Prof. E. J. Thompson,
1 vol. Geometry.

Hon. J. S. Pillsbury,
1 vol. Kitto's Illustrated History of the Bible.

Industrial League, Philadelphia,
1 vol. Carey, H. C., The Unity of Law.
1 vol. " " Miscellaneous Works.
1 vol. " " Past, Present and Future.
1 vol. Social Science.
1 vol. Carey's Slave Trade, Domestic and Foreign.
1 vol. Byle's Sophisms of Free Trade.
1 vol. Stewart's Speeches on the Tariff.
1 vol. Sullivan's (Sir E.) Protection to Native Industry.
1 vol. Smith (E. P.) Political Economy.
1 vol. Kelly (W. D.) Speeches, Addresses and Letters.
1 vol. Elder Dr. William's Questions of the Day.

Hon. Alfred J. Hill, St. Paul,
7 Nos. The Busy West.
19 Nos. Dawson's Historical Magazine.
5 Nos. Fowler (L. N.) Illustrated Phrenological Almanac.
6 Sectional Maps of Iowa, Minnesota and Wisconsin.
Misc. Pamphlets, 29 copies.

Hon. D. H. Secombe, Minneapolis,
1 vol. Coal and Coal Oil.

Gen. F. A. Walker, Supt. of Census Bureau,
1 vol. Ninth Census.
1 vol. Report of Indian Commission for 1872.

Hon. J. T. Averill, M. C.,
1 vol. Message and Documents.

Tribune Printing Company, Minneapolis,
1 vol. Manual of Practice for the use of Bar and Bench.
1 vol. Hammon's Manual for Practice.

Col. J. E. Stevens, Minneapolis,
50 Miscellaneous Pamphlets.

Hon. Freeman Talbot, Cleveland, Minn.,
1 vol. Minnesota and the Far West.

Daniel McPherson, Minneapolis,
1 vol. Dymond, Essays on the Principles of Morality.
1 vol. Chase, Day by Day.
1 vol. Peace Principles Safe and Right.
1 vol. Murray, (L.) The Power of Religion on the Mind.
1 vol. Washburn, (I. M.) Reason and the Sword.
1 vol. Corder, (S.) Life of Elizabeth Fry.
2 vols. Seebhom, (B.) Life of Stephen Millet.
1 vol. Murray, History of America.
1 vol. Memoirs of Elizabeth King.
1 vol. Penn, (William) No Cross no Crown.

Miss Minnie Bolles,
1 vol. Beecher, (C.) The American Woman's Home.

King, Mrs. H.,
1 pamphlet, Memoir of Daniel P. King.

Hon. M. H. Dunnell, M. C.,
1 vol. Message and Documents.
10 Misc. pamphlets.

W. H. Leonard, M. D., Minneapolis,
1 vol. Art of Shorthand Writing.
1 vol. Le Noveau Testament.
1 vol. Butler, (W. A.) Two Millions.
1 vol. Jay, (W. M.) Review of the Mexican War.
1 vol. Harvey, (H.) History of the Shawnee Indians.
1 vol. Paley, (U.) Natural Theology.
1 vol. Kennedy, Preliminary Report of Eighth Census.
4 Misc. pamphlets.

W. S. Clarke, President Mass. Ag. Society,
1 Report.

Hon. Marshal P. Wilder,
1 pamphlet, Transactions.

Hon. James Brown, Mankato,
1 vol. Historical Collection of the Far West.

Prof. George H. Cook, State Geologist of New Jersey,
1 vol. Geology of New Jersey.
8 vols. Maps illustrating Geology of New Jersey.

Prof. N. H. Winchell,
11 misc. pamphlets.

Prof. J. C. Newbury,
1 vol. Geological Survey of Ohio, with maps.
1 vol. Winchell N. H., Geological Survey of Ohio.

Gov't of Dominion of Canada, through Dr. Selwyn, Chief Geologist,
1 vol. Geology of Canada, from commencement to 1863.
1 vol. Atlas accompanying Geology of Canada.
1 vol. Geology of Canada from 1863 to 1866.
1 pamphlet, Geology of Canada from 1866 to 1869.
1 pamphlet, Geology of Canada from 1869 to 1871.
1 pamphlet, Geology of Canada, Fossil Plants.

Evening Times Printing Company,
1 pamphlet, Minnesota Tourist's Guide.

R. H. Day,
1 vol. Narrative of Irish Rebellion of 1798.
1 vol. Mitchell's History of Dakota County.

APPENDIX C.

LIST OF BOOKS

Issued to Students during Year—Sept. 10th, 1872, to June 19th, 1873.

	First Term.	Second Term.	Third Term.	Total.
History	48	125	21	194
Biography	33	76	12	121
Travels	6	97	5	108
Novels	56	99	8	163
Metaphysics	20	17	13	50
Belle Lettres, Prose	53	51	13	117
Belle Lettres, Poetry	43	61	7	141
Anc. Languages and Lit	4	3	5	12
Mod, " "	7	38	8	53
Nat. Science and History	15	31	35	83
Political Science	6	24	2	32
Mathematics	78	14	3	95
Miscellaneous	30	149	12	191
Totals	398	818	144	1,360

Total No. Books Issued for Home Reading during Year	1,360
Total No. Books Issued for Reading Room during Year	370
Total No. Magazines	135
	1,865

REPORTS

OF THE

PROFESSORS OF THE UNIVERSITY.

REPORT OF PROFESSOR CAMPBELL.

UNIVERSITY OF MINNESOTA,
June 30, 1873.

To the President of the University;

SIR:—My work during the past year has been in a transition state, the organization of the departments, under my charge not being complete. For this reason my classes have not all been heard.

The following subjects have been taught by me, or by those associated with me:

Term.		Subject.	Students.
German	I.	German Grammar	55
		Iphigenie auf Tauris	33
	II.	German Grammar	56
		Evans' Abriss	26
	III.	German Grammar	23
		Jungfrau von Orleans	14
		Lodemann's Tables	18
French,	I., II., & III.	(Reported by Professor Huggins)	..
Philology,	II.	Lectures on Philology	6
Philosophy	I.	Ontology and History of Philosophy	3
	III.	Psychology	4

Respectfully submitted,
G. CAMPBELL,
Professor of Mental and Moral Philosophy, and Comparative Philology.

REPORT OF PROFESSOR WALKER.

To the President of the University of Minnesota:

SIR: I have the honor to submit the following report of the department of Latin Language and Literature for the University year of 1872-3.

The following classes have been under my instruction, viz:

One section of the IV class, in Cæsar—15 weeks.

III Class in Cicero, 15 weeks; in Virgil, 23 weeks.

II Class in Livy, 23 weeks.

I Class in Horace, 30 weeks.

Junior Class in Tacitus, 15 weeks and Juvenal, 8 weeks.

Senior Class, in the Comedies of Plautus, 15 weeks.

The following classes have been instructed by Assistant Professor Miss Helen Sutherland:

Latin Grammar and Reader, in two sections, 38 weeks.

The IV Class in Cæsar's Commentaries, in two sections, for 15 weeks.

One section of IV Class, in Cæsar, 15 weeks.

One section of IV Class, in Cicero, 8 weeks.

Latin Composition and Latin Grammar are pursued in connection with all authors read during the first three years, History and Geography with Livy, Antiquites with Horace, Literature with Juvenal or Comedies.

Reports of the number, name, attendance and progress of the students have been made each week, and at the end of each term, to the President's office.

I am unable to give a summary of students in the Latin Department as the classes reciting to the Assistant Professor were not reported to me but directly to the President's office, according to the by-law then regulating that matter.

All of which is respectfully submitted.

V. J. WALKER,
Prof. Latin.

Nov., 1873.

REPORT OF PROFESSOR BROOKS.

To the President of the University:

SIR:—Please find herein the report of my Department for the University year 1872-3.

NUMBERS.

Collegiate Department.

IV Class,	19	
III Class,	15	
II Class,	10	
I Class,	5	49

College, Science, Literature and Arts.

Juniors,	1	
Seniors,	2	3
Total in Greek,		52

WORK DONE.

Studies Pursued.

Aristotle, Plato, Aristophanes, Demosthenes, Homer, Herodotus, Xenophen, Grammar and Reader, Greek Antiquities, History and Geography, Essays and written Analyses.

Lectures Given.

On Greek Literature.

Number of Class Exercises.

IV Class,	170
III Class,	169
II Class,	169
I Class,	111
Juniors,	88
Seniors,	24

Time.

To IV Class,	3 full terms.
To III Class,	3 full terms.
To II Class,	3 full terms.
To I Class,	2 full terms.
To Juniors,	1½ full terms.
To Seniors,	1 full term, (2 ex. per week.)

ASSISTANCE.

By Pres. Folwell.

III Class—Herodotus—1 term, 33 exercises.

By W. C. Sawyer.

IV Class—Grammar and Reader—2 terms, 96 exercises.

JABEZ BROOKS,
Prof. of Greek.

REPORT OF PROFESSOR DONALDSON.

To the President of the University:

SIR:—For the academic year 1872-3, I have the honor to submit the following brief report of the work done in the department of Rhetoric and English Literature.

During the first term I instructed the classical and literary juniors in the Introduction to English Literature, and two large sections of the IV. class in English Composition; during the second term, the senior class in American Constitution and International Law, the I. class in Logic, and continued English Literature for the literary juniors; during the third term, the literary and scientific sections of the I. class in Rhetoric and the entire Latin School in the Analysis of English Sentences. Mr. H. W. Slack instructed a class in English Composition, and Prof. Sawyer the III. class in History.

So far as possible, throughout the year, instruction in practical composition and elocution has been continuous in the four upper classes. One hundred and nineteen "Rhetorical Exercises," more than half of which were original, were publicly presented in the Assembly Hall.

During the year, the Honorable Board of Regents and the General Faculty have taken initiatory steps for a revision of the courses of study. Such a work is of the highest importance, and is, in my judgment, demanded by all the interests of the University, and should not be delayed longer than is imperatively necessary. Pending action in this matter, nothing further is submitted.

A. B. DONALDSON,
Prof. Rhet. and Eng. Lit.

Oct. 31st, 1873.

REPORT OF PROFESSOR THOMPSON.

To the President of the University of Minnesota:

SIR:—In accordance with the regulations of the Board of Regents, I have the honor to submit to you the following brief report of the Department of Mathematics and Astronomy, for the year 1872–3. During the first term, the department had charge of the following classes and studies:

Latin School,	2 Sections,	Higher Arithmetic.
III Class,	2 Sections,	Plane Geometry.
II Class,	1 Section,	Higher Algebra.
I Class,	1 Section,	Analytical Geometry.
Junior Class,	1 Section,	Differential and Integral Calculus.

II TERM.

Latin School,	2 Sections,	Elementary Algebra.
IV Class,	2 Sections,	Higher Algebra.
II Class,	1 Section,	Solid Geometry and Plane Trigonometry.
Junior Class,	1 Section,	Modern Geometry.

III TERM.

Latin School,	1 Section,	Eelementary Algebra.
IV Class,	2 Sections,	Higher Algebra.
III Class,	1 Section,	Bourdon.
II Class,	2 Section,	Spherical Trigonometry and Surveying.
I Class,	1 Section,	Mathematical Astronomy.
Junior Class,	1 Section,	General Theory of Equations.

The number of students in each class and the number of recitations given to each subject, is upon the records in your office and has passed out of my hands.

The pressing want of the department is a room better seated and better furnished for mathematical work. The progress of the Department of Astronomy will be very slow until it is supplied with a few pieces of apparatus, absolutely required to both demonstrate and illustrate the fundamental principles of the science.

It would add much to the convenience and efficiency of this department if the terms were of more equal length. Some

of the most important subjects of the entire course are necessarily placed in the third term of eight weeks. This affords a poor opportunity to present the leading and representative studies in the department. It scarcely suffices to introduce them. Terms of 14, 12 and 12 weeks would far better suit this department.

Respectfully submitted.

E. J. THOMPSON,
Prof. Mathematics and Astronomy.

REPORT OF PROFESSOR HUGGINS.

To the President of the University of Minnesota:

SIR:—I have the honor to submit the following report of the work and condition of the Department of Military Science for the University year ending June 20th, 1873. In compliance with orders from the War Department, I reported for duty at the opening of the fall term, September 9th, 1872.

The only instruction which as yet it has seemed practicable to give in the Department of Military Science, is practical instruction or drill in infantry tactics, Upton's Tactics prescribed by law for the army and militia of the United States being the system used. There having been no instruction in Tactics during the previous University year, I did not deem it best to organize the students into companies for drill during the fall term, and instruction was confined to squad drill, and a few of the simple company movements. There being no drill hall, military exercises were necessarily suspended during the winter, and a portion of the fall term.

In the spring the male students were divided into three companies, and exercised four times a week in company and battalion drill. A warm interest was taken by the students in these drills, and at the close of the year considerable proficiency had been attained.

The uniform prescribed is of dark blue cloth, and has been ordered by the members of two companies ("A" and "B,") comprising nearly all who design completing a course of study. A fine quality of cloth has been manufactured for the purpose by the North Star Woolen Mills, of Minneapolis, and is sold to the students at a moderate price.

The arms in use are of an obsolete pattern, and are too heavy for many of the students. Steps have been taken to procure the "Cadet Rifle Musket" used at the United States Military Academy, and also a section of light field pieces.

In addition to the prescribed military exercises, I would recommend the following course of theoretical instruction, to be optional with the student:

I. Military Engineering—to comprise the construction of field fortifications, roads and bridges, description and nomenclature of fortresses, attack and defense of works, and military mining.

II. Military History and Art of War—comprising the history and principles of Special and Grand Tactics and minor operations of war, the organization of modern armies, and method of moving and supplying them, with the history and study of celebrated battles and campaigns.

III. Military and International Law.

A drill hall and gymnasium is greatly needed. A hall 40x200 feet would, I think, answer the purpose, and the advantages to be derived therefrom are so great and obvious that I earnestly hope the necessary steps for the erection may be taken without delay.

I remain, very respectfully,
Your obedient servant,
E. L. HUGGINS,
First Lieut. 2nd U. S. Artillery,
Prof. Military Science.

REPORT OF PROFESSOR WINCHELL.

UNIVERSITY OF MINNESOTA,
MINNEAPOLIS, E. D., MINN.,
10th July, 1873.

To the President of the University:

SIR: In the winter term, beginning Jan. 7, 1873, I took the junior class in Geology, comprising four members. The class spent the greater portion of the term on Historical Geology, using *Dana's Manual*. Preparatory to this work, they ought to have gone over the essential portions of Lithological Geology, as given in the same manual. In hope

that the heavy covering of snow would be off the ground before the end of the term, and as there were no means of illustration in the University, this was deferred till after the groundwork of Historical Geology had been mastered. The class then availed themselves of the short remainder of the term for Lithological Geology.

The first half of the same term I instructed the Third Collegiate Class in Physical Geography, giving the study a geological turn, and using Prof. Dana's *Text Book of Geology*. This class went over essentially what is there denomi... Dynamical Geology. This class numbered twenty-one.

In the spring term, and during the last half of the winte term, the Third Collegiate Class studied Botany. They first went thoroughly over the "Lessons" of Prof. A. Gray. When flowers appeared in the spring, they were set to work on actual analysis of specimens, and each member of the class was required to work out independently, and properly classify, thirty or more species. Some of the class recorded over fifty species. For this purpose they made use of Morgan's *Student's Plant Record*. In Botany there were fifteen students.

In the spring term the First Collegiate Class pursued Zoology, using Agassiz' and Gould's *Principles of Zoology*. The instruction in this class was illustrated by the collections purchased of H. T. Woodman, last winter, by the Board of Regents, and was attended with a very satisfactory degree of interest and success. The class contained eleven students.

In making this report, the first on the instruction in Geology, Zoology and Botany, as a department in the University, I desire to make a few recommendations concerning the arrangement of the studies, and the time devoted to each, so as to bring them into better symmetry as a whole, and as related to the rest of the University instruction.

These sciences pertain more closely to the colleges of Agriculture and the Mechanic Arts, than to any other, and the scheme of study for them should be adapted to those colleges, rather than to that of Science, Literature and the Arts. The students in the college of Science, Literature and the Arts, should have the privilege of choosing these studies when their other classes will permit. Instead of that the present schemes of study for the sciences of Geology, Zoology and Botany, are condensed and crowded into the narrow space necessary for students who are professedly in the college of Science, Literature and the Arts, and who

generally desire but a restricted course of study in these branches. The consequence is that these sciences have not a fair representation, and are so situated that there is no opportunity, or very little, to present their full proportions, and to offer those attractions to the student that they are found to possess.

The science of Geology ought to be pursued one full year. One term for Dynamical Geology, one term for Lithological Geology and Mineralogy, and one term for Historical Geology. This should be followed by a full term in Determinative Mineralogy, with the use of the blowpipe.

The first, or Dynamical Geology, ought to come earlier in the course, and be made to include many of the principles of natural physics. It might be named instead—The Principles of Geology. I would recommend that it be substituted for Physical Geography, that study, as now taught, being an epitome of all the natural sciences.

The second, Lithological Geology and Mineralogy, with the work in Determinative Mineralogy and Blowpipe Analysis should be so placed as to follow Analytical Chemistry, and should occupy two terms in the senior year, or one in the junior and one in the senior.

The third, Historical Geology, should be so placed as to follow soon after a term's study in Lithological Geology.

In Zoology there should be two term's study, one for General Principles, and one for Systematic Zoology. At the present time two studies are named in the scheme that might very well be combined under one. I refer to Physiology and Zoology. If the term now devoted to Physiology be given to the principles of Zoology, the change would be so slight that Physiology would not be omitted, and Zoology would be fairly begun, and the following term's study on Systematic Zoology would be of far greater benefit to the student from the unification of his aim. In a post-graduate course opportunity should be afforded for special studies in classification, as one term is too short except for the merest outlines in Systematic Zoology.

In Botany there should be at least one long term. In that time the elements of Botany can be mastered, and a few hand analyses can be performed. This will be probably enough for students in the College of Science, Literature and the Arts. In the Colleges of Agriculture and Mechanic Arts another full term should be offered for more extensive study of Systematic Botany.

There is a great need of charts, diagrams and maps illus-

trative of these sciences. The collections of the Geological Survey will very soon afford specimens for very good illustration of most of the works above laid out, but these do not take the place of maps and charts. I hope that a small sum may be set aside for the purchase of such maps.

Very respectfully submitted,

N. H. WINCHELL,
Prof. of Geology.

REPORT OF ASSISTANT PROFESSOR RHAME.

UNIVERSITY OF MINNESOTA,
December 1st, 1873.

To the President of the University:

SIR: I have the honor to submit the following report of the work of my department for the year ending June 19th, 1873.

The classes under my instruction and the subjects studied have been:

FIRST TERM.

Study.	Class.	Number.	No. Exercises.
Use of Inst. Surveying....	Junior.	5	30
Use of Inst. Leveling.....	Junior.	5	35
Top. Drawing.....	Junior.	2	65
Physics.....	I.	11	65
Nat. Philosophy.....	IV.	66	65
Drawing—Plane Problems.	II.	16	65

SECOND TERM.

Descriptive, Geometry....	I.	4	65
Drawing--Elem. Projections	II.	13	65
" Use of Inst.....	III.	31	65
Mechanics	Junior.	1	50
Nat. Philosophy.....	IV.	60	65

THIRD TERM.

Drawing—Perspective.....	I.	3	30
Triangular Surveying.....	Junior.	1	30 hours
Surveying	II.	20	12
Spherical Trigonometry...	II.	20	18

On account of the absence of the Professor of Mathematics, at his request I taught the First class in Astronomy during the third term.

Mr. H. W. Slack assisted me during the first term, giving instruction to the B section of the class in Natural Philosophy.

Mr. A. M. Williamson taught both sections of the class in Natural Philosophy during the second term.

During the spring vacation, a topographical survey of the University campus was made by the members of the Junior class. The notes and map are on file in your office.

A surveyor's transit was added to our list of instruments last September. We now need very much a leveling instrument and leveling rod. The class will need these for practice next spring. I hope they will be purchased immediately, for which an appropriation has been made.

I would suggest that as soon as may be, appropriations be made for the purchase of additional instruments for the Physical Laboratory, and for models to illustrate principles in Descriptive Geometry.

Respectfully submitted,

M. D. RHAME,
Instructor in Civil Engineering and Physics.

REPORT OF MR. S. F. PECKHAM.

To the President of the University:

SIR:—Permit me to lay before you a statement of facts concerning the Department of Chemistry, which I have the honor to represent. * * * * *

In view of the increased opportunities to be offered by the University, and the probably greatly increased demands to be made upon the Department of Chemistry which will follow the completion of the new Laboratory building, provision should be made at as early a day as possible for the chemicals and reagents required. No bottles are made in this country fit for Laboratory uses, there not being a sufficient demand for the quality required to render their manufacture profitable. If allowed sufficient time I can procure them imported free of duty at a saving of 33 per cent. on their cost. To do this the entire outfit for the new Labortory, some seventy-five or eighty dozen should be ordered,

at once, as the importers will not take the necessary trouble on small orders.

At least twenty setts of reagents, each consisting of twenty-four bottles, should be prepared before the end of the present University year. These bottles must be carefully washed and labeled, and the solutions prepared and put into them. A large number of chemicals, each in considerable quantity, which are expensive to buy, should be prepared before the end of this collegiate year. All chemicals that can be bought crude of our local druggists can be purified much cheaper than they can be bought pure of the dealers in New York. To provide for this work, which is imperatively demanded an appropriation of two hundred dollars will be required for bottles and another hundred for chemicals and labor. Unless this work is done in season it will be impossible to open the new Laboratory successfully next September, even if the building should be entirely completed, as these preperations require unavoidably a great deal of time.

If I am correctly informed the contract for the new Laboratory does not include any furniture or fixtures. In order to place the room for students, the apparatus room, the professor's Laboratory and the lecture room in working order, there will be needed the following named articles of furniture, which will cost at *least* the sums specified, viz:

(8) Eight Students Work Tables,	*a* 40	$320 00
(2) Two Cases for Chemicals,	*a* 20	40 00
(8) Eight Sinks,	*a* 5	40 00
Water Bath and Still,		500 00
Reagent Bottles,	75 doz. *a* 3	225 00
Table and Sink in Apparatus Room,		30 00
Cases in Apparatus Room,		75 00
Table and Sink in Prof's Room,		30 00
Cases in Prof's Room,		25 00
Table in Lecture Room,		30 00
Gas Apparatus,		500 00
Pumps, Tanks for Water, Drains, etc.,		250 00
Outfit of Chemicals and Apparatus,		500 00
		$2,565 00

The cost of these fixtures will be from 2,700 to 3,000 dollars, probably about the latter sum.

In closing this communication permit me to call your atten-

tion to a matter which is perhaps not strictly within my own department, and yet it is one in which my department is deeply interested, I refer to the propriety of procuring a lathe and a few tools, the cost of which need not exceed $100.00 for the use of the University. I am somewhat familiar with the use of such tools and can assure you that it would be no difficult matter to utilize the mechanical skill among the students in such a manner as in a few years to double the value of our Physical and Chemical apparatus. Few persons realize how simple in construction and inexpensive in material a large portion of our apparatus is, and also how much of it can be constructed with a few tools provided one has the time at his disposal.

All of which is respectfully submitted.

S. F. PECKHAM.

REPORT OF THE CURATOR OF THE MUSEUM.

To the President of the University:

In April, 1873, the Board of Regents devolved on me the Curatorship of the University Museum. This report is intended to give a statement of the collections that were then found in the buildings of the University, their condition and subsequent care, and to call attention to some of the imperative needs of the Museum. It will also furnish a starting point from which the future growth of the Museum may be seen by regularly recorded annual increments. In order that this history may not be incomplete, it is necessary to enumerate, by reference to the previous reports of the President of the University, the sources and the dates of reception of collections that have been placed in the University.

Prof. Washburn mentions, in his report to the superintendent of public instruction, dated Nov. 28, 1868, "one box of shells, from the Smithsonian Institution," also, "one box geological specimens from the Smithsonian Institution." He also mentions "geological specimens from various parts of the State by Prof. Moore."

In the Report of the Board of Regents to the Governor, dated December 22, 1871, the collections obtained by Prof. Campbell in Europe are referred to, as consisting of geological specimens, and photographs of antiquities and works of art. These were added to the Museum in 1871.

In the report of the President of the University for the same year a record is made of the presentation to the University by Rt. Rev. H. B. Whipple of "a valuable collection of coins, consisting of about sixty Italian, Spanish, Greek, Roman, Egyptian and Moorish specimens."

Upon examination of the boxes and open shelving holding the specimens of the Museum, it was found that there were more specimens than had ever been recorded, and that they were all in more or less confusion. Some of them were utterly uncared for, unlabeled and unboxed, the donors' names, if they ever were known, having been lost, the localities whence derived in many cases obscurely remembered or unknown, and their value for all purposes much diminished. No records had been preserved. The following list embraces a general classification and description of the specimens found, with statements of their identification when such was possible:

Twenty specimens from Ayrshire, Scotland, illustrative of the coal measures, procured by Prof. G. Campbell.

Thirty-five European minerals, some of them illustrative of the ore and iron of the Dalmellington Iron Works, Ayrshire, Scotland, procured by Prof. G. Campbell.

Seven specimens from the Trenton Limestone, showing different fossils. Donor unknown.

One specimen, a large orthoceras, from the Trenton at Mendota. Presented by Gen. H. P. VanCleve.

Thirty-two specimens illustrative of the metamorphic rocks; localities and donors entirely unknown.

One hundred and seventeen specimens from the Hamilton limestone (of Illinois?), fossils. Obtained from J. F. Kenworthy.

Thirty-seven specimens, comprising various minerals and ores. No records whatever.

Thirty-eight specimens, minerals and fossils; localities unknown; from Dr. Stoneman.

Thirty-seven specimens, well labeled and identified, illustrative of the geology of W. Rutland, Vt., and Mt. Holyoke, S. Hampton and Chester, Mass., presented by Prof. Arthur Beardsley.

A collection of about two hundred rare minerals and fossils, partially labeled, but exposed to depredations and damage. Purchased by the Board of Regents. The localities whence these specimens were derived are unknown.

A good collection of marine corals and shells, partly

labeled. Purchased by the Board of Regents from H. T. Woodman, in 1872.

A box of bones said to be those of a saurian, obtained in Dacotah.

A collection of lead ore specimens from Mine La Motte, Missouri. Presented by Mr. G. D. B. Bainbridge, student in the University, March 10, 1873.

A collection of carniferous fossils from the Falls of the Ohio, at Louisville, Ky. Presented April 16, 1873, by Mr. Clark Stewart, student in the University.

Specimens of rock from the lower Falls of Prairie River, Minn. Presented June 17, 1873, by Nathan Butler, Esq.

The first step taken toward arranging and cataloguing these specimens, was the procuring of the proper record books and the choice of a system of labeling. The work of examining and arranging proceeded as far as the time at my disposal up to the beginning of the field work of the Geological Survey would permit. But the facilities and conveniencies for storing and preservation are so poor, that there is but little inducement to work at the specimens. They are crowded into a very small room, in which there are no proper cases nor shelves. They are mingled with the philosophical and chemical apparatus. They lie on tables, on the floor, in open boxes, accumulating dust, often displaced, sometimes injured and broken, inaccessible both to visitors and to the professor who would use them for illustration in his classes. The collections of the Geological and Natural History Survey are not yet turned over to the Museum, but remain as they were received, securely boxed, each specimen carefully wrapped, with its locality expressed in a separate piece of paper. There they must remain till proper storage room is provided, and cases for their exhibition be constructed.

It is earnestly requested that a room in the University building be allotted to the Museum, and that a few appropriate cases be ordered, to contain the collections at present on hand, and to receive those that may hereafter be obtained. The private collections of Prof. Peckham and myself, would be placed on exhibition in the University Museum if the necessary means for their security were taken by the Board of Regents.

N. H. WINCHELL,
Curator.