

THE ANNUAL REPORT  
OF  
THE BOARD OF REGENTS  
OF THE  
UNIVERSITY OF MINNESOTA,  
TO THE  
GOVERNOR OF MINNESOTA,  
FOR THE  
FISCAL YEAR ENDING NOVEMBER 30, 1872.

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TRANSMITTED TO THE LEGISLATURE OF THE FIFTEENTH ANNUAL  
SESSION, 1873.

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UNIVERSITY OF MINNESOTA.

*To His Excellency Horace Austin,  
Governor of Minnesota:*

Sir:—I have the honor to transmit herewith pursuant to law, the Annual Report of the Board of Regents of the University, for the fiscal year ending Dec. 21st, 1872.

I am respectfully,

Your obedient servant,

JOHN S. PILLSBURY,

President of Board Regents.

# R E P O R T .

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*To His Excellency, Horace Austin:*

The Board of Regents of the University of Minnesota have the honor to present the following report of the condition and affairs of the University as required by law.

## THE FACULTY.

During the past year the University Faculty has, to some extent, been changed and the number of instructors increased.

The Chair of Chemistry has been combined with that of Agriculture, and Dalston P. Strange, a graduate of the Michigan Agricultural College, has been secured as instructor in charge of this department. Mr. Strange was called to this position in accordance with strong recommendations from the officers of that institution. The services of Professor E. H. Twining being no longer required, he has accepted a position in the University of Missouri.

Professor Arthur Beardsly filling the Chair of Civil Engineering, tendered his resignation at the close of the academic year, which was accepted by the Regents, in June last.

Mr. M. D. Rhame, who is a graduate of Yale, and furnished with good testimonials has been appointed in his stead.

Mr. N. H. Winchell, a graduate of the University of Michigan, has been selected to give instruction in Geology and Minerology for the present year, and will enter upon his duties the first of January next.

Governor Austin having been requested by the Board to obtain from the war department, if practicable, the detail of First Lieutenant Eli L. Huggins, U. S. A., as Professor of Military Science and Tactics, he made the application accordingly, which was successful, and Lieutenant Huggins was ordered to perform the duties of the position, and has already entered upon them.

Elementary instruction in English branches has been given by Mr. Hiram W. Slack, a young man of education and intelligence.

The Faculty of the University is now constituted as follows:

WILLIAM W. FOLWELL, M. A., PRESIDENT,  
*and Librarian.*

REV. G. CAMPBELL, M. A., B. D.,  
*Professor of Mental and Moral Philosophy, and Instructor  
in German.*

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

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

ARIS B. DONALDSON, B. A.,  
*Professor of Rhetoric and English Literature.*

EDWIN J. THOMPSON, M. A.,  
*Professor of Mathematics.*

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

N. H. WINCHELL, M. A.,  
*Instructor in Geology and Minerology.*

DALSON P. STRANGE, B. S.,  
*Instructor in Agriculture and Natural Science.*

M. D. RHAME, B. A.,  
*Instructor in Civil Engineering and Industrial Mechanics.*

ELI L. HUGGINS, 1ST LIEUT. U. S. A.,  
*Professor of Military Science and Instructor in French.*

HIRAM W. SLACK,  
*Assistant in English Branches.*

WALTER E. FIELD,  
*Superintendent of the Experimental Farm.*

## NUMBER OF STUDENTS.

*Attendance of Students for the University year, ending  
June 27th, 1872.*

## SUMMARY.

Department.	Class.	Gentlemen.	Ladies.	Total.
Coll. Sci. Lit. & Arts.....	{ Senior.	0	0	0
	{ Junior.	3	0	3
	{ First.	10	2	12
	{ Second.	8	4	12 27
Collegiate Department.....	{ .....	.....	.....	.....
	{ Third.	38	8	46
	{ Fourth.	60	24	84
	{ Special.	4	3	7
Latin School.....	.....	59	15	74 211
Total Attendance.....	.....	182	56	238

## AMENDMENTS OF THE CHARTER.

During the fourteenth session of the Legislature the general laws relating to the organization of the University were amended as follows, to-wit :

The President of the University was constituted *ex-officio* a member of the Board Regents without the right of voting. The office of corresponding secretary of the Board of Regents created—the President of the University being made such secretary *ex officio*—and the Regents empowered to dispense with the elementary department of the University at their discretion.

## ELEMENTARY DEPARTMENT.

In accordance with the above amendments the board have ordered that the first section of this department, called the Latin School, be dropped at the close of the present academic year, and that the so called fourth class be also dispensed with in the year 1875.

## THE LIBRARY.

The number of volumes secured during the present year has been about 500. Correspondence has been continued with President Toppen who now resides in Europe with reference to the purchase of his library at Ann Arbor, Michigan, and the Board have reason to believe that he will accept their offer, and thus secure to the University his valuable collection of about 3,000 volumes. The University Library would in such case contain about 10,000 volumes exclusive of pamphlets.

## THE MUSEUM.

Five hundred models from the Patent Office in Washington have been received, but are stored from want of room to exhibit them properly, a collection of nearly three hundred

marine specimens, including corals, sponges and shells has been purchased from Professor Woodman, of Iowa, and properly classified for exhibition.

## GEOLOGICAL SURVEY.

In accordance with an act of the last Legislature entitled an act to provide for a geological and natural history survey of the State, and entrust the same to the University of Minnesota, the Board of Regents have secured the service of Professor N. H. Winchell, recently in charge of a division of the geological survey of Ohio, as chief geologist, a room in the University building has been assigned to Professor Winchell for the exhibition of geological specimens, and his report embodied in the appendix, will show the amount of work already accomplished. The appropriation, however, made by the Legislature, is altogether inadequate for the prosecution of the survey to the extent imperatively demanded by the importance of the enterprise. In this respect Minnesota is far surpassed by her sister States, Wisconsin, Iowa, Kansas and Missouri. It is confidently hoped that at its next session, the Legislature will set apart a sum more in accordance with the requirements of our broad territory and rapidly increasing population. The accompanying report will show the importance, both financially and scientifically, of adopting efficient means to expedite a systematic and thorough geological survey of the State. We take pleasure in mentioning at this point the courtesies shown Professor Winchell and his party by the following railroad companies in this State: The Northern Pacific, Lake Superior & Mississippi, St. Paul & Pacific, St. Paul & Sioux City, Sioux City & St. Paul, Winona & St. Peter, and Southern Minnesota. The officers of these several organizations not only cheerfully proffered passes to the chief geologist and his assistants, but also to convey free of charge all specimens collected by them. The Milwaukee & St. Paul and St. Paul & Chicago companies declined on their part to show any favors to the party.



## AGRICULTURAL FARM.

There has been a considerable increase in the production of grain and vegetables during the past year. The ditching of the farm has been carried forward, and a large number of fruit and forest trees set out. The experiments made were for the most part upon varieties of wheat and oats received from the department of Agriculture in Washington. The productive season being nearly at an end at the time of the arrival of Professor Strange to take charge of the department of Agriculture in the University, he has not yet been able to prepare a complete statement of the actual progress made since our last report, and of the contemplated securing of numerous varieties of wheat grown in northern latitudes for trial upon the experimental farm, and by the farmers in other parts of the State.

## RESOURCES OF THE UNIVERSITY.

Whole number acres land granted by		
Congress, - - - -		202,000
Acres sold to pay indebtedness, - -	14,000	
Acres sold for Permanent Fund, - -	27,991	
Acres remaining unsold, - -	160,009	
	-----	202,000

## LIBRARY AND REPAIR FUND.

To balance on hand as per last report,		\$185 42
Paid Wiley Brs. for books, - - -	\$162 47	
Carried to general fund, - - -	22 95	
	-----	\$185 42

## EXPERIMENTAL FARM FUND.

To amount on hand as per last report, -		\$671 87
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## UNIVERSITY LAND FUND,

Balance on hand,	-	-	-	\$39 42
Amount of Permanet Fund at interest,				145,000 00

RECEIPTS AND DISBURSEMENTS, CURRENT EXPENSES FROM  
DEC. 22d 1871, TO DEC. 21st, 1872.*Receipts.*

Balance on hand as per last report,	-	-	-	\$ 795 79
Received from State Treasurer on account of interest on permanent fund and Pine stumpage,	-	-	-	21,000 00
For sale of Horses,	-	-	-	211 33
Sale of 26 Desks,	-	-	-	104 00
Library and repair fund,	-	-	-	29 55
Manhattan Insurance Co.,	-	-	-	27 50
				<hr/>
				22,161 58

## DISBURSEMENTS FROM DEC. 22d, 1871, TO DEC. 21st, 1872.

For Salary of Faculty,	-	-	-	\$17,090 65
For expenses of Regents,	-	-	-	987 91
For Insurance,	-	-	-	60 00
For Printing,	-	-	-	120 87
For Surveying Instruments,	-	-	-	200 00
For Marine Specimens,	-	-	-	200 00
For Incidental expenses,	-	-	-	1,353 62
For Books for Library,	-	-	-	117 25
For Salary of Farmer,	-	-	-	450 00
Balance in Treasury	-	-	-	1,581 28
				<hr/>
				\$22,161 58

For Statement of Treasurer in detail, see Appendix.

## FUND FOR GEOLOGICAL SURVEY.

Amount appropriated by Legislature,	-	-	\$1,000 00
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Paid Chief Geologist,	-	-	-	\$800 00
Balance on hand,	-	-	-	200 00
				—————\$1,000 00

## GENERAL PROGRESS.

The board take a genuine pleasure in referring to the general prosperity of the University. The present year is the first that has presented it in its completeness. Heretofore the work has been mostly preparatory, now, however, the highest class is approaching the close of its course, and in June next, the University will confer its first baccalaureate degrees, at the same time dropping the lowest year of preparatory instruction.

The ability and success with which the President and instructors have brought forward their respective departments, call for our special commendation, while the increasing attendance of students of a high order, give promise of a prosperous future.

## OUR WANTS.

The greatest need of the University, the endeavor to elevate itself to the position of *an alma mater*, must be apparent to every one. We have for several years successively made earnest appeals to the representatives of the people to appropriate the means absolutely necessary for the extension of its high educational facilities. We have heretofore called your attention to the large sums set apart by our neighboring states for this purpose. Recently, California has followed their example, and more than equalled their liberality by appropriating \$300,000 for University buildings. So long as we take a laudable pride in comparing the climate and production of Minnesota with those of our sister states, and in other respects seek to take a prominent part in the development of this great Northwest, we should cease to manifest indifference or neglect, and zealously assist in the rapid development of our high schools of learning. The

first great want is a sum sufficient for the erection of the main University building, the second a building to represent specially the agricultural department, including an ample laboratory for chemical studies. These provided, our students need not go to other States to complete their education, and our University will not so sadly suffer, as at present, by comparison with similar institutions elsewhere. With the presentation of these facts we commend most earnestly the interests of the University to the Legislature.

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A P P E N D I X .

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THE UNIVERSITY OF MINNESOTA,  
SAINT ANTHONY'S FALLS,  
December 1st, 1872. }

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

SIR:—I have the honor herewith to transmit a report of the condition and progress of the University for the university year ending January 27th, 1872.

I am, very respectfully,

Your obedient servant,

WILLIAM W. FOLWELL,

President.

REPORT OF THE  
PRESIDENT OF THE UNIVERSITY  
TO THE BOARD OF REGENTS.

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*To the Honorable, the Board of Regents:*

Were it not breaking the continuity of a series, it might be as well to offer no report at this time. The last report, bearing date December 1st, 1871, owing to delay, presumably unavoidable, of the State Printer did not reach the Legislature till the last day of the session, and then not in complete form. The act of the last Legislature, amendatory of the organic law, changed the time for the closing of this and subsequent reports from the second Tuesday of December to the close of the University year in June.

GENERAL CONDITION AND PROGRESS.

During the brief period intervening, no event of importance interrupted the steady routine of our work. At the end of the winter term, in April, some public exercises were held in the Assembly Hall. His Excellency the Governor being present, made an extemporaneous address full of wise suggestions. He strongly urged the students not to be in too great haste to get through their studies, and also while engaged upon them to subordinate all other interests to them. The volunteer choir enlivened the occasion with some excellent music.

The summer term has closed without demonstrations for two reasons: the one, that there being as yet no graduating class there has been no just occasion for a commencement; the other, that as usual, many of our advanced students

have been obliged to take leave before the close of the session. This is a common thing in new states and wherever many students support themselves by labor or teaching. The present arrangement of our terms, giving a short spring term was devised, as the Board are aware, for the accommodation of such students. It has been suggested that it has, or may have the effect to invite students not "working their way" to be needlessly absent, and their parents to withdraw them prematurely. The experiment of a year or two more will probably enable us to judge the matter.

#### THE UNIVERSITY YEAR.

Were it not against the American custom I should be disposed to recommend for adoption the arrangement of the Scotch Universities, which begin their single annual academic term in November, and close it in April. This disposition liberates the student for work during the whole working season. It would be necessary to extend the courses of study over another year, and this would of itself, be a considerable advantage. It is *killing* work for a young man to carry on successfully a college course of study and earn his living by unskilled labor, or by teaching at the same time. But few constitutions can endure it. The summer season would be devoted by the professors to investigation and authorship, and to the instruction of special and post-graduate studies.

While I am not prepared to recommend the immediate adoption of such a plan, I am certain that it is worthy of early and serious consideration. I think it would place the higher education within the reach of a much larger number than can now attain to it. No young man of brains and energy, having good health need forgo it. I observe that some American institutions—among them the normal schools of Minnesota—are making the experiment of a similar arrangement of the scholastic year and terms.

#### CLASSES AND PROMOTIONS.

The work of the year includes all the studies usually taught in the American colleges and secondary schools excepting those of the Senior year, the highest class having been of Junior rank. The promotions following the examinations just ended give us Senior and Junior classes in the COLLEGE OF SCIENCE, LITERATURE AND THE ARTS, and a



Junior class in the COLLEGE OF THE MECHANIC ARTS. We shall therefore open the next year with all the classes of a regular American college, and more. The Board will need to take early action for the necessary increase of the teaching force.

#### THE COLLEGE OF AGRICULTURE.

I trust your honorable body may be successful in securing the services of some gentleman competent to fill the chair of Agriculture, and disposed to push the department with vigor. His task will not be an easy one. The field is a comparatively new one, and our surroundings are peculiar. "What to do?" and "How to do it?" are questions to be answered for these times and for this place. We shall work out ways and means in agricultural education as has been done in legal, medical and polytechnic education. We cannot expect that any large number of youth will willingly become the subjects of experiments. Not till we present in the College of Agriculture a considerable array of competent and experienced professors, and have some results to show, can we expect any large accessions to the rolls of that department. I trust the arrangement by which the subject of Chemistry is attached to the chair of Agriculture,—however desirable it may be under the present circumstances,—may not be regarded as permanent. No one man can cultivate two fields so vast, and neither of the departments will bear to be merely nominally filled.

#### THE COLLEGE OF MECHANIC ARTS.

It will also devolve upon the Board to supply the chair of Civil Engineering and Industrial Mechanics vacated by the resignation of Professor Arthur Beardsley, C. E. It will be unfortunate if we shall not succeed in supplying this vacancy with an energetic and competent officer. The Engineering students are likely to be numerous and zealous, we cannot well afford to have them attracted elsewhere. A class of four young men, very well prepared, are now ready to enter the College of the Mechanics Arts in the Civil Engineering course.

Fortunately schools of Engineering are no longer an experiment. The methods have been fully worked out. We have numerous American examples from which to copy. I believe nothing to be now lacking for the upbuilding here

of a successful Polytechnic department, but money to pay professors, to procure apparatus and to shelter students. The need of such a department and the duty resting upon us to develop it are obvious.

#### THE LITERARY DEPARTMENT.

THE COLLEGE OF SCIENCE, LITERATURE AND THE ARTS is fully organized. The number of professors would be nearly, if not quite sufficient, could they be liberated from some of the elementary work now imposed upon them. It is exceedingly desirable that the amount of daily work hitherto required of the full professors, and I will add, very cheerfully rendered, should be reduced. A professor having charge of a department of instruction, and held responsible for its success, should have time to oversee and inspect the work of assistants and in particular to scrutinize the examinations. Provision should be made at once for departments of history, political economy and some other subjects not yet given in charge to any officer. Attention is respectfully called to the proposal of the senior professor in his accompanying report to assume some additional work, related more or less nearly to his special departments, while it is probable that some of the subjects may be assigned places in the existing programme of studies. I am clearly of the opinion that others must be deferred to a post-graduate course. I would recommend that such a course be drawn up and offered in the forthcoming calendar.

I regard it as desirable that some more convenient designation replace the formidable title "College of Science, Literature and the Arts."

#### NEW DEPARTMENTS.

In regard to other departments contemplated by the organic law, it needs only to be said that it is useless to think of opening any of them until our buildings be enlarged and multiplied. When that time shall come I should hope that among the first of new departments to be opened may be a "Business College," worthy of the name and of a place in the University federation. Such a college should start from the common basis of the existing University Colleges and demand a sound secondary education as a pre-requisite for admission to a "degree course." The only grave difficulty

in arranging the curriculum of such a department would be the embarrassment of selecting from a wild range of ennobling, yet practical studies.

As for colleges of law and medicine, I beg to record anew my hope and trust that neither shall open here, until the professions are ready to sustain the Board in refusing admission to all candidates not furnished with a good general education. If such were known to be the intention of the Board, I am certain that they would have the applause of all true educators, and that the desired consummation would be hastened.

The usual tables of enrollment and attendance are appended.

Attention is respectfully directed to the reports of Professors herewith transmitted.

#### MILITARY EXERCISES.

No instruction has been given in military science and tactics during the period covered by this report. The War Department has declined to detail an officer of the army to take charge of the subject, and no University officer could be spared from his proper duty to give such instruction. The re-opening of the military department after so long an intermission will be a virtual introduction of new studies and exercises to students generally unaccustomed to them. I confess that I look forward to the experiment with some anxiety, when I consider the divided sentiments of those interested. While ready for any plans which the Board may adopt, I do not change my opinion, heretofore informally expressed, that it would be wise and expedient to establish a separate "college or department" of military science. The Board possess full authority to do this under the organic law, and there are precedents to justify it. It is obviously impossible to subject the students of all courses, classes, and departments to military discipline and exercises, especially since the circumstances absolutely forbid the introduction of anything analogous even to camp or garrison life. This matter deserves early and thorough treatment.

#### GEOLOGICAL SURVEY.

The act of the Legislature approved March 1st, 1872, authorizing a Geological and Natural History Survey of the State and entrusting the same to the University of Minnesota, devolves much care and responsibility upon the Board.

If however, they shall be successful in securing competent and enterprising scientists to undertake the various branches of the work, and if the results shall be commensurate with even moderate expectations, the Board will have reason to rejoice in their labors. It will be necessary, at an early date, to organize these surveys, and to put at least one man—the Chief Geologist—into the field. It is to be regretted that the meagre appropriation made by the law will compel the Board to use University funds to prosecute the work—it cannot be doubted but that future legislatures will show intelligent liberality towards an enterprise of so great importance to the State. It is a fact that many times the amount of the present annual appropriation, was expended last year in one locality of the State alone, in a vain search for coal. The Geologist could at least have warned against the folly.

#### LAND GRANTS.

It will not be out of place to call your attention in this document to some proceedings of the National Agricultural Convention, held in Washington, D. C., on the 15th, 16th and 17th of February last, which convention I attended as your delegate, and also as that of the State Agricultural Society. The proceedings, considerably mutilated, have been published by Congress and distributed over the country. Four main topics occupied the convention, viz. :

1. The expediency of seeking further land-grants from Congress for the promotion of colleges of agriculture and the mechanic arts.

2. The subject of establishing experimental farms and stations for the promotion of agricultural knowledge.

3. The question of modifying the military instruction given in the national colleges of agricultural and mechanic arts.

4. The best methods of co-operating with one another, and with the Department of Agriculture.

The first named topic which I had the honor of bringing before the convention in a brief address occupied fully one third the time.

The opinion seemed to be nearly unanimous that the land-grant of 1862 for the endowment of the institutions named had proved in all cases insufficient. It was also urged by many members that the allotment under that act to the States then represented was very unequal and especially unjust to the new

States and to the Territories. The Commissioner of Agriculture, the Hon. Fredk. Watts, in the course of his remarks said: "Heretofore, by the act of 1862, the act about which we are concerned, a most unjust distribution was made of the public lands. They were distributed according to the ratio of population. Minnesota received 120,000 acres; New York, 990,000 acres. Minnesota has some 80,000 square miles, and New York some 47,000 square miles in area. That it was unwise is manifest because this very State of Minnesota is likely to hold a population equal to the State of New York. \* \* \* \* It is very unjust therefore that they should give to the State of New York 990,000 acres, and to the State of Minnesota 120,000 acres."

At the close of the practical discussion the convention adopted the following resolutions:

Resolved, That the convention respectfully recommend to the Congress of the United States the bestowal of an additional liberal grant of land, or the proceeds thereof, upon the Colleges of Agriculture and the Mechanic Arts, which have been established in the several States and Territories in accordance with the enactment of July 2, 1862, and its amendments, and upon such as may hereafter be established in States and Territories when such institutions have not been established.

Resolved, That a committee of one from each State and Territory, here represented who with the presiding officer of the convention, shall urge the foregoing resolutions upon the attention of Congress.

The committee raised by a second resolution delegated their powers to the sub-committee consisting of the following members:

*Dr. Geo. B. Loring*, of Massachusetts, President of the convention; *Dr. J. M. Gregory*, of Illinois; *Dr. B. J. Bowman*, of Kentucky; *Hon. Ezra Cornell*, of New York; *Col. Wm. S. Clarke*, of Massachusetts; *Dr. J. S. Twombly*, of Wisconsin, and *William W. Folwell*, of Minnesota. A memorial drawn up by them was read before Congress, by whose order it was printed.

#### MORRILL'S BILL.

A bill embodying the wishes of the friends of the measure was presented to the Senate, by Senator Morrill, of Vermont, the author and leading advocate of the original act of 1862. The bill having undergone a transformation is now

pending. It proposes to grant to each State for the benefit of its College or Colleges of Agriculture and the Mechanic Arts, the *proceeds of the sales* of 500,000 acres of the public lands estimated at one dollar and a quarter per acre. Those members of the working committee, best informed on the subject, are confident of the passage of the bill early in the coming session of Congress.

While the measure, if successful, will bring needed relief to many struggling institutions, and give new impetus to the technical education in our country, it fails to remedy the apparent and flagrant injustice of the apportionment of the act of 1862. I have no doubt but that justice will yet be done, and I deem it expedient that our State Legislature be asked by the Board to memorialize Congress in this behalf. It is to be regretted that the amount to be appropriated by the pending bill is so meagre in proportion to the magnitude of the enterprise which no less than one to establish and adequately endow at least one great "National School of Science" in each State and Territory. The sum of six hundred and twenty-five thousand dollars is a very handsome sum as an addition to an endowment already large, but it is altogether inadequate to form the original endowment of a reputable college.

If the government means to be just and to insure the healthful development of such National Schools of Science for the benefit of the industrial classes, it must in some way raise their endowments to respectable dimensions, and in so doing remedy the inequality and the original benefaction.

I do not deem it necessary to make any account of the proceedings of the convention upon the other three topics mentioned, but will merely respectfully refer the Board to the published report, and invite their careful inspection.

The most encouraging feature of the convention was the hearty belief and enthusiasm in the professional education of the farmer and the artisan mingled, albeit with much doubt and hesitation as to ways and means.

#### THE NEW EDUCATION.

I will now remark that with the indulgence of the Board took advantage of my journey to the east to visit and spect a large number of higher institutions of learning, it impossible to give here any extended report of my observations. The one being most apparent and striking was

the ardor with which all institutions of college or university aspirations are responding to the demand for the new education. It is gratifying to note that this progressive tendency is guided and balanced by the conservative resolution to hold fast all the good of the past. The extent to which the American colleges are willing or able to provide for modern demands may be taken as a measure of their prosperity. Minnesota may be congratulated upon the advantage she enjoys of her freedom to adopt all her methods and plans which promise well, while unembarrassed by inherited evils.

#### BUILDING AND GROUNDS.

The landscape architect, Mr. H. A. S. Cleveland, who was invited to examine the campus for the purpose of devising plans for its improvement and decoration, after making a reconnaissance, gave it as his opinion that nothing should be done until the Board should have decided upon the buildings intended to occupy the ground and their respective sites. There can be no doubt of the soundness of this opinion, and I would therefore very respectfully recommend that the subject receive early consideration. I beg leave to make the following suggestions :

Inasmuch as it is simply impossible to embrace all the work of a University—however that may be with a college—within the walls of a single structure, the questions which immediately present themselves are : “ What and how many buildings appear to be necessary ? ” “ In what order shall they be erected ? ” “ Where shall they be located ? ” These questions settled, the landscape artist can soon determine what avenues, paths, gateways, &c., are needed and what decorations are admissible.

After a careful inspection of the present fraction of a building, I have reached the conclusion, in which I am confirmed by the opinion of an experienced builder, that although it can, by suitable additions and improvements, be rendered serviceable for a generation or two, it is totally unfit to form part of the great plan originally projected. I beg leave to suggest the inquiry whether it would not be wise to call upon the next legislature to appropriate a moderate sum for the completion of the building by an addition of suitable dimensions and becoming style ? The edifice so enlarged would accommodate one academic, and some of the technical work, for some years. As new departments develop, additional structures should be provided for their accommoda-

tion. It will be very soon indispensably necessary to erect a chemical laboratory, and it is desirable that the agricultural college be equipped with a separate and appropriate building which might also accommodate the botanical and horticultural work. Sooner or later such structures as the following will become necessary :

1. A fire-proof building for the Library and Collections.
2. A building for Engineering and Physics.
3. An Astronomical Observatory.
4. A Medical College.
5. A Law College.
6. And at length, a great public hall, &c., &c.

Doubtless private liberality may be looked to for assistance in the erection and outfit of some of these buildings.

#### LODGINGS.

I am gratified to be able to report that the condition of the building is good and very creditable to the young people who have frequented its rooms and halls. The indispensable increase of the teaching force will necessitate the opening of one or more new class rooms, for which orders should be promptly given. I trust that such arrangements may be made as will not render it necessary to deprive the boarding clubs of the basement rooms now occupied by them. But for this resource, which has enabled some forty young men to obtain good meals at \$2 00 per week, it would have been impossible for some of our most promising students to attend. The extension of such facilities is very desirable. To our inability to provide suitable rooms for young women, do I attribute the fact that the proportionate attendance of young ladies is conspicuously diminishing. I think we must assume that young women have a solid footing in the University. An institution which has never admitted women—seeing they were here from the beginning—will never turn them out. Wherefore any arrangements which may be made by public authority, must in fairness, look to the advantage of both sexes. I do not doubt but that the number of lady students could be greatly increased if we could offer them suitable homes under proper supervision. Just here—in the matter of maintaining students of both sexes—is the place for private, especially Christian, liberality, to second the efforts of the University Boards. Let the Christian bodies of the State surround the University with christian homes, in which students of one or both sexes can be sheltered and trained.



The University will furnish them instruction, literary, scientific, classical, technical and professional, FREE.

Thus public beneficence and private liberality will conspire together in promoting the higher education of the people, rather than dissipate their resources in the attempt to support numerous rival establishments.

#### THE EXPERIMENTAL FARM.

In regard to the farm I have no information not already in your possession, and beg leave to refer to remarks in my last report.

#### THE LIBRARY.

During the period covered by this report, no large accessions have been made to the library. An appendix shows the donations which have been received. I regret to state that the alphabetical catalogue of authors, furnished as part of the last report is not yet wholly in print,\* owing to delays, presumably unavoidable, in the office of the State printer. The completion of this catalogue will mark an era in the brief history of our library. A library without a catalogue is nearly valueless, except to a few officials and habitues. The catalogue opens its treasures to the world. The making of catalogues is costly and laborious; but it were sheer folly to store up books and pamphlets without them. So soon as possible the catalogue of subjects should be begun, and carried forward with such dispatch as may be practicable. In the preparation of the catalogue now in press, I was fortunate in being able to call to my assistance the accurate bibliographical skill of Profs. Twining and Beardsley. To the former I am especially indebted for valuable assistance in preparing the "copy" for the printer. I append the titles of the works, other than public documents, received since the last report.

It is much to be regretted that the library is stored in so small a room. The books ought to be where they can be seen by all comers. "The very sight of a large library," says Taylor Lewis, "is inspiring." No one University establishment tends so much to bind together into a whole the various departments and their diversely occupied members. I deem it very desirable that ample and more convenient

\* It has since been published.

apartments be provided for the library and the reading room soon to be connected with it. The consecration of a fund, however small at the beginning, for the regular increase of the library, is a thing which ought not to be long delayed. I would request that a small appropriation be made for binding and repairs.

#### COLLECTIONS.

No additions of importance can be reported at this time to the Mineral Cabinet, and perhaps it is well that so long as we have neither rooms nor cases for their display that specimens do not accumulate. It will before long be necessary to provide proper storage for the large collections to be made in connection with the Geological Survey. I may add that some 500 models from the U. S. Patent Office remain in the boxes for lack of rooms and shelving for their arrangement and display.

#### CONCLUSION.

I do not deem it proper to recapitulate the long catalogue of building, furniture, apparatus, books, &c., necessary to equip the University in a style and manner equal to those of the Universities of neighboring States, and commensurate with the needs now pressing upon us. Aware as we are of the present condition of the funds of the University and the State, the recital would not serve any practical purpose and might seem like either a complaint or a petition. I do not despair; I have the fullest confidence that in good time the great State of Minnesota will place her University on a footing becoming her own dignity and her own history, and worthy of the great objects of such an institution.

All of which is respectfully submitted.

WILLIAM W. FOLWELL.

## APPENDIX A.

The following tables show the enrollment, attendance and classification of the students for the *whole* of the University year 1871-2:

## COLLEGE OF SCIENCE, LITERATURE AND THE ARTS.

Class.	Course.	Gentlemen	Ladies.	Total.
Senior.....	(Not then organized.)..	0	0	0
Junior.....	Classical.....	2	0	2
	Scientific.....	1	0	1
	Literary.....	0	0	0
		3	0	3

## THE COLLEGIATE DEPARTMENT.

Class.	Course.	Gentlemen	Ladies.	Total.
First.	Classical.....	1	.....	1
	Scientific.....	7	1	8
	Literary.....	2	1	3
		10	2	12
Second.	Classical.....	7	.....	7
	Scientific.....	1	.....	1
	Literary.....	.....	4	4
		8	4	12
Third.	Classical.....	20	.....	20
	Scientific.....	14	2	16
	Literary.....	4	6	10
		38	8	46
Fourth.	Classical.....	15	.....	15
	Scientific.....	25	8	28
	Literary.....	20	21	41
		60	24	84
Unclassified.....	.....	4	3	7
Grand Total.....	.....	120	41	161

## THE LATIN SCHOOL.

Gentlemen.....	59
Ladies.....	15
Total.....	74

*Summary.*

Department.	Class.	Gentlemen.	Ladies.	Total.
Coll. Sci. Lit. & Arts.....	{ Senior.	0	0	0
	{ Junior.	3	0	3
Collegiate Department.....	{ First.	10	2	12
	{ Second.	8	4	12
	{ Third.	33	8	46
	{ Fourth.	60	24	84
	{ Special.	4	3	7
Latin School.....	.....	59	15	74
Total Attendance.....	.....	182	56	238
Enrolled but not Attending...	.....	21	6	27
Total Enrollment.....	.....	203	62	265

The whole number of candidates for admission was 122; of this number twenty failed to pass the examination, and twenty-seven were admitted with conditions. These examinations were considerably more rigorous than any similar ones previously made. It was gratifying to note a marked improvement in those indispensable rudiments, reading, writing and spelling.

## LIST OF DONATIONS

*To the Library of the University of Minnesota, from Dec.  
1st, 1871, to June 29th, 1872.*

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- Hon. Alex. Ramsey,  
7 vols. Globes.  
1 vol. Report Com'r Education.  
7 vols. Messages and Documents.
- Hon. John Jay Knox, Controller of the Currency,  
1 vol. Report.
- Rear Admiral B. F. Sands, U. S. N., Superintendent Naval Observatory,  
1 vol. Report on Eclipse.
- Brig. Gen. A. A. Humphrey, U. S. A., Chief of Engineers,  
1 vol. Botany of 40th Parallel.  
1 vol. Report of 1871.
- Secretary of New York State Agricultural Society,  
10 vols. Transactions.
- Brig. Gen. J. N. Barnes, Surgeon General U. S. A.,  
1 vol. Calalogue and 4 Circulars.
- H. D. Bennett, Esq., Steward University of Michigan,  
1 vol. 8vo, Proceeding of Board of Regents.
- Brewer & Toleston, Boston,  
1 vol. 4to, Worcester's Dictionary.
- Mark L. Sperry, Secretary Scovill Manufacturing Co., Waterbury, Conn.,  
1 vol. 8vo, "Great Industries."
- Hon. C. Delano, Secretary of Interior,  
1 vol. Reports.  
— vols. Miscellaneous Public Documents.
- Gen. Francis Walker, Superintendent Ninth Census,  
Reports, &c.
- Little, Brown & Co., Boston,  
1 vol. Lectures.
- The Zenobian Society of the University,  
3 vols., 12mo, Poems.
- G. Sidney Smith, Esq., St. Paul,  
1 vol. Cat. Library State of New York.
- President T. C. Abbott, Michigan Agricultural College,  
1 vol. Report Board of Agriculture.
- Mr. J. W. Buckley, Rushford,  
1 Pamphlet, Address.

- Hon. John Hancock, Superintendent of Education, Cincinnati,  
1 vol. Report.
- Prof. F. L. O. Roehring, Ithica, N. Y.,  
3 vols. and Pamphlets.
- Prof. Geo. Derby, Cambridge, Mass.,  
1 vol. Report Board of Health.
- Prof. Wm. F. Porter, Cincinnati,  
1 vol. 8vo, Catalogue Public Library.
- Hon. J. D. Philbrick, Superintendent Schools, Boston.  
8 vols. Reports.
- Hon. Fred'k Watts, Commissioner of Agriculture,  
13 vols. Reports.
- Dr. Thos. Lathrop, Superintendent of Education, Buffalo, N. Y.,  
1 vol. Report.
- Hon. Justin Winsor, Librarian Boston Public Library,  
Bulletins.

## LIST OF NEWSPAPERS

*Sent free to the University by Publishers.*

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The Minneapolis Daily Tribune.  
The St. Paul Daily Press.  
The Duluth Daily Morning Herald.  
The Western Progress.  
The Western Temperance Herald.  
The Mower County Transcript.  
The Watchman and Reflector.  
The New York Weekly Witness.  
The Baxter University Record.  
The Musical Independent.  
The Educational Reporter.  
The Book Buyer.  
The Farmers' Union.  
The Glencoe Register.



R E P O R T S  
OF THE  
P R O F E S S O R S   O F   T H E   U N I V E R S I T Y .

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REPORT OF PROFESSOR CAMPBELL.

UNIVERSITY OF MINNESOTA, }  
June 30, 1872. }

*To the President of the University :*

SIR:—Owing to the change of time for the presentation of our reports there is little matter to present which was not contained in my statement rendered in December, 1871.

The two German classes then in progress moved on with little variation to the close of the year. The beginning class finished the German Grammar, and the advanced class read the first part of Evans' *Abriss* of the History of German Literature, Schiller's *Maid of Orleans* and *Song of the Bell*, and several other selections. The junior class began German the first of January and continued the study throughout the year.

In my department proper, the juniors pursued the science of Psychology the second term and Ethics the third—the latter subject taking the place of Philology (Linguistics), which they have not yet had.

As the subjects taught by me were temporarily arranged during my absence abroad, I would respectfully request the Board of Regents to organize my department at their earliest opportunity; and with that in view, I beg leave to make the following general suggestions :

Literary students who do not take Latin should be required

to pursue German three years. Scientific students should take German at least one year, and classical students at least one or two terms preparatory to the study of Comparative Philology. Philology, or the science of language, should precede the science of mind. Then should follow Ontology, or Philosophy proper, the History of Philosophy, Ethics, Evidences of Christianity and Natural Theology.

I would suggest that Philology come the second term of the junior year, Psychology the third term. In the senior year, first term, Ontology and the History of Philosophy; second term, Ethics and the Evidences of Christianity. I am willing to offer an optional course of ten lectures in Natural Theology for the third term of the senior year. The following offer of optional instruction is also made for your consideration and adjustment if practicable: A course of five lectures on the Scottish Dialect and Literature, a course of six lectures in the German language on the Literature of Germany, class instruction in reading the German philosophers in the original and also in the grammar of the Sanscrit Language.

The above suggestions are made with the anticipation that the Regents will divide the university year into three terms of about equal length, as I do not see how my department can be fitted to two terms and a half which is the present arrangement.

G. CAMPBELL,

Professor of Mental and Moral Philosophy and Instructor in German.

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#### REPORT OF PROFESSOR TWINING.

THE UNIVERSITY OF MINNESOTA,  
ST. ANTHONY'S FALLS,  
June 27, 1872. }

*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 with this date.

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

## DURING THE FIRST TERM,

- II. Class in Chemistry.
- III Sc. Class in Physical Geography.
- IV Sc. Class in Natural Philosophy.

## DURING THE SECOND TERM.

- I. In Chemical Physics.
- II Sc. In Chemistry and Physiology.
- III Sc. Physical Geography and Botany.
- IV Sc. In Natural Philosophy.

## DURING THE THIRD TERM.

- I. In Zoology.
- II Sc. In Physiology.
- III Sc. In Botany.
- IV. (One Section) in Elementary Astronomy.

I have been highly gratified by the interest taken by the students with whom I have had to deal in their studies, and by the marked progress generally made. I consider the Board of Regents justified by the event, in the high standard they have set for the Collegiate Department, and in taking leave of the University I desire to urge upon them that no considerations be allowed to operate to its degradation. The tone of the elementary work in the Collegiate Department will, when carried into the higher duties of the University, certainly secure for it usefulness and universal respect.

I have the honor to remain, respectfully, your obedient servant,

E. H. TWINING,

Professor of Chemistry.

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 REPORT OF PROFESSOR WALKER.

*To the President of the University:*

In accordance with the by-laws I transmit the following report in respect to the study of the Latin Language and Literature in the University for the academic year ending June 28, 1872.

The following classes have been under my own instruction :  
*Junior Class* in Tacitus, Juvenal and Lit.

I. *Class Collegiate* in Horace and Antiquities.

II. *Class Collegiate* in De Senectute, Livy, and Roman History.

III. *Class Collegiate* in Cicero and Virgil, Latin Grammar and Composition.

IV. *Class Collegiate*—A section in Cæsar, Latin Grammar and Composition two terms.

The records of enrollment showing the number of students in each class, and also reports showing the attendance of each student together with his recitations and examinations, have been deposited in the President's office.

The following classes have been taught by the Assistant Professor, Miss Sutherland :

IV. *Class Collegiate* in Cæsar, Latin Grammar and Composition. A section one term ; B section three terms.

*Latin School* A and B sections three terms and C section one term.

The reports of these classes in all respects in accordance with the by-laws have gone directly to the President's office, consequently I have no knowledge of them except what is gained by general observation and inquiry. The order and amount of work to be done by these classes has been arranged by myself, but being occupied the entire four hours of recitation in teaching, I have not the means of knowing to what extent nor in what manner the work has been accomplished.

For the academic year of 1872-3 the proper work of all the preparatory and University classes in the Latin language and its literature claims my attention ; hence it becomes necessary for the efficient working of the department that the number of my daily recitations be reduced, as soon as may be, to the usual number of professors in other colleges and universities of like grade as our own.

All the above is respectfully submitted.

V. J. WALKER,  
 Prof. Lat. Language and Lit.

Dec. 15, 1872.

## REPORT OF PROFESSOR BROOKS.

*To the President of the University:*

SIR:—Herewith please find my report for the year ending June 27, 1872:

## CLASS LISTS.

*Collegiate Department.*

IV Class,	-	-	-	-	-	-	-	16
III Class,	-	-	-	-	-	-	-	16
II Class,	-	-	-	-	-	-	-	7
I Class,	-	-	-	-	-	-	-	1
								<hr/> 40

*College Literature, Science and Arts.*

Juniors,	-	-	-	-	-	-	-	2
Total in Greek,	-	-	-	-	-	-	-	<hr/> 42

An increase over last year.

## STUDIES PURSUED.

Greek Grammar and Reader; Xenophon's Anabasis; Herodotus; Homer's Iliad; Demosthenes' Olynthiacs and Philippics; Oeschylus' Prometheus Vincetus; Aristophanes' Clouds; Aristotle's Rhetoric. The above, accompanied with Composition, History, Geography, Antiquities, Mythology, &c.

## RECITATIONS.

First Term, twenty per week.  
 Second Term, twenty per week.  
 Third Term, twenty-five per week.

One of the classes, (viz.: Herodotus) in the short (third) term, was taught by Mr. M. C. Eustis five hours per week.

## EXAMINATIONS.

These were held regularly at the close of each term.

One not examined on account of sickness, second term.  
 Two failed to pass in studies of third term.  
 Two out at work the third term and not examined.  
 Nine having withdrawn from the University during the  
 year, were not examined in all the studies of the year.  
 The remainder have all passed in their studies.

JABEZ BROOKS,  
 Prof. of Greek.

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### REPORT OF PROFESSOR DONALDSON.

*To the President of the University :*

SIR:—For the Academic year ending June 27th, 1872, I have the honor to submit the following report :

#### FIRST TERM.

Instruction was given to two classes in English Composition and to one class in English Literature;—seventy-seven students in all.

#### SECOND TERM.

Instruction was given to one class in Logic, one in Rhetoric, and one in General History;—seventy-five students in all.

#### THIRD TERM.

Instruction was given to two classes in Rhetoric and one in Etymology of English Words;—forty-four students in all.

#### ALL THE YEAR.

Instruction in Composition and Elocution was given to twenty-six students, comprising the three higher classes. During the year, each of these students prepared seven public rhetorical exercises, more than half of which were original. Ten such exercises was the maximum fixed; but want of time for the public presentation necessitated a reduction of the number to seven.

## OTHER INSTRUCTION,

collateral to the English Course, was given by Professors Folwell, Campbell, Beardsley, Sutherland, and by students. This instruction included English History, History of Civilization, History of the United States, and English Grammar and Analysis.

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

## REPORT OF PROFESSOR THOMPSON.

*To the President of the University:*

SIR:—In accordance with the laws of the University, I have the honor to submit the following brief report from the Department of Mathematics.

During the year ending June —, 1872, there were instructed in this department the following named classes :

## I. TERM.

STUDY.	CLASS.	NUMBER.	INSTRUCTOR.
Calculus (Integral,)	Junior,	2	Prof. Thompson.
Analytical Geometry,	I. Class,	11	Prof. Thompson.
Higher Algebra.	II. Class,	12	Prof. Beardsley.
Plane Geometry,	III. Class,	41	Prof. Thompson.
Higher Arithmetic,	Latin School,	62	Prof. Thompson and Beardsley.

## II. TERM.

Solid Geometry and } Plane Trigonometry, }	II. Class,	12	Prof. Thompson.
Plane Geometry,	IV. Class,	88	Prof. Thompson.
Higher Arithmetic,	Latin School,	62	Prof. Thompson.

## III. TERM.

Math. Astronomy,	I. Class,	11	Prof. Thompson.
Spher'1 Trigonometry,	II. Class,	12	Prof. Thompson.
Higher Algebra,	III. Class,	41	Prof. Thompson.
Elementary Astronomy,	IV. Class,	88	Prof. Twining and Thompson.
Elementary Algebra,	Latin School,	62	Prof. Thompson.

I am well satisfied with the general progress the students have made; though not rapid, I believe it has been substantial and healthy. The department needs more appli-

ances, and I trust the Board of Regents will soon feel warranted in procuring them.

I would recommend that, inasmuch as the Department of Astronomy is *practicing* connected with this Department, and the classes thus far taught by the Professor of Mathematics, it be attached to this Department, and if in harmony with your views, the Board of Regents be requested at their next meeting to so order it.

The following is the scheme of work at present in operation in this Department :

Calculus Diff.,	Juniors,	6	Prof. Thompson.
Analytical Geometry,	I. Class,	11	Prof. Thompson.
Higher Algebra,	II. Class,	15	Prof. Thompson.
Plane Geometry,	III. Class,	49	Lieut. Huggins & Prof. Thompson.
Arithmetic,	Latin School,	50	Miss Sutherland & Mr. Strange.

EDWIN J. THOMPSON,  
Prof. Math.

## REPORT OF PROFESSOR BEARDSLEY.

SWARTHMORE COLLEGE,  
SWARTHMORE, DEL. CO., PA.,  
Twelfth Month 18th, 1872. }

*President of the University:—*

SIR:—In compliance with your request of the 13th inst., please find below a brief report of the working of my department for the year ending June 27th, 1872.

### I. TABULAR STATEMENT.

Term.	Class.	No.	Subject of Study.	Remarks.
First.	I.	10	Mechanical Physics.	Silliman's.
	II.	9	Higher Algebra.	To Gen. Theo. Equations.
	II.	10	Drawing.	Plane Problems, &c.
	L. S.	26	Arithmetic.	Higher.
Second.	I.	7	Descriptive Geometry.	Orthographic and Isometrical Proj's.
	II.	5	Drawing.	Elementary Projections.
	III.	34	Drawing.	Elements, Lines, Tints, Colors, &c.
	L. S.	18	History of the U. S.	Assisting Prof. Donaldson.
Third.	I.	7	Descriptive Geometry.	Lectures on Linear Perspective.
	II.	5	Surveying.	} Practice with the } Chain and Compass.
	II.	8		
	II.	4	Drawing.	Elementary Projections.
L. S.	35	Algebra.	Elementary.	



## II. OF THE PROGRESS MADE BY THE CLASSES.

1. *Mathematics*.—To assist the Professor of Mathematics I have taught during the year, as seen above, one class in higher algebra, one class, (reciting in two sections), in elementary algebra, and one section of the class in arithmetic.

For details of this work I refer you to the report of the Department of Mathematics.

2. *Physics*.—This subject was in progress at the time of my last report, and I have but to add to that report that the class sustained a creditable examination at the close of the term.

3. *Descriptive Geometry*.—The First class studied during the second term the Orthographic and Isometrical Projections of Descriptive Geometry.

I can speak in terms of highest praise of the enthusiasm and zeal of the members of this class in this elegant and useful branch of science. They performed their required work unusually well, and passed a very satisfactory oral examination at the close of the term.

4. *Linear Perspective*.—The excellent preparation which the First class had obtained, through their Descriptive Geometry, enabled them to work up this subject without the aid of a text book, and to understand and to become familiar with the whole machinery of vanishing points, points of distance, measuring points, &c.

5. *Draughting*.—The First class constructed neatly and well many problems in Descriptive Geometry and in Linear Perspective, and its members have acquired an invaluable knowledge of the Graphical language and methods.

The Second class pursued a course in Projective Drawing and its application to the elements of Structural Drawing and the casting of simple shadows. The class was small, but its members were earnest and faithful in their work.

The Third class began its course in this subject with the elements of Industrial Drawing; the use of draughting instruments, the use of the brush in tinting and shading, the construction of scales, and the theory of harmony and contrast of colors.

6. *Surveying*.—This subject, which was to have been taught in connection with, and as a practical application of plane trigonometry, came into my hands unexpectedly. From combinations of unfavorable circumstances I was enabled to give the students who made up the class but a short course in the theory of the subject; and having only one

chain and one compass, and but little time (on the part of the students) at my disposal, I found it difficult to give each of the thirteen students the amount of practice in the use of the instruments which he ought to have received.

7. *History*.—This class I taught for the sake of relieving Prof. Donaldson whose department was overburdened with work during the second term. For details please consult his report.

The above work relates wholly to the Collegiate Department of the University.

### III. COLLEGE OF THE MECHANIC ARTS.

The College created by the State Legislature during the past winter has not been represented, during the past year, by any students in actual attendance, but will be so represented in 1872-3, by a good class of those well prepared to secure its benefits.

But two courses of study have thus far been provided for, one in civil and one in mechanical engineering. It is proper to state here, however, that in these two courses provision has been made for those who wish to pursue only special subjects, as *Architectural* or *Mechanical Drawing*, or *Railroad Engineering*, or *Bridge Building, &c.*, as well as those who intend to graduate. These two courses were planned for the benefit of all who need instruction in any of the subjects taught, and who are competent to receive that instruction.

Of the importance of this college to the manufacturing interests of the State the following quotation from the New York Tribune is evidence:

“In technological training, the success of agricultural colleges has been all their warmest friends could desire. The pressing need of such education in this country is painfully manifest to everybody who has occasion to employ skilled labor. Belgium and Germany, by the thorough education of working men, are absorbing the manufacturing business of all Europe. England is waking up to her deficiency in this respect, as she finds various branches of manufacture leaving her shores, and is making prodigious efforts, in her slow and clumsy way, to educate her workmen for their daily tasks. Here, till the date of our agricultural college system, there were few if any educational establishments where a boy could learn the use of the mechanical implements of any trade, or even of the minor professions.

If only by the great impulse these colleges have given to training workmen who thoroughly understand the use of their tools, the worth of the system to the nation shall be measured, the outlay will be amply repaid. There has been already a large accession to the number of well educated civil and mining engineers, architects, and constructing machinists graduating at these institutions. We have need of such men while diamond mine swindles and frame Mansards are possible."

IV. The wants of the Department remain as in my last report, viz :—Field Instruments ; Apparatus for illustrations of every kind, especially in Physics ; Models of problems in Descriptive Geometry ; Models and Drawings of Bridges and other Engineering structures, and of Machinery ; Samples of Stones, Bricks, Woods, and of other building materials.

A collection of 500 Models from the Patent Office had been received, but had not been opened at the time of my leaving the city. These will, I hope, be found useful.

Respectfully submitted,

ARTHUR BEARDSLEY,  
Late Prof. Civ. Eng. and Ind. Mech.

## TREASURER'S REPORT FOR 1871.

*[The above Report of Treasurer was inadvertently omitted in the Report for 1872.]*

Since my last report was submitted, December 20th, I have received from the sources mentioned below, on account of the

### GENERAL FUND.

1871.	Dr.	
Jan. 3,	Received from State Treasurer.....	\$2,000 00
“ 3,	Received from Col. Robertson, bal. of appropriation for trees, seeds, &c., not used.....	48 08 ✓
“ 3,	Received from Pres't Folwell, collections from students and others for room rent, fuel, &c.....	528 84 ✓
“ 26,	Received from sale of horses.....	200 00
Feb. 2,	Received from State Treasurer.....	2 000 00
March 1,	Received from State Treasurer.....	1,000 00 ✓
“ 28,	Received from State Treasurer, on acct. of appropriation for selecting University Lands.....	430 50
“ 31,	Received from State Treasurer, General Fund.....	1,000 00
April 22,	Received from State Treasurer, General Fund.....	1,500 00 ✓
May 1,	Received from Pres't. Folwell, collections as stated above.....	628 35 ✓
June 3,	Received from State Treasurer, General Fund.....	1,000 00 ✓
“ 26,	Received from State Treasurer, General Fund.....	3,000 00 ✓
July 5,	Received from Pres't. Folwell, collecting as above.....	241 36 ✓
Oct. 4,	Received from State Treasurer, General Fund.....	2,000 00 ✓
Nov. 1,	Received from State Treasurer, General Fund.....	2,000 00 ✓
“ 28,	Received from State Treasurer, General Fund.....	2,000 00
	Balance from last report.....	1,425 26
		\$21,002 34

### ON ACCOUNT OF THE GENERAL FUND.

1870.	Cr.	
Dec. 21,	Expenses of Regents attending meeting, Voucher No. 1.....	\$ 32 60
“ 21,	By am't paid Capt. Merriam recovering horses estray, Voucher No. 2.....	6 00
“ 21,	By am't paid Faculty current month, Voucher No. 3.....	1,116 67
1871.		
Jan. 3,	By am't paid Pillsbury & Co., sundry bills paid by them, V. Nos. 4, 5 and 6.....	278 29
“ 4,	By am't paid Bainbridge, farmer, on account salary, Voucher No. 7.....	137 80
“ 12,	By am't paid Pillsbury & Co., advances to President Folwell, Voucher No. 8.....	100 00

Jan.	13,	By am't paid Prof. Johnson's order, hauling arms, Voucher No. 9	4 50
"	13,	By am't paid Prest. Folwell, incidentals paid, Voucher No. 10....	543 96
"	20,	By am't paid for selecting lands, Voucher No. 11.....	122 50
Feb.	1,	By am't paid salaries of faculty January, Voucher No. 12.....	1,100 00
"	12,	By am't paid Government fees, entering lands, Voucher No. 13..	108 00
March	1,	By am't paid Salaries of Faculty February, Voucher No. 14 ....	1,000 00
"	11,	By am't paid Prof. Thompson, advanced, Voucher No. 15.....	50 00
"	11,	By am't paid Bainbridge, farmer, on salary, Voucher No. 16.....	135 60
"	11,	By am't paid Pillsbury & Co., advanced to pay for selecting lands, Voucher No. 17.....	200 00
April	1,	By am't paid salaries of Faculty for March, Voucher No. 18 ....	1 050 00
"	21,	Expenses Regents attending meeting, Voucher No. 19.....	51 60
"	22,	By am't paid for team of horses for University farm, Voucher No. 20.....	425 00
May	1,	By am't paid salaries of Faculty for April, Voucher No. 21....	1,050 00
"	1,	By am't paid Prest. Folwell for incidentals paid, Voucher No. 22,	501 23
"	16,	By am't paid Prof. Thompson, advanced, Voucher No. 23.....	50 00
June 1 and July 8,		By am't paid Prof. Thompson, order in favor of Sidney Smith, Voucher No. 24.....	40 00
June	1,	By am't paid W. E. Field, farmer, 1½ months' salary, V. No. 25	75 00
"	1,	By am't paid salaries of Faculty for May, Voucher No. 26.....	1,050 00
"	12,	By am't paid Prof. Beardsley, advance, Voucher No. 27.....	50 00
"	13,	By am't paid C. L. Willis, rent of lots adjoining farm, V. No. 28	15 00
"	29 and 30,	By am't paid balance of salaries of the Faculty—	
		Prof. Brooks, Voucher No. 29.....	450 00
		President Folwell, Voucher No. 30.....	500 00
		Prof. Twining, Voucher No. 31.....	450 00
		Prof. Walker, Voucher No. 32.....	450 00
		Prof. Donaldson, Voucher No. 33.....	450 00
		Prof. Thompson, Voucher No. 34.....	350 00
		Prof. Beardsley, Voucher No. 35.....	250 00
		Preceptress H. Sutherland, Voucher No. 36....	193 05
July	5,	By am't paid Prest. Folwell, incidentals paid, Voucher No. 37...	269 55
"	8,	By am't paid Prof. Folwell for editing University Almanac, Voucher No. 38.....	50 00
"	8,	By am't paid W. E. Field, farmer, on salary, Voucher No. 39...	50 00
"	8,	By am't paid J. S. Pillsbury & Co., sundry bills paid, V. No. 40,	48 55
"	8,	Expenses of Regents attending meeting, Voucher No. 41.....	58 35
"	8,	By am't paid salary of Treasurer 1 year, Voucher No. 42.....	300 00
"	8,	By am't paid Secretary's salary 4 months, Voucher No. 43.....	33 35
"	8,	By am't paid Prof. Johnson, balance of salary, Voucher No. 44,	102 40
"	18,	By am't paid J. H. & J. B. Record, on contract for building barn, Voucher No. 46.....	525 00
Aug.	5,	By am't paid W. E. Field, farmer, on salary, Voucher No. 47..	50 00
Sept.	1,	By am't paid Prof. A. Beardsley, advance, Voucher No. 48.....	35 00
"	1,	By am't paid Prof. Thompson, advance, Voucher No. 49.....	150 00
"	3,	By am't paid W. E. Field, farmer, on salary, Voucher No. 50...	50 00
"	15,	By am't paid Pillsbury & Co. sundry bills paid, 17 vouchers filed, Voucher No. 51.....	238 93
Oct.	4,	By am't paid W. E. Field, farmer, salary, Voucher No. 52 ....	50 00
"	5,	By am't paid Messrs. Record, on barn contract, Voucher No. 53	225 00
"	5,	By am't paid salaries of Faculty for September, Voucher No. 54,	1,540 03
Nov.	1,	By am't paid Secretary's salary 4 months, Voucher No. 55. ...	33 00
"	7,	By am't paid salaries of Faculty for October, Voucher No. 56..	1,565 00
"	10,	By am't paid W. E. Field, farmer, salary, &c., Voucher No. 57,	66 34
"	10,	By am't paid Secretary Merriam, 1¼ yrs. salary, Voucher No. 58,	125 00
"	10,	By am't paid Pillsbury & Co., sundry bills paid by them, Voucher No. 58.....	89 10
"	19,	By am't paid M. Morse, work on barn contract, Voucher No. 59	101 31
"	21,	By am't paid I. Dean & Co. materials for barn, Voucher No. 60	141 90

23 05

Nov. 21,	By am't paid J. S. Pillsbury & Co., sundry bills paid, V. No. 61	107 24
Dec. 2,	By am't paid W. E. Field, farmer, on salary, Voucher No. 62...	50 00
" 5,	By am't paid salaries of Faculty for November, Voucher No. 63,	1,550 00
" 5,	By am't paid Insurance, to replace risks held by broken companies, Voucher No. 64.....	200 00
	Balance to new acct.....	795 79
		<u>\$21,002 84</u>

Examined and found correct.

H. H. SIBLEY, for Auditing Committee.

ON ACCOUNT OF APPROPRIATION FOR PURCHASE OF A LIBRARY AND REPAIRS OF BUILDINGS.

1871.	DR.	
April 5,	Received from State Treasurer on above account.....	\$6,000 00
July 8,	Received from State Treasurer on above account.....	800 00
" 19,	Received from State Treasurer on above account, balance.....	3,200 00
		<u>\$10,000 00</u>

CR. TREASURER.

	Cr.	By balance from last report.....	88 17
Jan. 3,	Amount paid kalsomining college buildings, Voucher No. 1.....		400 00
" 3,	J. S. Pillsbury, sundry bills paid for materials and repairs, Voucher No. 2.....		63 69
" 26,	By E. B. Benjamin, books and stationery, Voucher No. 3.....		24 25
Feb. 9,	By eight months interest on loans negotiated by Prest. Pillsbury at 9 per cent. and exchange, Voucher No. 4.....		308 25
" 9,	By Prest. Folwell, sundry bills paid, Voucher No. 5.....		20 18
April 5,	By paid note, loan mentioned above and exchange, V. No. 7. . .		5,012 50
" 6,	By Remitted John Wiley & Son, invoice of books and interest at 7 per cent., Voucher No. 8.....		756 08
May 1,	By Prest. Folwell, sundry bills paid, Voucher No. 6.....		45 95
June 27,	By Remitted Prof. Campbell, purchase of books, Voucher No. 9.		400 00
July 8,	By Remitted Prof. Campbell, purchase of books, Voucher No. 10.		800 00
" 5,	By Prest. Folwell, sundry bills paid, Voucher No. 11.....		54 98
" 5,	By Pillsbury & Co., sundry bills of repairs paid (Vouchers filed) Voucher No. 12.....		122 15
Sept. 15,	By Pillsbury & Co., sundry bills of repairs paid, Voucher No. 13.		272 35
Oct.	By Pillsbury & Co., sundry bills of repairs paid, V. No. 16....		246 30
Nov. 14,	By John Wiley & Son, freight on books, Voucher No. 14.....		79 25
" 14,	E. B. Benjamin books, stationery, &c., and exchange, V. No. 15,		102 01
Dec. 14,	By Wiley & son, books, &c., and exchange, Voucher No. 17....		818 47
" 20,	By Pillsbury & Co., advanced to Prof. Campbell to buy books..		200 00
" 20,	By balance to new account.....		185 42
			<u>\$10,000 00</u>

Examined and found correct.

H. H. SIBLEY, for Auditing Committee.

EXPERIMENTAL FARM FUND ACCOUNT.

1871. Balance remains as in last report, there having been no further purchases of land.....	\$671 87
Land sales account also remains nearly as in last report. There have been no further sales and the mortgage debt on the University remains unsettled.	
The Treasurer has received in settlement with G. M. Gilmore collections on account of interest and other claims.....	34 00
Add balance from last report.....	51 42
	<hr/>
And has paid Gilman's acct. for services rendered as agent.....	\$46 00
Add balance to new account.....	39 42
	<hr/>
	85 42
	<hr/> <hr/>

TREASURER'S REPORT FOR 1872.

JOHN NICOLS, TREASURER, IN ACCOUNT WITH THE REGENTS.

GENERAL FUND, FOR CURRENT EXPENSES.

		DR.	
1871.			
Dec. 20,	To balance from last report.....		\$795 79
“ 23,	To amount received from State Treasurer.....		2,000 00
1872.			
Jan. 27,	To amount received in part of note taken on sale of horses....	100 00	•
Feb. 1,	To amount received from State Treasurer.....	2,000 00	•
“ 29,	To amount received from State Treasurer.....	3,000 00	•
March 30,	To amount received from State Treasurer.....	2,000 00	•
April 23,	To amount received from State Treasurer.....	2,000 00	•
June 24,	To balance from order of 26 Desks at University.....	4,000 00	•
“ 24,	To baluace of note for sale of horses.....	100 00	•
“ 24,	To balance for interest on same.....	11 33	•
“ 24,	To balance from order of 26 Desks at University.....	104 00	•
“ 24,	To balance for return premium, Fire Insurance, from Manhat tan Company, winding up.....	27 51	•
Sep. 3,	To balance from State Treasurer.....	2,000 00	•
Oct. 25,	To balance from State Treasurer.....	2,000 00	•
Nov. 27,	To balance from State Treasurer.....	2,000 00	•
	To balance from Library and Repairs acc't.....	22 95	•
			<hr/>
	Amount of Vouchers of Expenditures.....		\$22,161 58
			<hr/>
	Balance in Treasury.....		\$1,683 00

1871.		CR. TREASURER.	
Dec. 20,	By amount paid Prof. J. Brooks, salary, voucher No. 1.....		\$80 00
" 21,	By amount Regents Bryant and Donaldson's Expenses, voucher No. 2.....		23 20
Dec 29,	By amount paid Prof. E. J. Thompson, salary, voucher No. 3..		300 00
" 29,	By amount paid Prof. G. Campbell, salary, voucher No. 4.....		325 65
" 30,	By amount paid Pres't W. W. Folwell, balance on incidentals, voucher No. 5.....		27 25
Dec. 30,	By amount paid Pres't Folwell, and Profesors Twining, Brooks, Walker, Donaldson, Beardsly and Sutherland, voucher No. 6..		1,300 00
1872.			
Jan. 3,	By amount paid W. E. Field, Farmer, salary, voucher No. 7..		50 00
" 11,	By amount paid Regent Harwood, expenses, voucher No. 8.....		29 00
" 27,	By amount paid Pillsbury & Co., five vouchers filed for advances made, voucher No. 9.....		324 18
Feb. 1,	By amount paid W. E. Field, Farmer, salary, voucher No. 10...		50 00
" 1,	By amount paid President Folwell and Faculty, salaries, voucher No. 11.....		1,550 00
Feb. 6,	By amount paid Pres't Folwell, expenses of trip to Washington, attending Convention, voucher No. 12.....		200 00
Feb. 19,	By amount remitted John Wiley & Son, invoice of Sept. 25th, voucher No. 13.....		117 25
Feb. 20,	By amount paid President Folwell and Faculty, salaries, voucher No. 14.....		1,620 00
March 1,	By amount paid Treasurer's salary for one year, ending Dec. 31, voucher No. 15....		300 00
March 12,	By amount paid Secretary's salary for four months, voucher No. 16.....		33 33
March 21,	By amount paid W. E. Field, Farmer, one month's salary, voucher No. 17.....		50 00
March 21,	By amount paid premium, Fire Insurance, voucher No. 18.....		60 00
March 30,	By amount paid Regent Bryant, expenses, voucher No. 19.....		14 00
" 30,	By amount paid Pres't Folwell and Faculty, voucher No. 20.....		1,600 00
April 4,	By amount paid W. E. Field, Farmer, one month, voucher No. 21		50 00
" 11,	By amount paid Prof. Thompson, on salary, voucher No. 22.....		30 00
" 10,	By amount paid Regent Harwood, expenses, voucher No. 23.....		17 60
" 19,	By amount paid Prof. G. Campbell, on salary, voucher No. 24....		80 00
" 24,	By amount paid Pres't Folwell and Faculty, salaries, voucher No. 25.....		1,660 09
June 1,	By amount paid Pres't Folwell and Faculty, salaries, voucher No. 26.....		1,550 00
" 1,	By amount paid Secretary, salary, three months, voucher No. 27..		5 09
" 27,	By amount paid W. E. Field, farmer, 2 months, voucher No. 28..		100 60
" 15,	By amount paid Pres't of Board, on acc't salary, voucher No. 29..		353 13
" 15,	By amount paid Treasuer of Board, expenses of going to Washington, voucher No. 30.....		25 00
June 26,	By amount paid Pres't Folwell & Faculty, salaries, voucher No. 31		1,740 00
June 26,	By amount paid J. S. Pillsbury & Co., advances made by them on twenty vouchers filed, voucher No. 32.....		359 87
July 9,	By amount paid W. E. Field, farmer, one month, voucher No. 33		50 00
" 16,	By amount paid Prof. Winchell, expenses, voucher No. 34.....		78 60
" 17,	By amount paid Regent Bryant, expenses, voucher No. 35.....		26 00
" 20,	By amount paid Reg-nt Harwood, expenses, voucher No. 36.....		35 65
Aug. 1,	By amount paid Pres't Folwell, bal. on acc't of incidentals, &c., voucher No. 37.....		119 23
" 3,	By amount paid Reg-ent Bryant, expenses, voucher No. 38.....		13 50
" 6,	By amount paid Pres't Folwell, advances on account of incidentals, voucher No. 39.....		50 00
Aug. 15,	By amount paid Prof. Thompson, advances, voucher No. 40....		50 00



UNIVERSITY OF MINNESOTA.

Aug. 16,	By amount paid Judge Harwood's bill, copying reports by order of the Board, voucher No. 41.....	107 02
Aug. 19,	By amount paid W. E. Field, farmer, one month, voucher No 42	50 00
" 20,	By amount paid Wilson & Worley, repairing stove, voucher No. 43.....	22 50
Aug. 26,	By amount paid Pres. Folwell, advance on acct of incidentals, voucher No. 44 .....	50 00
Sept. 3,	By amount paid Regent Harwood, sundries, voucher No. 45....	65 46
" 3,	By amount paid W. E. Field, farmer, one month, voucher No. 46	50 00
" 5,	By amount paid Regent Bryant, expenses, voucher No. 47 ..	20 30
" 9,	By amount paid Tribune Printing Co., printing, voucher No. 48.	16 87.
" 14,	By amount paid Pioneer Printing Co., adv'ng, voucher No. 49...	25 00
" 21,	By amount paid Dispatch Printing Co., adv'ng, voucher No. 50..	25 00
Oct. 2,	By amount paid Press Printing Co., adv'ng, voucher No. 51....	25 00
" 2,	By amount paid Pres't Folwell and faculty, and farmer, salaries, voucher No. 52 .....	1,685 00
Oct. 2,	By amount paid Pres't Folwell, surveyor's instrument, voucher No. 53 .....	200 00
Oct. 3,	By amount paid Evening News, advertising, voucher No 54....	10 00
" 18,	By amount paid H. F. Woodman, coll. of specimens, voucher No. 55 .....	200 00
Oct. 29,	By amount paid Jas. J. Green, advertising, voucher No. 56....	7 75
Nov. 1,	By amount paid Pres't Folwell & faculty, and farmer, salaries, voucher No. 57 .....	1,720 00
Nov. 15,	By amount paid Barnard & Clark, for desks, voucher No. 58....	40 00
" 23,	By amount paid David Ramaley, advertising, voucher No. 59...	11 25
Dec. 2,	By amount paid Pres t Folwell and faculty, and farmer, salaries, voucher No. 60.....	1,720 00
Dec. 5,	By amount paid Regent Harwood, salary, voucher No. 61.....	25 00
		<hr/>
	Balance to new account.....	\$20,528 58
		<hr/>
		1,633 00
		<hr/>
		\$22,161 58

I certify that I have examined the foregoing accounts and compared them with the vouchers, and find them correct.

H. H. SIBLEY,  
Auditing Committee.

ST. PAUL, December 30th, 1872.

LIBRARY AND REPAIRS FUND.

TREASURER DR.

1871.  
Dec. 20, To balance from last account..... \$185 42

CR. TREASURER.

By remittance to John Wiley & Son, to pay invoice of March 13th 162 47 ✓  
By balance carried to General Fund..... 22 95  

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\$185 42

EXPERIMENTAL FARM FUND.

TREASURER DR.

1871.  
Dec. 21, To balance from last report ..... \$871 87

## ANNUAL REPORT.

## LAND SALES FUND.

## TREASURER DR.

1871.		
Dec. 20,	To balance from last report.....	439 42

## GEOLOGICAL SURVEY ACCOUNT.

## TREASURER DR.

1872.		
Oct. 2,	To appropriation received from State Treasurer .....	\$1 600 00

## CR. TREASURER.

Oct. 2,	By amount remitted Pres't Pillsbury to pay two months' salary of Geologist.....	400 00
Nov. 27,	By amount remitted Pres't Pillsbury to pay one month's salary of Geologist .....	200 00
Dec. 14,	By amount remitted Pres't Pillsbury to pay one month's salary of Geologist .....	290 00
		<hr/>
		\$800 00
		<hr/>
	Balance in Treasury.....	\$200 00
Dec. 30,	By amount paid Pres't Pillsbury to pay expenses of Survey....	180 92
		<hr/>
	Balance, Dec, 31st, 1872.....	69 08

I certify that I have examined the foregoing accounts, and find them to be correct.

H. H. SIBLEY,  
Auditing Committee.

St. PAUL, Dec. 30th, 1872.