# MEETING OF JUNE 6, 1893.

The Board of Trustees of the University of Illinois met in the University parlor, in Urbana, Ill., at 3:30 o'clock p. m., June 6, 1893. There were present Messrs. Armstrong, Bryant, Bullard, Graham, McLean, Morgan, and Raymond; absent, Governor Altgeld and Messrs. McKay, Gore, and

The regent's report was then presented.

#### REGENT'S REPORT.

To the Board of Trustees of the University of Illinois.

Gentlemen: The twenty-sixth year in the history of the University is now near its close, and according to law and the duty imposed upon me, I report to you concerning the progress made and indicate the needs for future continuance and advancement.

#### DEGREES.

By vote of the faculty you are asked to give authority to confer degrees as follows:

College of Agriculture.

Degree of Bachelor of Science.

Wilber John Fraser,

William David Gibbs.

College of Engineering. Degree of Bachelor of Science.

Course of Mechanical Engineering.

James W Cook, William Henry Cornell, George Washington Seaman, Bernard Victor Swenson.

Course of Electrical Engineering.

George Webster Blakesley, Bernard Victor Swenson, Thomas Tyson Woodruff.

Course of Civil Engineering.

Harlow Bacon, Edward Ernest Barrett, Henry Emmett Bartlett, Willis Wilson Danley, Mark Alden Earl, Arthur Bates Loomis.

Clyde Benjamin McClure, William David Pence, Class of 1886, Fred Milton Spalding, John Truesdale Stewart, Almon Daniel Thompson, William Townsend,

Robert Clarke Vial.

Course of Architecture.

George Philip Behrensmeyer, Frank Manear Brown, Albert Grant Higgins, Alexander Levy, Adolph Bertinus Peterson, James David Phillips, Alfred Wilemin Rea, Donald Gamaliel Scott, Shigetsura Shiga, Severin Canute Skielvig.

College of Science. Degree of Bachelor of Science.

School of Chemistry.

Robert Franklin Carr, Fred Goldsmith Coffeen, Fred Augustus Hall, Edward Everett Hunt, William Priestly McCartney, James David Metcalf, Clendon VanMeter Millar, Will Ambrose Powers.

School of Natural Science.

Hubert Franklin Andrews, Oscar Paul Chester, Philip Matthias Hucke, Walter Scott McGee, Louis McMains, Jeremiah George Mosier,

Richard W. Sharpe.

College of Literature. Degree of Bachelor of Arts.

Mary Edna Arnold, William Briggs Rowe,
Charles Wesley Russell.

College of Literature. I George John Arbeiter, Grace Ayers, Harvey Irving Carpenter, Charles Willard Carter, William Rock Chambers, Edward Everett Cole, Class of 1882. Edward Chilton Craig, Louis Thompson Graham, William Johnson Graham,

Degree of Bachelor of Literature.

Frank M Gulick,
Agnes Gale Hill, A. B., Class of 1892.
Harriette Augusta Johnson,
Louis Klingel,
Nina Belle Lamkin,
Robert Emmett McCloy,
Mary Estelle Mann,
Loueva May Mathews.
Sophia Mary Peterson,

Orres Ephraim Young.

The following named graduates of former classes have been recommended for the second degree designated:

Francis John Tresise, B.S., class of 1890, Degree of Civil Engineer. Alice May Barber, B.S., leass of 1892, Degree of Master of Science. Lewis S. Daugherty, B.S., class of 1889, Degree of Master of Science. Jessie Ellars, A.B., class of 1890, Degree of Master of Arts. Cleaves Bennett, B.L., class of 1889, Degree of Master of Literature. Oliver S. Moles, B.L., class of 1889, Degree of Master of Literature. Z. Lincoln Whitmire, B.L., class of 1886, Degree of Master of Literature.

Degrees recommended for those graduating ten years or more ago with certificates:

Miles F. Hatch, class of 1872, Degree of Master of Science. Thomas E. Rickard, class of 1872, Degree of Master of Literature. Harvey C. Estep, class of 1874, Degree of Civil Engineer. John P. Campbell, class of 1874, Degree of Master of Literature. Walter E. Knibloe, class of 1876, Degree of Master of Literature. Weston H. Mahan, class of 1876, Degree of Master of Literature. Charles P. Graham, class of 1873, Degree of Master of Literature. Franklin C. Platt, class of 1873, Degree of Master of Literature. Elna A. Robinson, class of 1875, Degree of Mechanical Engineer. Mrs. Amanda Campbell Moore, class of 1875, Degree of Master of Literature.

The faculty further recommends that Henry P. T. Little be given the Degree of Bachelor of Science.

Edward Chilton Craig, Mark Alden Earl, William Johnson Graham, Fred Milton Spalding, and John Truesdale Stewart have been recommended by the faculty to the governor of the State and have been honored by him with commissions by brevet as captains in the Illinois National Guard.

#### ENROLLMENT.

At this time last year there was reported to you a total enrollment of pupils of 583, which was an advance of 64 over the preceding year, and which was then stated to be the greatest annual growth in the history of the institution. The enrollment now reaches 714, or 131 more than that of last year. This is phenomenal for us. It has been a healthy development of the work already in hand without the attraction of anything really new, except the short winter course in agriculture, in which there were 29 students. No other state university or other prominent collegiate institution of several years' standing in the country, so far as my information goes, has made so large gains in per cent. of attendance, though it is true that the general increase of students has been very remarkable in many, especially in western universities.

The greatest gain here has been in the college of engineering, especially in the course of electrical engineering, in which the advance over last year is 178 per cent. The increase of architectural students, including the architectural engineers, is 24 per cent.; of students in chemistry, 12 per cent.; in natural history, 28 per cent.; in Latin and Greek, together, 71 per cent. In the last there were 21 enrolled last year; 36 this year.

For further comparison I submit the following tables, summaries for the last two years:

## SUMMARY, 1891→92.

	*Graduate	Resident	Senior	Junior	Sophomore	Freshman.	Preparatory	Special.	гот	AL.	Total.
COURSES AND CLASSES.	uate school	nt graduates			more	nan	ratory	1	Men	Women	
Agriculture, men  Mechanical engineering, men Electrical engineering, men Civil engineering, men Mining engineering, men Architecture   Men   Women Chemistry   Women Natural science   Men   Women Art and design   Men   Women  Music, women English and mod   Men ern language   Women Latin   Men   Women Classic   Men   Women Not specified   Men   Women   Total   Men   Women		1 1 1 1 1 1 2 5 5 8	5 12 9 2 4 1 1	1 3 5 13 13 3 1 7 6 6 2 50 7	1 1 1 2  93 8	1 35 12 30 3 3 29 15 3 3 144 9 111 111 5 3 3 2 157 27	6 299 144 129 11 200 11 1 1 1 200 11 1 1 200 11 1 1 200 11 1 1 1	1 8 2 3 3 3 11 13 11 13 12 11 13 12 11 13 12 11 13 11 13 11 13 11 13 11 13 11 13 11 13 11 11 13 11	111 911 333 899 6 91  442  588  12  494	1 14 14 14 15 15 15 15 15 15 15 15 15 15 15 15 15	111 91 333 838 66 \$ 92 \$ 48 \$ 56 \$ 19 3 \$ 104 \$ 17 \$ 18
Total		-8	46	57	101	184	163	24			583

<sup>\*</sup>Not established till 1892.

#### SUMMARY, 1892-93.

	Graduate	Resident	Senior	Junior	Sophomore	Freshmen	Preparatory	Special	Тот	ral.	Total .
Courses and classes.	te school	nt graduates			nore	1en	atory		Women	Men	
Agriculture, men Mechanical engineering, men. Electrical engineering, men. Civil engineering, men. Mining engineering, men. Municipal engineering, men. Architecture. \{ \frac{Men}{Wem}. \} Architectural engineering, men. Chemistry. \{ \frac{Men}{Women}. \} Natural history. \{ \frac{Men}{Women}. \} Art and design. \{ \frac{Men}{Women}. \} Art and design. \{ \frac{Men}{Women}. \} English and  \frac{Men}{Mondern anguages.} \{ \frac{Men}{Women}. \} Latin. \{ \frac{Men}{Women}. \} Classical \{ \frac{Men}{Women}. \} Not specified \{ \frac{Men}{Women}. \} Total \{ \frac{Men}{Women}. \} Total \{ \frac{Men}{Women}. \} Women	1 1	1 1	100 100 100 100 100 100 100 100	11 33 111 155 22 166 166 167 166 167 167 167 167 167 167	17  6 14  8	288 355 277 3 3 1 1 277 1 4 4 100 1 1 133 6 6  9 18 1 1 4 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	55 266 366 366 367 117 114 44 100 1122 166 33 11 166 30	1	411 799 944 922 7 1 1552 2 2  54 8  4  610	22 23 33 55 55 5 11 104	411 799 94 92 77 1 1 1 99 1 15 4 72 1 106 1 13 1 23 1 5
Total	4	5	67	80	113	194	196	55			714

### CLASSIFICATION OF INSTRUCTORS AND SALARIES.

It is recognized that you appreciate the fact that the most important, as well as the most difficult and delicate duty devolving upon the board of trustees, is the proper selection and assignment of instructors. The university succeeds or fails according as the instruction provided is good or poor; it can best succeed only when the professors are the best obtainable and have the hearty encouragement of the board of control. Your action of last year in changing the term of service is believed to have had a very salutary effect, and if the present rule becomes fixed by long continuance still greater benefits may be anticipated from it. The exceedingly great importance of anything that tends to inspire professors and instructors with a feeling of just appreciation, of due recognition of value of service rendered, and of stability of office, causes me to venture some suggestions as the basis of possible rules concerning the employment and salaries. It is believed that some rules may be adopted by you in this matter which will aid in your deliberations and which will make the onward progress of the University more surely upward progress. I understand it is a general impression among you that the salaries now paid are too low; they are certainly lower than those of most similar universities in our region of country. I respectfully offer the following outline of classification and salaries:

- 1. The titles of teachers to be in order as follows: Professors, associate professors, assistant professors, instructors and assistants.
- $\Box$ 2. The full salary for these to be respectively: \$2,500, \$2,000, \$1,600, \$1,200 and \$1,000.
- 3. That professors, associate professors, and assistant professors be first engaged for one year, and, if at the close of this year the facts warrant

it, that they be permanently engaged during the pleasure of the trustees; that instructors and assistants be engaged each year for tenmonths.

4. That the salary of a newly appointed professor be \$1,800 to increase \$100 each year to maximum stated; for an associate professor, \$1,500 first year, to increase \$50 annually to maximum; for an assistant professor, first year, \$1,200, to increase \$50 annually to limit; for instructor, \$100 per month, first year, to increase annually \$5 per month to limit; and for assistant, \$60 to \$75 per month first year, to increase annually \$5 per month.

Any such scheme would have to be elastic in application, but, if adopted as the basis of usual action, any deviation would carry with it the cause. In any event, the increase provided should take effect for satisfactory service only. Should employment be continued without the stated increase, it would indicate want of such service; should greater increase be made, especial commendation would be signalized. Transfer from one grade to a higher would also indicate merit.

This applies to future employments. Adjustments for present employés can hardly be made by rule, but reference to such rules might aid in equitably fixing salaries and titles. If desired, I shall be glad to render any possible assistance in this, whether by rule or otherwise.

As bearing somewhat on the same idea, I mention for your consideration the leasing of building lots to professors at a nominal rate and under conditions to be formulated hereafter. Upon such leased lots residences might be built by those to whom leases are made, under regulations including minimum and maximum cost, manner of keeping and method of disposal in case of need. This has been discussed in a tentative way, and several professors have expressed much interest in the suggestion. There is certainly a growing desire on the part of members of the faculty to live in the neighborhood of the University, as well as a manifest tendency on the part of citizens, to secure residences out this way. Professors hesitate to invest in houses in which to live, because of the difficulty in disposing of them in case they leave the service of the University. A reasonable stability in tenure of office and some provision on the part of the University to accept the buildings, at a valuation to be ascertained according to a prescribed method, would remove most of the difficulty, and would certainly add to the desirableness of living here, and, it seems to me, would certainly add to the welfare and advancement of the University. Cornell University has long tried this plan with most excellent results. In connection with a sketch showing suggestions for the location of future public buildings, I have indicated a plat of such building lots.

### WORLD'S COLUMBIAN EXPOSITION.

The exhibit for the World's Columbian Exposition was for the most part in a fair state of completion upon the opening day, May 1st, or at least it was, in comparison with other exhibits, well along at the time. Though still incomplete, it is in general a very creditable and representative showing of the resources and appliances of the University. No one can estimate the amount of thought and labor it has cost. This labor, under many disadvantages and difficulties, has been a great burden upon men already overloaded with duties which could not be neglected. If one suitable man could have given his whole mind and energies to the matter, no doubt much improvement might have been made over the showing as it is. For the departments in which the exhibit is now most incomplete, there are valid excuses to offer, though no excuses can make amends for the detrimental effect of delay. In addition to the very large amount of extra labor upon the part of the members of the faculty in preparing the exhibit, for which not a dollar has been paid or is asked, it is arranged that the general superintendence of it during the summer shall be under the same unpaid agents. The Illinois Board of World's Fair Commissioners pays the ordinary expenses of one

member of the faculty continuously for this purpose, and assignments to this duty are made here from volunteers, each to serve about half a month. This again is understood to mean attention to business. No one accepts the place with an idea that it will give him a chance to see the general Exposition.

The chairman of the faculty committee on the Exposition submits the following communication:

University of Illinois, June 5, 1893.

## Dr. T. J. Burrill, Acting Regent,

Dear Sir: At your request I have the honor to present the following statement as chairman of the committee of the faculty on the University exhibit at the World's Columbian Exposition:

This exhibit was mainly in place when the Exposition was formally opened May 1st. Most that remained to do was done in the next few days. There are still some departments of the exhibit in which some things are not installed, partly because of the pressure of work upon those in charge, partly because some articles could not be forwarded until the close of the term, and partly because of delay in decision of some questions by the state commission. The exhibit, however, is much more nearly complete than are many of the exhibits by educational institutions in the department of Liberal Arts.

As it was thought best that I should be in charge of the exhibit during most of the month of May, I am able to speak with some positiveness concerning it, and have no hesitation in saying that it will be of vast value to the University. It is not only much larger than the showing made by any other university, but is more varied and complete, more fully showing the facilities and methods of work in all its departments. It is evident that it will be seen by very many more people than will visit the exhibits in the galleries containing the educational exhibits in general in the Liberal Arts department. Especially will the people of our own State see it. The interest taken in it is very gratifying. Multitudes fail to give it any careful study, but many persons manifest their surprise and gratification at its extent and interest. Many thousands of the citizens of Illinois will here get their first impressions concerning the methods and requirements of and for modern high class and technical education. Already many from other portions of this country and from foreign lands have given the exhibit appreciative observation. The fact that the University exhibit proper is placed alongside those by the State Laboratory of Natural History and the State entomologist is fortunate for all interests.

The plans agreed upon by the commission provide for the constant attendance of one member of the faculty of the University, whose expenses are to be paid, and of either two or three students or instructors, who are to be paid \$75 a month.

A serious question is the danger of injury to or loss of articles exhibited. Already several articles have been stolen. Some things are necessarily exposed. In some cases the protection can only be slight. It will be practically impossible so to guard the exhibit as to prevent possible danger of theft. With the condition of the funds at the disposal of the commission it is hardly probable it would assume the liability.

During my stay at the Exposition I was increasingly impressed with the fact that its close will give us a great opportunity for making collections of great value to us. In some cases the collections can be secured by exchange; in many cases, I believe, articles of much interest would be given us, especially by representatives of foreign exhibits or those from distant states. I suggest the importance of the preparation of a plan for systematic work in this direction.

In most respects our relations with the commission have been pleasant and satisfactory. In regard to a few questions we feel that decisions have been made which were incorrect and unjust. I take pleasure in expressing, what I believe we all feel, our indebtedness to Mr. E. E. Chester, of the commission, who, as chairman of the committee on educational exhibits, has ever manifested a deep and intelligent interest in the exhibit by the University and has done much to help the committee of the faculty in its work.

Respectfully submitted,

G. E. Morrow.

There are, as usual at this time of year, a large number of things requiring your attention. Members of the faculty can look after numerous matters much better than while the affairs of the terms consume their time and energies; while the passage of the legislative bills makes it possible for you to meet some requests not heretofore feasible. The requests from the various departments for appropriations of money are summarized in the subjoined list. Full information is contained in the communications themselves, or will be presented as required:

## REQUESTS FOR APPROPRIATIONS.

	\$1,730	00
Supplies from department funds	500	00
Muffle furnaces		
Polariscope		
Barometer		00
Spectroscope		00
Water blast with setting	50	00
Apparatus for nitrogen determinations	25	00
Extraction apparatus for grain, milk, etc	75	00
Chemistry— Platinum ware	\$500	
Testing laboratory— Apparatus and instruments (list furnished)	\$1,790	00
Municipal engineering— Photographs and structures in water works and sewerage	\$50	00
	\$10,000	00
Thesis apparatus (overdraft)	100	00
Forges and tools	4,500	
Models, etc., for drafting room	900	
Apparatus for gas and fuel analysis	500	
Lubricant testing machines	1,000	
Dynamometers	1,500	
Mechanical engineering— Engine for valve setting	\$1,500	00
	\$245	00
Cement laboratory equipment	90	00
New instruments	50	
Repair of instruments	55	
Civil engineering— Re-establishing surveying spiral. Repair of instruments. New instruments.	\$50	00
	\$239	00
Apparatus (list furnished)	64	00
Architectural cabinet	175	00
Architecture—		
College of engineering— Instruments	\$216	50

Geology— Furniture (list furnished) Apparatus and materials (list furnished)	\$897 686	
	\$1,583	00
Botany— Microscope and accessories	\$200	00
College of literature— Lectures	\$600 250	
	\$850	00
Department of Greek— Apparatus	\$150	00
Library— Binding books	\$175	00
Art and design— Collections for museums of industrial art. Teacher's desk. Small utensils and repairs. Easels for students' use. Sink. Attention to room.	30	00 00 00
Cement walks. Cleaning buildings Care of ground. T. J. Burrill. expenses. Architectural shop, band saw.	1,260 $300$ $150$ $10$ $200$	00 00 85

From the department of chemistry a plan is suggested for better store-room facilities. The proposition merits careful consideration, and, if the business is sufficient for the division of labor proposed, it seems to me both economy and efficiency would commend making the new store-room as suggested. Attention should also be called to the better ventilation of the chemical laboratory, to which attention has heretofore been called. The heating apparatus in this building also requires overhauling during the summer.

The faculty of the college of engineering presents through its dean a communication, herewith submitted, concerning the needs of the college in the way of increased instruction, and separate papers by members of the same faculty bearing upon the same subjects, accompany the statement by the dean.

It has seemed desirable to reorganize somewhat the work in the school of natural science. This is in part made necessary by the withdrawal of Professor Baldwin, who taught the subject of mineralogy. In the proposed changes this subject is transferred to Professor Rolfe's department, where, in connection with geology, it properly belongs. Physiology, on the other hand, is closely related to zoölogy, and when taught by laboratory methods, as it should be in the University, requires very largely the same equipments. In this connection I submit a paper by Professor Forbes.

The dean of the college of literature presents a request for provision for another course of lectures, and a petition comes from students of the college of science, asking for a course from eminent specialists in science. While a formal asking has not been made by the college of engineering, the experience of the past makes it appear very desirable that renewed provisions should be made for them.

Communications addressed to myself from the junior and sophomore students in mechanical and electrical engineering are herewith submitted. I communicate herewith a paper from Assistant Professor Merrill upon a matter of interest to young women and commend the subject to your attentive consideration.

The faculties of the various colleges at my request considered the appointment of one fellow for next year for each college. Thirteen applications have been received this year for fellowships upon the plan adopted by you last year, and upon which two were last year appointed. The special faculties reported to the general faculty and now the latter body recommends the following named persons for these fellowships, all from the present graduating class:

For the college of agriculture, Wm. D. Gibbs.

For the college of engineering, James D. Phillips.

For the college of science, C. V. Millar.

For the college of literature, C. W. Carter.

The report of Professor Morrow upon the farm is herewith communicated to you.

University of Illinois, June 5, 1893.

# Dr. T. J. Burrill, Acting Regent:

DEAR SIR: I respectfully report farm transactions for the three months ending June 1st, as follows:

Receipts Expenses	• • •			· · · ·			• • • • • • • •	\$1	1,765	02
Expenses	• • • •					• • • • • •	• • • • • • • •		411	10
Balance	e to	cre	dit of	f far	ms			\$1	1,347	79

The receipts may be classified thus: horses and colts, \$510; cattle, \$471.15; hogs, \$299.67; hay, \$311.52; milk, \$88.25; corn, \$62.37; miscellaneous, \$22.06.

In accordance with the action of the board of trustees at its March meeting about 200 acres of the stock farm has been rented for corn.

The date at which this plan was decided on was late for arrangement for this year. As there was no suitable house on the farm, it was practically impossible to arrange for renting the farm as a whole. No desirable men were found wishing to pay cash rent. About 120 acres were rented to neighbors, well known, at the customary grain rent of two-fifths of the crop delivered in the crib. About 80 acres were rented for one-half the crop so delivered, the University to furnish use of a plow, cultivator, wagon for husking, and one team; the renter to furnish all manual labor. As the farm had the machinery on hand and it seemed best to keep three mares then in foal, this arrangement was adopted. Should the crop be a full average one, the returns will be larger than from cash rental.

Forty acres of pasture land it was thought had been rented to one man, who finally decided not to take it. It is believed that nearly or quite as much rental can be secured by taking horses to pasture, though this plan will involve some additional trouble. Eighty acres of meadow are yet to be disposed of. Several men have made application for parts of it. It can, probably, be rented to one man; or, if desired, the hay can be secured by the farm force. It is believed that this will give somewhat larger returns than to rent.

Looking to future renting of the farm it was thought advisable to have a larger acreage plowed this year.

Additional cattle will be sold during the season. There is a demand for fresh cows and cattle for beef, but none for breeding animals. While in good condition, most of the cattle were not in the best condition for sale as beef. It is believed the gain made on grass will more than repay the cost of keeping. It is expected to make additional sales of horses. Perhaps 2,500 bushels of corn can be sold.

A statement of the stock and machinery on the farms accompanies this.

The late date of this report and some lack of detail are explained by my absence in connection with the University exhibit at the World's Fair during much of May.

# Respectfully submitted,

G. E. Morrow.

The board of direction of the Experiment Station has held its regular quarterly meeting, and I transmit its report.

# Dr. T. J. Burrill, Regent,

DEAR SIR: The Board of Direction of the Agricultural Experiment Station presents the following papers:

 $Paper\ A$  is a statement of the expenditures for the quarter ending March 31.1893.

Paper B is a list of warrants drawn during the same quarter, No 130 to 209, inclusive, and is accompanied with youchers for the same.

 $Paper\ C$  is a statement of the appropriations, expenditures and balances for the quarter ending June 30, 1893.

 $Paper\ D$  is a statement of appropriations asked for the next quarter.

PAPER A-STATEMENT OF EXPENDITURES FOR QUARTER ENDING MARCH 31, 1893.

	Appropriated.	Expended.	Balances.
Buildings and repairs Board expense Books and publications Botanical apparatus Bulletins Chemical apparatus Fuel and lights Incidentals Printing, stationery, and postage Meteorological apparatus Salaries Seeds and trees Tools and supplies Wages and teams Sundry— Darying experiments. Exhibit at Columbian Exposition	40 00 50 00 10 00 750 00 50 00 100 00 25 00 25 00 1,985 00 100 00 25 00 25 00	50 02 1 00 583 59 40 05 86 24 28 37 24 98 12 15 1, 985 00 60 19 15 95 760 66	9 00 166 41 9 95 13 76 1 63 08 2 83 39 81 9 00
Total	\$4,200 00	\$3,688 54	\$511 48

PAPER C-STATEMENT OF EXPENDITURES, QUARTER ENDING JUNE 30, 1893.

	Appropri- ated.	Expended.	Balances.
Buildings and repairs Board expenses. Books and publications. Botanical apparatus. Bulletins. Chemical apparatus Fertilizers. Fuel and lights Incidentals Printing, stationery, and postage. Salarles. Seeds and trees. Tools and supplies. Wages and teams. Sundry— Dairying experiments Columbian Exposition work.	40 00 150 00 10 00 500 00 50 00 100 00 25 00 150 00 1,775 00 50 00 1,100 00	10 00 148 90 1,081 66 14 20 1 80 444 02	\$25 00 40 00 150 00 10 00 262 31 17 44 50 00 15 00 1 10 693 34 35 80 48 20 655 98 96 00 80 00
Total	\$4,255 00	\$1,974 83	\$2,280 17

PAPER D-ESTIMATES, QUARTER ENDING SEPTEMBER 30, 1893.

Buildings and repairs	\$25	00
Board expenses.	40	00
Books and publications	50	00
Botanical apparatus	60	00
Bulletins.	200	00
Chemical apparatus	170	00
Fuel and lights	60	00
Furniture and fittings		00
Incidentals.	25	00
Printing, stationery, and postage	95	00
Salaries.		
Seeds and trees.	1,000	00
Tools and supplies.	25	
Wages and teams.	1.150	
Sundry—	1,100	00
Clover and wheat experiments	60	00
Desirying agraphing to		00
Dairying experiments. Columbian Exposition work.	50	00
Continuous desposition work	50	
Total.	\$3,965	00
Total.	φυ, συσ	00

The board of direction asks that the trustees appropriate funds according to estimates in Paper D for the use of the Station.

The board of direction asks that its president and secretary have authority to use, for such purposes as may best subserve the interests of the Station, any unexpended balances of the station funds appropriated for this fiscal year.

The board of direction asks authority to undertake the following new work:

1. Investigations upon rhizobia, or the root tubercles of leguminous plants, with a view of securing their growth upon the roots of grain plants.

These organisms assist clover and other similar plants to utilize the nitrogen of the air; it is hoped that some artificial means may cause similar results with grasses and cereals. It is desired to employ upon this work for two months Mr. Albert Schneider, of Minneapolis, paying him for his services \$75 a month.

- 2. To try methods of protecting wheat from freezing and ice.
- 3. To experiment with crimson clover in northern and southern Illinois.
- 4. To experiment with the cow pea and red clover in southern Illinois.
- 5. To investigate at the Station the value of forage plants other than grasses and clovers.

The board finds that a part of the land it is using needs more draining, and asks that the University join the Station in this matter. The Station proposes to limit its half of the expenditure to \$100.

The board of direction has raised the salary of Mr. Clinton from \$850 to \$1,000 per annum for the rest of this year ending March 31, 1894; also of Mr. Gardner from \$900 to \$1,000 per annum for the same term. As the University pays a part of the salary of each of these men, the board of trustees is asked to confirm this action.

Respectfully submitted,

G. E. Morrow,

President of the Board of Direction.

# INSPECTION OF MILITARY DEPARTMENT.

The annual inspection of the military department was recently made and the report of the inspector is herewith submitted. It shows that commendable progress has been made during the last year. Especial at-

tention is asked to the matter of exchanging the old rifles, used here twenty years or more, for better ones as suggested by the inspector.

Urbana, Illinois, May 18, 1893.

To the Inspector General, United States Army, Washington, D. C.
(Through Inspector General of the Department.)

SIR:—I have the honor to submit the following report of an inspection of the military department of the University of Illinois, Urbana, Illinois, made this day.

As full information in regard to the location, date of establishment, source of revenue, and government of this institution is contained in my report dated May 15, 1892, repetition herein is not deemed necessary.

The University, which is presided over by Thomas J. Burrill, A.M., Ph.D., (acting regent), is non-sectarian and is prepared to teach annually about 900 students. There are thirteen (13) buildings, one of which is a military building.

The military department was established in 1868. The course is satisfactory to the faculty. By some students the drill is said to be regarded as irksome; the military professor states, however, that there has been less dissatisfaction this year than during the two preceding years. During the inspection I questioned probably fifty cadets on this subject, and the majority of them expressed themselves as well satisfied with the military department.

Standing in military study and drill is placed on record with other class credits. Every male student must make two credits—when practicable during the freshman and sophomore years—one of which is given for two terms of drill and recitations in drill regulations, the other for four terms of drill. Drill practice counts 100 if every drill is attended and all duties well and faithfully performed. Absence, lack of promptness and attention, disobedience, improper uniform, etc., detract from this maximum standing; and any student falling below 75 fails to pass, loses all credit for the entire term, and can not proceed with other studies except by special permission of the faculty.

The University authorities are anxious that the military department should be what it ought to be, and, by way of inducement to continue in it, have created military scholarships which are awarded to those attaining the rank of commissioned officers in the battalion, No portion of the income from the land grant is especially set aside for the military feature of the institution, but all requests for financial assistance are granted.

The enrollment of students for the present college year is 714—610 males and 104 females. During this (spring) term, the attendance is 444 males and 77 females—total, 521. There are now in the military department 67 sophomores and 101 freshmen—total, 168; all of whom are over fifteen years of age.

None of the students live at the University; they all room in the two adjacent towns (Urbana and Champaign).

The military professor reports that the discipline of the military students, while not satisfactory in all respects, shows a marked improvement over the preceding year. Discipline is maintained by reports, warning, suspension and dismissal. The student is first warned by the military professor; if second warning becomes necessary within a year after the first, the parent or guardian is also notified; a third warning within a year brings the student before the faculty for discipline.

The aptitude of the students for military instruction is good. The following are reported to have shown special aptitude for the military service, viz.:

M. A. Earl, senior class; F. L. Busey, E. V. Capps, A. M. Munn, C. W. Noble, H. E. Reeves and W. N. Vance, sophomore class.

One cadet, John T. Stewart, has expressed a desire of entering the army as 2nd lieutenant by civilian appointment. He is a member of this

year's graduating class. In eight terms in the military department his average has been 93. His standing in other studies, I am informed, is about medium. His physical condition is apparently good.

The military organization is a battalion of four infantry companies, an artillery detachment and a band. During the winter term a hospital corps detachment, consisting of a steward and eight bearers, was maintained. The steward obtained a position in the hospital corps at the Columbian Exposition, Chicago, at the end of the winter term and the corps was broken up. The hospital detachment was composed of students intending to enter the medical profession, and, while in operation, the members evinced much interest in it.

There is no select company for special drill.

The band is composed of 2 seniors, 5 juniors, 7 sophomores, 9 freshmen and 2 preparatory students—total, 25. It is maintained by special appropriation from the general university fund.

Commissioned and non-commissioned officers are appointed by the military professor and approved by the faculty. To be eligible for corporals, students must have gained 2 term credits in class-room instruction and 2 in drill: for sergeants, 3 term credits in each: for lieutenants and captains, 6 term credits in each. The major is selected from amongst those who were company officers the preceding year. Captains and lieutenants are selected from the junior, and majors from the senior classes, but may be taken from other classes "when the good of the service may require it." Corporals are from the freshman and sergeants from the sophomore classes.

The uniform is a blouse and trousers of cadet gray, and forage cap of same color, with University badge ("U. of I"). Band uniforms, same with white trimmings. Commissioned officers wear the uniform of officers of the same degree in the National Guard.

The battalion carries the U.S. flag only.

Captain E. R. Hills. 5th Artillery, has remained on duty as professor of military science and tactics since my last inspection. His detail commenced here September 1, 1890. He resides at Urbana, about a mile from the University, and rents his house, none of the professors except one (agriculture) being provided with quarters. He is a member of the faculty, with all the rights, privileges, and authority of other heads of departments: and he observes the established usages affecting duties and obligations of other members. When performing his military duties he appears in proper uniform.

Captain Hills performs no non-military duties at the University, and receives no compensation from it.

All orders, appointments, promotions, etc., affecting the military department are made by the military professor, submitted to the faculty for approval, and then promulgated by him. Rules are made by the board of trustees.

Captain Hills enforces proper military discipline at all times when the students are under instruction, and requires them to appear in the prescribed uniform at all drills and military ceremonies. He has rendered the required reports to the adjutant general of the army, and has kept, for transfer to his successor, "Roster of the Battalion," "Report Book Officers," "Letters Sent," and copies of reports.

Practical instruction embraces infantry drill in the schools of the soldier, company, and battalion, and the ceremonies; extended order drill for squad, platoon, and company; target practice, signaling, and artillery drill. This instruction is given by the military professor personally or under his immediate supervision, and occupies about four hours per week, from 4 to 5 p. m:, or (deducting the time required for the students to assemble at drill hall) strictly speaking, three and one-half hours per week.

Military drill is confined to the freshman and sophomore years, and is obligatory on all male students, except seniors and juniors who are not

commissioned officers, preparatory students, and those of the sophomore and freshman classes who are physically disabled or specially excused by the faculty.

Since last annual inspection, there have been 78 infantry company drills, 52 artillery drills in formation of detachments, manual of the piece, dismounting and mounting, carriage and limber, etc.; 22 battalion drills, 3 dress parades, and 5 reviews and inspections. No regular weekly company inspections have been had, but inspections have been made from time to time as part of the company drills. New students are extercised without arms from three to four weeks. There has been no artillery target practice, but artillery practice firing with blank cartridges has been had. Target firing with small arms has been limited to one afternoon's practice at 50 and 100 yards, which was attended with good results, although only twelve cadets (officers and sergeants) participated, owing principally to the unfavorable weather and the bad condition of the butts.

No other practical instruction has been had, except signaling with wand and flag. Seven signal drills with flag have been had this term.

The military professor states that instruction in telegraphy is not preferred to military signaling, and that it is not desirable to send to this institution, for instruction in long range signaling, some of the old style heliographs called in from posts.

There is a suitable drill ground for company and battalion drill in close order, but it is rather limited for extended order. A large hall, 100x150 feet, erected in 1889–90, affords excellent facilities for indoor drill. A target range—up to 400 yards—is located about a mile and a half south of the university buildings.

Theoretical instruction consists of recitations, and notes by the military professor furnished the sophomore class, and has been conducted by the military professor personally, with the exception that during the winter term, owing to the size of the freshman military class, the cadet major was employed as an assistant, and heard three recitations per week—the military professor taking the other three sections of that class at the same hour. During the winter and spring terms four, and during the fall term five hours per week are devoted to this instruction.

Since the last annual inspection the three classes, junior, sophomore, and freshman, have had a total of 152 recitations, embracing infantry drill regulations, guard duty, organization of the U. S. army, signaling, field fortifications, and military forces of the United States—the average attendance being: fall term, 175; winter, 158; and spring, 28.

There are no lectures delivered by the military professor, but he furnishes the sophomore class with notes on the organization of the U. S. army for war and peace, military forces of the United States, and cannon projectiles. No other theoretical instruction has been given, no campaigns have been studied by the students and no military essays have been prepared by them.

The text books in use are the Infantry Drill Regulations, Manual of Guard Duty, Wheeler's Field Fortifications, and Art and Science of War. The librarian states that the university library contains 300 volumes (including ordnance reports) on different military subjects.

There are 299 Springfield cadet rifles on the returns, but two are believed to be deficient. The rifles are not in good condition—the stocks are scratched and battered, etc. When not in use, they are stored in drill hall and armory, and cared for by the janitor. The account rements (300 sets) are much worn. The two (2) six-pdr. bronze guns, with carriages and limbers, that have been furnished the institution are in fair condition, but old and worn. They are kept either in the drill hall or in a small building erected for that purpose. All the foregoing property

belongs to the United States, and is insured at its full value per ordnance price list. Regular property returns are rendered to the chief of ordnance by the president of the University.

The full allowance of ammunition has not been drawn from the United States, and none is furnished by the State.

Attention is invited to the following extracts from the interesting and comprehensive *resumé* of the past year's work, submitted by Captain Hills:

"The fall term began September 15, and closed December 21, 1892. Commencing on September 20th, companies A and B, composed principally of sophomores, were drilled on Tuesdays and Fridays, from 4 to 5 p. m., in the school of the company, bayonet exercise, and in the school of the battalion. On September 19th, the freshman class was formed into two companies, C and D, and drilled on Mondays and Thursdays, from 4 to 5 p. m. For the instruction of these new companies in the school of the soldier, all the sergeants from companies A and B, except two, were required to drill squads. Arms were issued to some October 10th, and to the rest later on. About November 21st the companies were formed for company drill. In December they had bayonet exercise. The first sergeant of the artillery detachment during the preceding year left the junior military class, and to secure an officer for the detachment the former captain was induced to continue in that position. Artillery drills began October 11th. At the close of the fall term the battalion aggregated 224, the highest number reached during the year. \*

"During the full term 144 freshman were required to study and recite in the Infantry Drill Regulations. In order to make the credit required by the rules, 10 sophomores also recited with the freshmen. Three sections were formed—the first reciting on Mondays, the second on Wednesdays and the third on Thursdays, all from 3 to 4 p. m. The class went over the school of the soldier, including bayonet exercise, and was examined December 17th. There were 19 failures; at a subsequent examination 13 of these passed.

"The sophomore military class (the sergeants) recited on Thursdays, and reviewed the school of the soldier, including bayonet exercise, and completed the school of the battalion. All passed the examination satisfactorily. The junior military class studied field fortification, reciting on Fridays; all who were present at the examination passed.

"The marks received for recitations made and that obtained at examination were considered in determining the grade. A standing of 75 on a scale of 100 is necessary to secure a credit for any study. A student receiving a mark below 75 and not less than 60 is conditioned and may have a re-examination within 3 months. A mark below 60 constitutes a failure and the student may not proceed with any studies without special permission of the faculty.

"At the beginning of the winter term, January 5, 1893, the organization of the battalion remained as before, but I found that the members of the junior military class, because of the amount of work required of them in other departments, had requested permission to resign their positions in the battalion. The matter was carefully looked into by the regent, who found that the request was not based on any dissatisfaction with the military department, but a desire to prosecute those studies which were to fit them for their chosen professions, and it was decided to relieve them. This left the battalion without any company officers and dissolved the junior military class. When the fall term closed, there were 17 sergeants; of these 12 continued during the winter term, 5 dropping out. Early in the term the sergeant major returned to his home on account of sickness and remained absent during the term. The four first sergeants were appointed first lieutenants and placed in command of the companies; four sergeants were advanced to first sergeants, the color sergeant was made sergeant major, and the remaining sergeant became color sergeant. These changes disarranged and seriously impaired instruction.

It was evident at once that the new officers who commanded the older companies (A and B) composed of their own classmates, were at a disadvantage; this was partly overcome but not wholly.

"Several students who were preparing for the medical profession applied for permission to form a hospital corps detachment. The request being granted, two litters were obtained from the adjutant general of the State by one of the students. Mr. H. R. Marsh was appointed hospital steward, and a detachment of 8 men placed under him for drill as bearers. These students drilled once each weak with their respective companies and once at litter drill. They also received instructions in first aid to the injured from Professor Donald McIntosh, of the university faculty. They were regular in attendance and took great interest and pride in the work, Early in this spring term Mr. Marsh left to take a position in the hospital corps of the Columbian Exposition, and the detachment was then discontinued.

"During this term all drills were indoors and were in the schools of the company and battalion, and bayonet exercise. Battalion drill was had with but two companies, the floor space being insufficient for the four companies. Many of these drills were conducted by the cadet major under my direction. Winter term closed March 22, 1893, with a total of 212.

"In the winter term the freshman military class numbered 164. Upon my recommendation the class was divided into six sections and Cadet Major Earl employed to assist me. Every week we exchanged sections. Cadet Major Earl's assistance was of great value to me, and it is due him that I should express my high appreciation of his services, both as an instructor and as an officer of the battalion. The class studied and recited in the school of the company—close and extended order.

"The sophomore military class recited on Tuesdays, reviewing the school of the company and taking up the ceremonies, manual of guard, U. S. signal code, etc.

"At the examination of March 18th all members of both classes who were examined, except one, passed satisfactorily.

"The spring term began March 23, and closed June 7, 1893. A freshman military class was formed \* \* \* \* \* I found that I had but 10 men to fill the positions of officers and sergeants. The artillery detachment was without an officer. Owing to the weather I have not been able to have any outdoor drills this term, about one-half have been held indoors: and consequently but little has been accomplished in extended order. There have been several battalion drills, three parades, and five reviews and inspections. The strength of the battalion has been reduced to I77.

"There has been an unusual amount of sickness this year, not only among the students, but among the population in general, and quite a number have been obliged to return home on that account. Up to this day (May 17th) since September 19, 1892, the number of absences from drill on account of sickness has been, for the fall term, 145; winter term, 160; spring term, 45; total, 350.

"The freshman class has had, this term, recitations in the school of the battalion and the ceremonies; the sophomore class in guard duty, notes on cannon and projectiles, and practice in signaling with wand and flags.

"The target butt was partly torn down by some one, probably in search of lead, and was not repaired until about May 1st. Saturday being the only day available for practice, I have had but one afternoon on the range. The firing party consisted of officers and non-commissioned officers only, and as there is but one target it was slow work. The practice was at 50 and 100 yards, and the results were unusually good. This party had been instructed in aiming previous to firing.

"The artillery detachment has had instruction in the manual of the piece, formation of and posting detachments, mechanical maneuvers and firing with blank cartridges. Its composition has changed three times, wholly or in part, through members leaving college and being relieved because of absence from drill. This has impeded instruction somewhat.

"There has been no serious disorder or disturbance during the past year. There have been minor irregularities which have been met by an application of the rules. A more general desire to earn the credit for attendance at drill has been apparent. On the whole, while not entirely satisfactory, there has been an improvement in discipline and an attention to duty."

From the foregoing it is evident that the military department at this institution covers a large field of work, and calls for constant, thorough and painstaking effort on the part of the officer in charge.

The exercises pertaining to the inspection began at 3:30 p.m., and were as follows:

- 1st. Review in full form, commanded by Captain Hills. The line was properly and promptly formed, and the marching in review was well executed in regular cadence and steadiness, the soldierly bearing and military appearance being uniformly good.
- 2d. Inspection. The rifles were generally clean in the bore, but the exterior was not creditable in appearance, being rough and marred from the effect of rust, and the stocks were more or less battered and nicked. The accourrements were worn and needed blacking.

The arms and accoutrements are not taken care of by the cadets individually, but are used by them interchangeably.

The uniform was neat and well fitted throughout, presenting a very creditable appearance. The cadets are not required to wear white gloves.

3d. Captain Hills drilled the battalion and the movements were, with a few exceptions, fairly well executed. Company drills were generally good in the varied movements, including the manual, marching, bayonet exercise by one company, and extended order by another.

Companies A and B, commanded by Cadet Lieutenants E. V. Capps and F. L. Busey, respectively, deserve special mention, in the order named, for promptness and precision in many movements and soldierly bearing throughout. These young cadet officers appear to be alive to their duties as company commanders. Companies C and D did fairly well.

The artillery detachment presented a very creditable appearance and showed zeal and thoroughness in their duties. The mechanical maneuvers were well executed, and the firing by piece and battery specially so.

The signal detachment promptly and correctly transmitted a test message, which concluded the exercises.

The following table exhibits the strength of the corps of cadets at date of inspection.

PRESENT AT INSPECTION.												A	ABSENT.		
Organizations.	Majors	Adjutants	Captains	Lieutenants	N. C. staff	1st sergeants	Sergeants	Corporals	Privates	Total commis- sioned	Total N. C. O. and privates	Commissioned	N. C. O. privates,	Aggregate present and absent	
Field and staff. Band Artillery department Company A Company B Company C Company D Total				 1 1		···i		1 4 4 4 5	23 14 18 21 33 25	1 1 1 1	1 23 16 22 25 38 31 156		2 1 2 3 3 5 —	17 25 29 42 37	

Nine members of the band do not properly belong to the military department, thus reducing the aggregate to 168.

It is gratifying to state that there is a marked improvement in almost every respect in the military department as compared with last year.

Captain Hills has labored most earnestly and energetically to advance his department on the road of progress. He has the full confidence and co-operation of the University authorities, and it seems clear that the young men composing the cadet corps are responding with alacrity and good faith to the unflagging work on their behalf of their able military instructor.

Much improvement can still be made, but it is believed that another year of progressive work similar to the last will practically place the military department of this institution quite near its high place of excellence of years ago. This department is now advancing, not retrograding, and the suggestion is made for the consideration of proper authorities that it might be proper encouragement to replace, at an early day, all the old and battered rifles and worn out accoutrements by an issue of new ones throughout, and that proper steps be taken to cause each cadet to care for his own piece and equipments, and thus insure individual responsibility. This seems so important that if necessary to effect it, the cadet should be relieved from a sufficient part of some other work or study, and thus avoid having the above duty appear as an added burden.

Very respectfully.

J. M. LEE.

Captain 9th Infantry, Asst. to Inspector General, Dept. of the Missouri.

I would suggest that this report be printed in the minutes of the board.

Respectfully submitted,

THOMAS J. BURRILL,

Acting Regent.

Mr. Ramsey, principal of the high school of Fall River, Mass., having requested an interview with the trustees on the matter of the regency, was invited to address the board.

On motion of Mr. Bullard, authority was given to confer bachelors' and masters' degrees as recommended by the faculty of the University. (For list see page 100.)

On motion of Mr. Raymond, the board of supervisors of Champaign county, which was then in session at the court house, in Urbana, was invited to attend commencement exercises.

The board then adjourned to meet at 7:30 o'clock p. m.

## EVENING SESSION.

At this session of the board meeting Mr. McKay was present, besides those present in the afternoon.

The treasurer presented his report, which was referred to the finance committee.

## TREASURER'S REPORT.

JOHN W. BUNN, TREASURER,

IN ACCOUNT WITH UNIVERSITY OF ILLINOIS.

<u></u>					Dr.		
1893. March	14	To balance	۵.			No.	\$30,125 49
	20 20	To interes	t on land co	ntract	No. 39, J. E. Blinkenstaff " 23, James Lowe	\$121 80 122 00	
44	23				school bonds		243 80 150 00
"	31	To amoun	t received o	n acco	int buildings and grounds	\$20 00	
	31 31			44	mechanical department architectural department	1 60 56 81	
	31	44			agricultural department	348 65	
	31			"	horticultural department	23 30	
44	31 31	"		4.6	testing laboratoryuniversity fees	2 25 1,031 25	
• 6	31				preparatory year	202 50	1,686 36
April	1 1	To interes	t on Sangar	non co	unty school bonds	\$300.00	30 00
Мау	1		Bond		" " "	150 00	
6 6	1	• •	Cass		** ** ***	325 00	
"	1		Shelby			360 00	1, 135 00
	31 31	To interes	t on land co	ntract	No. 105, H. M. Killeen unt salaries buildings and grounds	\$16 66	12 40
4.4		- 5 4110411	- 100077040		buildings and grounds fuel and lights	20 00	
	31	• • •	"		fuel and lights	37 54	
	31 31				mechanical department architectural department	210 24 2,025 47	
"	31	4.6	4.6		agricultural department	1,545 32	
46	31	"	6,6		horticultural department	122 40	
"	31 31				laboratories	129 75 2,590 00	
4.4	31		4.6		preparatory year	462 50	
	31	44	4 4	44	music fees	183 25	7,343 13
							\$40,726 18
					Cr.		
1893.						* 400 OW	
Мау	31 31	By amoun	it paid on a	ccount	board expensebuildings and groundsfuel and lights	\$460 87 7,418 10	
66	31	"	6 6		buildings and grounds	72 44	
	31	66	• •	"	fuel and lights	811 89	
	31 31	::			stationery and printing	491 42 1,064 04	
44	31	4.6			preparatory year mechanical department	282 12	
44	31		• •	"	architectural department	1,428 85	
46	31 31		"	"	agricultural department horticultural department	535 00 31 75	
4.4	31		4.6	6 6	military department	21 87	
46	31		"		laboratories	314 76	
46	31		"	"	library and apparatus	15 68 98 95	
	31				incidental expense		\$13,047 74
44		By amoun	t paid on ac	count	Natural History hall	\$379 83 131 84	
44	31 31		6 6	"	accredited schools furniture and fixtures	37 55	
66 .	31				Illini subscriptions	93 33	
4.6	31	"	"		music fees	183 25	
• •	31 31		::		Technograph	183 70 100 00	
	31	"			gymnasium	78	
• •	31			"	Minnesota lands	12 75	1,123 03
44	31	By amoun	t paid on a	ccount	buildings and grounds	\$434 50 411 70	-,
	31 31	"			apparatus and materials mechanical and architect'l shops	590 19	
6.6	31	"		44	books and publications	312 85	
"	31		"	"	cabinets	26 65	
	31 31		"	"	instruction	6,925 24 25 00	
6 6	31	6.6	"	6 6	heating and furnishing Natural		
46		46		44	History Hall	285 35	
44	31 31				metallurgical laboratory State Laboratory of Natural	20 08	
	01				State Laboratory of Natural History	2,113 80	
46	31			"	United States fund		11.145 36 4,450 12
		l .					-,

# Treasurer's Report—Concluded.

May 3	Balances— Current funds. State appropriations. United States fund	4,615 45	\$10,959 93 \$40,726 18
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URBANA, June 6, 1893.

John W. Bunn, Treasurer.

Mr. Webber, the mayor, some members of the city council, and other citizens of Urbana, were received by the board, and some time was devoted to discussion of drainage questions.

On motion of Mr. McKay, the board appointed the committee on buildings and grounds to meet with the Urbana city council the next evening for further discussion of the same subject.

The board then adjourned to meet at 8 o'clock a. m., Wednesday.

# SESSION OF WEDNESDAY MORNING.

The board met pursuant to adjournment, the same members being present as on the preceding day, with the exception of Mr. McKay.

The report from the Experiment Station was then considered.

On motion of Mr. McLean, authority was given the board of direction to undertake the new work described in the report.

On motion of Mr. Bullard, authority was given the board of direction to expend station funds according to the askings and estimates submitted.

The advance in the salaries of Messrs. Clinton and Gardner was approved.

On motion of Mr. McLean, \$100 was appropriated from current funds to be used for drainage purposes, along with the amount appropriated from station funds.

On motion of Mr. McLean, it was voted to make the exchange of arms as recommended by Captain Hills. The business agent, Captain Hills, and the regent were given authority to effect the exchange and to spend such amount from current funds as might be needed to defray the expenses of the change.

The board then adjourned to meet at 3 o'clock in the afternoon.

## AFTERNOON SESSION.

The board met at 3 o'clock p. m., pursuant to adjournment.

The president and secretary were authorized to execute a bond in the sum of \$10, the same being required to be filed with the collector of customs of the port of New York, in order that certain photographs purchased by Professor Moss, for the use of the University, and with University funds, might be entered free of duty.

The secretary reported that the people of school district No. 117, Kingman township, Renville county, Minnesota, wished to secure an acre in the southwest corner of NW  $\frac{1}{4}$ —8—116—34 for a school house site.

On motion of Mr. Raymond, it was voted to sell to said district one acre of ground, situated as above described, for a school house site, with a clause in the conveyance providing that when no longer so used the land revert to the University of Illinois.

The committee on Minnesota lands made the following report which was received for record:

To the Board of Trustees of the University of Illinois.

GENTLEMEN: The sales of lands not heretofore reported have been as follows:

No.	Date.	Name.	Description.	No. acres.	Price per acre.	Whole price.	Cash paid.
113 114	" ::	Peter Lundquist Simon Larson	N ½ NE 26-117-34 S ½ NE 26-117-34 NE ½ 34-117-33 S E S E 31-124-36	80 80 160 40	\$15 78 15 78 15 00 12 50	\$1,262 50 1,262 52 2,400 00 500 00	\$125 00 125 00 360 00 125 00
				360		\$5,425 00	\$735 00

Respectfully submitted,

S. A. BULLARD, S. W. SHATTUCK, W. L. PILLSBURY,  $Minnesota\ Lands.$ 

The secretary stated that he had procured a book for the endowmentfund register, as directed by the trustees at their meeting of March 28th.

On motion of Mr. Bullard, it was voted that the register be submitted to the finance committee.  $\ \, \bullet \ \,$ 

Mr. Armstrong, from the committee on instruction, made an informal report with regard to the regency.

The papers presented by the regent from the faculty, with regard to the proposed new building for the college of engineering, were referred to the committee on buildings and grounds.

Mr. G. W. Parker, instructor in wood working and foreman, was given a vacation of two months, on motion of Mr. Bullard.

On motion of Mr. McLean, it was voted to print in the minutes a report of an inspection recently made by Capt. J. M. Lee, 9th Infantry, assistant to inspector general, Department of the Missouri.

Mr. Bryant stated that Governor Altgeld, who had delivered the commencement address, had been unable to remain for the board meeting. He had, however, in conference with some members of the board, urged that the erection of the new building be pushed as rapidly as possible.

Mr. Bryant offered the following resolution, which was adopted:

Resolved, That we most heartily approve of the recommendation of Governor Altgeld, and that the committee on buildings and grounds begin immediately to make preparation for the construction of the building for the engineering college, and that the committee has our hearty good will and support in pushing forward the erection of the building with all practicable dispatch.

On motion of Mr. McLean, the items in the regent's report were considered in detail.

The scheme for the classification of instructors in the University, and of their salaries was referred to the committee on instruction.

The recommendation with regard to leasing ground to the members of the faculty for building purposes was referred to the following committee, appointed by the president, Messrs. McLean, Morgan, Raymond.

The several requests for appropriations presented by the regent were referred to the finance commmittee to be reported upon as soon as practicable.

The proposition for a store room in the basement of the chemical laboratory, to be connected by an elevator with the laboratories upon the first and second stories, was referred to the committee on buildings and grounds.

The following matters were referred to the committee on instruction: Students' petitions with regard to the mechanical engineering department; the recommendation presented by the dean of the college of engineering; the recommendation by Professor Ricker, with regard to the department of architecture; the request for a course of lectures before the colleges of agriculture and science; the report by Professor Forbes with regard to the work in the zoölogical department and concerning the transfer of physiology to that department; and the communication from the dean of the college of literature.

Miss Merrill's paper with reference to what was desirable to do for the welfare of the young women attending the University, was referred to a special committee, Messrs. Morgan, Bryant, and Armstrong.

The farm report was referred to the farm committee.

Mr. McLean offered the following resolution, which was adopted:

Whereas, There is a standing rule of this board requiring the head of each department of the University to keep an inventory book, in which to enter in detail all apparatus and other property belonging to his department, therefore, be it

Resolved that in addition to keeping said book, as required by said rule, it is ordered that the head of each department shall present to the board, at its annual meeting in March, an inventory of all apparatus and other property belonging to said department, together with a statement of the condition thereof. Said reports to be delivered to the business agent 5 days before said annual meeting and it is made the duty of the business agent to present these reports.

Mr. Armstrong moved that Professor Shattuck be made business agent of the University, at a salary of \$2,600 a year.

On motion of Mr. Morgan the subject was referred to the finance committee to be reported upon before the board adjourned.

The committee on instruction reported verbally, recommending the appointment of Miss Elizabeth Cooley, of Morgan Park, Ill., as assistant professor of German, at a salary of \$1,600 per annum, and the appointment was approved.

The committee further reported recommending the establishment of a chair of political science. This recommendation also was adopted.

Mr. Morgan offered the following resolution, which was adopted:

Resolved, That the committee on buildings and grounds be and is hereby instructed to proceed at once in its discretion to construct suitable water closets for use at University Hall. Also to enlarge and improve the cloak and dressing room, and the coat room.

The board then adjourned to meet at the Columbian Hotel, Urbana, Ill., at 8:30 o'clock p. m.

## EVENING SESSION.

The board met at the Columbian Hotel, Urbana, at 9 o'clock p. m.

The executive committee made the following report:

University of Illinois, June 6, 1893.

To the Board of Trustees of the University of Illinois.

GENTLEMEN: Your executive committee reports that April 8, 1893, it contracted with the Garvin Machine Co., of New York, for

1 No. 1 universal milling machine, complete with counter-shafts and all attachments belonging thereto, price \$625;

And with the Lodge and Davis Machine Tool Co., Cincinnati, Ohio, for 1 14-inch engine lathe, complete with counter-shafts and all attachments belonging thereto, price \$225.

1 No. 1 Fox Monitor, with dovetail set-over and quick return, with counter-shaft and all attachments belonging thereto, price \$150.

1 15-inch crank shaper with counter-shaft and all attachments belonging thereto, price \$300.

These machines are all to be used as a part of the exhibit of the mechanical engineering department at the World's Columbian Exposition.

The condition of the contracts is that if the machines shall be returned in good shape at the expense of the University the contracts shall thereby be satisfied; if they are not so returned, that the University shall be liable for the machines at the prices named.

Respectfully submitted,

N. W. GRAHAM, N. B. MORRISO, S. A. BULLARD,

The committee further reported that upon its request to the governor he had sent a message to the General Assembly recommending that the University be empowered by law to loan its endowment fund upon real estate security.

On motion of Mr. Raymond, the action of the committee was approved.

The committee on instruction made a further report recommending the establishment of a chair of pedagogy, and the recommendation was adopted.

On motion of Mr Morgan, Mr. Edward Kimball Hall, director of the gymnasium and instructor in athletics, was re-appointed for the year beginning September 1, 1893, at a salary of \$1,500 a year.

On motion of Mr. Bullard, the following appropriations were made as recommended by Professor S. W. Shattuck, business agent.

Board expense		\$500	
Salaries for instruction and regent		14,613	00
Salaries for services		834	91
Buildings and grounds		400	00
Fuel and lights		-1.500	00
Stationery, printing, and postage		500	
Catalogues and advertising		1,200	00
Laboratories			
Library and apparatus		50	
Incidentals		200	00
Water supply		275	00
Furniture and fixtures		150	00
Mechanical, architectural, agricultural, and horticultural de	epart-		
ments		700	00
Military department		50	00
Military scholarships	<b>.</b>	90	00
Accredited school diplomas		135	00
Commencementba			00
University bulletins	6.6	100	00
Illini subscriptions	"	93	34
Music	66	100	00
Map of University grounds	66	25	00
Minnesota lands	4.6	105	10
Furnishing Natural History Hall	66	86	77
Art department	66	10	96
World's Fair exhibit	66	100	
University extension	66	75	
Gymnasium	66	49	
OJ 111111111111111111111111111111111111			
		\$21,343	63
		~~×,010	56

The committee on instruction, and the regent were given authority, with the approval of the executive committee, to fill, in their discretion, vacancies in the crops of instructors below professorships.

The committee on instruction reported, recommending that some person be made principal of the preparatory department, and the recommendation was approved.

The board then adjourned to meet at 8 o'clock a. m., Thursday.

# SESSION OF THURSDAY MORNING.

The board met in the University Parlor at 9 o'clock a.m.

The finance committee made the following reports, which were severally adopted:

URBANA, ILL., June 7, 1893.

To the Board of Trustees of the University of Illinois.

Gentlemen: Your finance committee has examined the report of the treasurer, J. W. Bunn, for the quarter ending May 31, 1893, showing balance and receipts amounting to \$40,726.18; expenditures, amounting to \$29,766.25; and a balance on hand May 31, 1893, \$10,959.93, and has found the report correct.

It has also examined vouchers submitted by the business agent for the quarter ending Feb. 28, 1893, No. 301 to 675, inclusive.

The committee has also examined vouchers No. 130 to 209, inclusive, submitted by the board of direction of the Experiment Station, and has found all these vouchers correct and properly receipted.

Respectfully submitted,

ALEXANDER McLean, James E. Armstrong, Finance Committee.

Urbana, Ill., June 7, 1893.

To the Board of Trustees of the University of Illinois.

Gentlemen: Your finance committee reports that it has examined warrants No. 701 to 1,375, inclusive, issued and paid from March 1, to September 1, 1892, and warrants No. 1 to 675, inclusive, issued and paid from September 1, 1892, to February 28, 1893, and that it has found the same correct and duly canceled.

Respectfully submitted,

ALEXANDER McLEAN, JAMES E. ARMSTRONG, Finance Committee.

URBANA, ILL., June, 7, 1893.

To the Board of Trustees of the University of Illinois.

GENTLEMEN: Your committee having had before it the petition from the University military band, recommends that \$100 be paid said band on the following conditions:

- 1. Should said band go to World's Fair, it will be under the control of the Illinois board of commissioners as to when and where it shall render service.
- 2. Said \$100 will be paid to the band upon bill rendered by the leader of the band, together with a certificate from the secretary of the board of Illinois commissioners, that service has been satisfactorily rendered.

Respectfully submitted,

ALEXANDER McLEAN, JAMES E. ARMSTRONG, Finance Committee.

URBANA, ILL., June 7, 1893.

To the Board of Trustees of the University of Illinois.

GENTLEMEN: Your committee reports upon the matter of the business agent, that it has had an interview with Professor Shattuck, and has found that he preferred the present state of affairs should continue.

Your committee, therefore, recommends that Professor Shattuck be continued as business agent from Sept. 1, 1893, to Aug. 31, 1894, at a salary of \$600 per annum. It further recommends that the matter of an assistant in the mathematical department be considered by the committee on instruction.

Respectfully submitted,

ALEXANDER McLean, James E. Armstrong, Finance Committee.

URBANA, ILL., June 7, 1893.

To the Board of Trustees of the University of Illinois.

GENTLEMEN: With regard to appropriations asked for in the papers presented with the regent's report your committee recommends:

- 1. An appropriation of \$216.50 from U. S. fund to the college of engineering for the purpose of purchasing instruments, as asked for by the dean of the college, Professor Ricker.
- 2. An appropriation of \$50 from state appropriation for apparatus and materials, for the purchase of photographs, etc., for the department of municipal engineering.
- 3. An appropriation of \$239 from U. S. fund, for the department of agriculture.
- 4. An appropriation of \$175 from state appropriation for books and publications, for binding books belonging to the library.
- 5. An appropriation of \$1,100 from state appropriation for buildings and grounds to lay cement walks as recommended by the regent, except that from the west door of the University Hall and that this amount be expended under the direction of the committee on buildings and grounds.
- 6. An appropriation of \$300 from state appropriation for buildings and grounds, for cleaning buildings; and \$150 for care of grounds, both sums to be expended under the direction of the business agent.
- 7. An appropriation of 10.85 from current funds, to pay expenses incurred by the regent, as per account rendered.
- 8. With regard to the request made by the Athletic Association your committee recommends that said association be asked to lay before the finance committee a statement of its financial condition, taken from its books, so that the committee may have at hand the facts on which to base intelligent action.
- 9. An appropriation of \$245 from U. S. fund for civil engineering department.
- 10. An appropriation of \$500 from current funds, for supplies for the chemical department, the amount to come from the income of the department.
- 11. An appropriation of \$100 from state appropriation for apparatus and materials for the use of the department of Greek.
- 12. An appropriation of \$103 from current funds, for the school of art and design.
- 13. An appropriation of \$200 from U. S. funds for purchase of a band saw and fixtures for the use of the architectural shop.
- 14. An appropriation of \$146 from current funds, to pay expense bills of Messrs. McKay and Armstrong.
- 15. An appropriation of \$100 from current funds, for the military department, for re-fitting target butts and the purchase of a tent and other material.

As to the other requests, your committee refers them back to the board without recommendations, but it deems them worthy of immediate attention.

Respectfully submitted.

ALEXANDER MCLEAN, JAMES E. ARMSTRONG, Finance Committee.

URBANA, ILL., June 7, 1893.

To the Board of Trustees of the University of Illinois.

Gentlemen: Your committee recommends that an appropriation from the state appropriation for taxes paid by the treasurer be made for taxes on lands in Minnesota.

Also that the president and secretary be directed to draw upon the Auditor of Public Accounts such orders as the law requires, in order that he may issue to the treasurer of the University his warrants upon the state treasurer for the amounts appropriated by the legislature to the University of Illinois and to the State Laboratory of Natural History.

Your committee further recommends that from the appropriations for the State Laboratory of Natural History assignments be made for the quarter beginning July 1, 1893.

Respectfully submitted,

ALEXANDER McLean, Finance Committee.

James E. Armstrong,

Mr. McLean offered the following resolution, which was adopted:

Resolved, That a special committee of three members of this board, and Drs. Burrill and Forbes, be appointed for the purpose of obtaining such material from the World's Columbian Exposition as will be of value to the University; and that the sum of \$2,000 from the state appropriation be appropriated to be used in purchasing such material, for delivering, and other expenses, and that said committee be given full power and authority to carry out the purpose of this resolution, reporting their action to this board.

The president appointed for this committee Messrs. Armstrong, Morgan, and Morrison.

Mr. Morgan offered the following resolution, which was adopted:

Resolved, That Dr. Burrill, Professor Morrow, Professor Talbot and Professor Palmer be placed in exclusive charge and authority over the mechanical exhibit of the University at the World's Columbian Exposition and put it at once into a thoroughly presentable condition.

Mr. Bullard reported from the executive committee that the Union Manufacturing Company had tendered the board, through the business agent, a contract concerning the water supply for the University, as follows:

### CONTRACT.

It is hereby agreed by and between the Union Manufacturing Company, party of the first part, and the trustees of the University of Illinois, party of the second part, that in consideration of the sum of \$500 per year the said Union Manufacturing Company shall furnish the said University of Illinois with a sufficient supply of water, to be used for the same purpose for which it is now being used by said University, for the term of five years from the first day of January, 1893, the said party of the second part agreeing to pay party of the first part \$125 at the end of each three months during the existence of this contract, beginning the first day of April, 1893. It is hereby understood and agreed that should anything occur at water works' plant or to the mains to prevent party of the first part from furnishing the supply of water above mentioned, they will not be held liable for damages, and party of the second part will be released from paying for water for the time the supply is cut off.

The committee recommended that the contract be agreed to by the University when the following words had been added thereto: "It is understood and agreed that the said University may use water for all purposes necessary for the conduct of the institution."

The president and secretary were authorized to execute such contract on behalf of the University.

The sum of \$50 was appropriated from current funds to cover the deficiency in the appropriation for water supply since the expiration of the former contract, October 1, 1892.

The business agent made the following report:

University of Illinois, June 6, 1893.

Nelson W. Graham, Esq., President Board of Trustees, University of Illinois,

SIR: I have the honor to hand you herewith the following named financial statements:

Paper A is a statement of the current appropriations for the three months ending May 31, 1893.

Paper B is a showing of the state appropriations May 31, 1893.

Paper C and C 2nd is the same for the United States fund.

Paper D is a list of vouchers presented for audit, being No. 301 to 675 inclusive.

Paper E is an estimate of current receipts and expenses for the three months ending Sept. 1, 1893.

Paper F is an estimate of current receipts and expenses, on the present basis as to the expenses, for the twelve months ending Sept. 1, 1894.

PAPER A—CURRENT APPROPRIATIONS.

March 14, 28, and 29, 1893.	Appr'p'iated.	Receipts appr'priated.	Expended.	Balance.
Board expense	\$500 00		\$460 87	\$39 13
(Current	1		(5,634 42)	
Salaries for instruction ⟨ State	<b>15,995 00</b>		$\{6,925,24\}$	1,075 06
United States fund.			(2,360 28)	
Salaries for services	1,865 00	\$16 66	1,783 68	67 98
Buildings and grounds	100 00	40 00	72 44	67 56
Fuel and lights	. 1,000 00	37 54	811 89	225 65
Stationery, printing, catalogue	1,100 00		491 42	608 58
Preparatory year		665 00	1,064 04	
Mechanical department	100 00	211 84	282 12	29 72
Architectural department	100 00	2,082 28	1,428 85	753 43
Agricultural department	100 00	1,893 97	535 00	1,458 97
Horticultural department	50 00	145 70	31 75	163 95
Military department	50 00		21 87	28 13
Laboratories	200 00	132 00	314 76	17 24
Library and apparatus			15 68	34 32
Incidentals			98 95 78	101 05
Gymnasium	50 00		1 78	49 22
University extension	75 00			75 00
Water supply	150 00		37 55	150 00 62 45
Furniture and fixtures			37 99	60 00
Military scholarships			131 84	18 16
Accredited schools	200 00		183 70	16 30
High school circular			100 10	100 00
Natural History Hall, moving	466 60		379 83	86 77
Minnesota lands	117 85		12 75	105 10
Illini subscriptions			93 33	93 34
Art department			30 00	10 96
University bulletins				100 00
Technograph			100 00	100 00
Map of grounds.		1	100 00	25 00
Commencement expenses	200 00		1	200 00
Music fees		183 25	183 25	200 00
Music	100 00	100 20	1	100 00
			· · · · · · · · · · · · · · · · · · ·	100 00

PAPER B-STATE APPROPRIATIONS.

	Received.	Expended.	Balance.	Assigned.
Taxes on Minnesota lands. Buildings and grounds. Apparatus and materials Mechanical and architectural shops	\$3,044 23 5,000 00 3,000 00 4,000 00	4,456 31 2,835 24 3,794 43	164 76 205 57	\$543 69 164 76 205 57
Books and publications. Cabinets. Expenses of instruction Heating Military Hall. Natural History Hall. Heating and furnishing same	2,000 60 500 00 40,000 00 3,500 00 60,000 00 10,000 00	246 12 40,000 00 3,367 17 60,000 00	253 88 132 83	253 88 132 83
Metallurgical laboratory	4,000 00 \$135,044 23		\$1, 377 27	
Illinois State Laboratory of Natural History	\$15,650 27	\$12,412 09	\$3,238 18	\$2,858 58

## PAPER C-UNITED STATES FUND.

	Received.	Expended.	Balance.	Assigned.
Year ending June 30, 1890.				
Before reported on	\$13,000 00 2,000 00	\$13,000 00 1,903 88	\$96 12	\$96 12
Total	\$15,000 00	\$14,903 88	\$96 12	\$06 12
Year ending June 30, 1891.				
Before reported on	\$14,510 00 1,430 00 60 00	1,314 85	\$115 15 14 14	\$115 15 14 14
Total	\$16,000 00	\$15,870 71	\$129 29	\$129 29
Year ending June, 1892.				
Before reported on Library Mechanical department English literature Metallurgical laboratory Total	\$13,650 00 2,000 00 1,100 00 150 00 100 00 \$17,000 00	1,816 11 1,100 00 30 23	\$183 89 119 77 100 00	\$183 89 119 77 100 00 \$403 66
Year ending June 30, 1893.				
Salaries for instruction Mining engineering Agricultural lectures Mechanical department. Veterinary department Zoölogical department College of engineering Testing laboratory. Physics and electricity. Unassigned	\$15,100 00 50 00 250 00 400 00 40 00 150 00 40 00 800 00 770 00	45 44 48 95 350 90 400 00 150 00 21 13 786 62	\$4 56 201 05 49 10 40 00	18 87 13 38
Total	\$18,000 00	\$16,903 04	\$1,096 96	\$326 96

The board is requested to appropriate the amounts given under the head of expenses, in Paper E, for the three months ending September 1, 1893.

Respectfully submitted,

S. W. SHATTUCK,

Business Agent.

Thirty-five dollars was appropriated from current funds for repairs and tuning the piano in chapel.

The board then adjourned to meet at 9 a. m., Wednesday, July 5, 1893, at the University Hotel, Chicago.

N. W. GRAHAM,

W. L. PILLSBURY,

President.

Secretary.