# MEETING OF JUNE 12, 1888.

The Board met at the University parlor, at 3 p. m., June 12, 1888, and no quorum being present, adjourned to meet at 9 o'clock a. m., June 13, 1888.

# SECOND DAY'S SESSION.

The Board met at 9 o'clock a. m.

Present—Trustees Bennett, Eisenmayer, McKay, McLean, Millard, Pullen and Shawhan.

Absent—The Governor, Dr. Edwards, Messrs. Cobb, Clemens and Dysart.

The records of the meetings of March 13 and March 21, 1888, were read and approved.

The following report from the Executive Committee was received and the recommendations contained therein were approved:

To the Board of Trustees of the University of Illinois:

The undersigned committee respectfully reports that pursuant to the call of the chairman, it held a meeting in Chicago, March 31, 1888, and transacted the following business:

Dr. S. H. Peabody, President of the Board oi Direction of the Agricultural Experiment Station of the University of Illinois, presented the following report and recommendations from said Board of Direction:

To the Board of Trustees of the University of Illinois:

The Board of direction of the Agricultural Experiment Station presents this, its first report upon the subjects committed to it for consideration.

The Board has first sought to determine the general scope of experimental work which should be undertaken, as indicated by the nature of the agricultural and kindred pursuits carried on in the State of Illinois, and the present condition of this great industry. While many topics present themselves as worthy of investigation, and such as, sooner or later, will demand consideration, the following appear to be the most important. Others seem to group themselves about these, or to be secondary issues naturally growing out of these. These four have been selected by what seems a principle of natural selection:

1. The culture of the cereal grains and the grasses.

- 2. The feeding of animals with reference to growth and meat product.
- 8. The feeding of cattle with reference to the milk product.
- 4. Orcharding and the culture of small fruits and garden products.
- In each of these departments thought has been taken as to:

1. Experiments which can be undertaken at once, in order that some report of the work done, or in progress, may be sent to the waiting public at an early day.

2. Experiments of a broader and more exhaustive character which may require considerable time to bring about results, intelligible and reliable. As the working season is now upon us, most attention has been given to find what lines of work in these greater departments can be entered upon at once. The following are recommended:

1. In the department of field experiments:

(A) Plat culture for testing varieties. For this season corn, oats and roots. Object, to determine the truthfulness of named varieties and their relative values under ordinary and similar cultivation.

(B) Plat culture of some carefully chosen varieties. Object, to determine the influence of definitely varied methods of cultivation; or conditions of soils; or methods of fertilization.

(C) The uses of fertilizers; as barn-yard manures; commercial fertilizers; mineral substances, etc.

(D) The following up of lines of crop experiments already undertaken, and partially worked out on the University farms upon the points named above, and upon rotation, drainage, etc. To corn and oats, named above, must be added wheat, the grasses and other forage plants, when the season comes for beginning such experiments.

2. In the department of stock-feeding:

Experiments should be undertaken to determine the relative values of different kinds of food, with reference to distinctly chosen and definite purposes:

(A) The value of ensilage fed to growing animals compared with other substances, as hay or special foods, etc.

 $(B) \;$  The comparison, later in the season, between grain and grass feeding, on cattle of various ages and conditions.

3. In the department of dairy feeding:

(A) The feeding of ensilage to dairy cows, in order to ascertain its value in comparison with other forage, hay, grain, or other foods.

(B) Experiments upon the use of certain salts with milch cows.

(C) Experiments upon the frequency with which water should be given to milch cows and the temperature which is best for their use.

(D) Experiments upon the composition and characteristics of the milk from animals of different breeds and their grades.

(E) In this connection it is deemed advisable to to begin a careful investigation with a view to discover some simple and exact method of determining the quantity of fatty matter in fresh milk. The subject is one of great importance in the operation of creameries, concerning both the farmer who sells milk and the manufacturer who buys it, and as a means of indicating the true value of milk giving animals. Some work already done in this direction leads to the belief that success may reward further effort.

4. In the department of horticulture:

(A) Experiment with a part of the old orchard now on the University farm, using varied cultivation, various fertilizers, etc.

(B) Plant a limited area with new trees; as apples, pears, plums, etc., with a view of testing their adaptability to the situation as well as the influences of varied culture upon them, particularly as to the use of fertilizers.

(C) To conduct similar experiments upon grapes, using in part the stock now on hand and in part new plantings.

(D) Plant small fruits for testing varieties, culture, hybridization, etc.

(E) Investigate carefully and exhaustively a few kinds of vegetables, one, two or more to determine identity of varieties, comparative values, adaptation, and culture.

(F) Begin some tests as to the use of special fertilizers about forest trees.

(G) Investigate plant diseases and the remedies therefor.

## GENERAL PLANTING.

To prepare for feeding experiments upon live stock in the next fall and winter, a considerable planting of corn for ensulage, and of roots should be made. In this will be found also opportunity for experimenting upon the kinds of seeds, thickness of planting, etc., etc.

## LAND.

It is proposed that the Station occupy for the coming season most of the land of the north farm, beginning at a point south of the University buildings and extending through to the south road on both sides of the central driveway. The agricultural experiments to be mainly east of the driveway; horticultural experiments to be west thereof. It is not thought desirable that a general and permanent assignment should be made, but that the matter may be so left open that such lands may be used in successive seasons as the varying needs of the Station may require.

Feeding experiments should be conducted as far as possible at the north barn. But feeding of ensilage must be done at the south barn, as the silo is there. Feeding of cattle on grass must be done at either place, as the exigencies of the season may require. In this respect it will be necessary to allow some latitude of discretion to the managers of the farm and of the Station.

#### QUARTERS.

The Board of Direction finds that the upper story of the chemical building, now nearly unoccupied, comprises a suite of rooms well adapted for the purpose of the Station, subject to the only objection that they are up two flights of stairs. The Board would select the northeast room for an office; the middle room on the north for a library; the east room for mailing and work room; the large south room to be divided by a partition into two apartments, the southwest to be used as a chemical laboratory and the southeast room for collections. The laboratory must have a small room separated from it as a balance and record room, and should communicate with the photographic rooms, which are likely to be frequently used.

## NEW BUILDING.

A building is needed in which various work intermediate between the field and the office shall find a place; such work as the handling of grains and seeds, receiving, weighing, storing, packing, etc. The agricultural and horticultural work will each need such space. Many experiments in feeding should be followed by a careful manipulation of the product, separating, for example, the different kinds of flesh in the ultimate, physical analysis of the animal. A place for such work should be provided. A plan of such a building is prepared to be 30x56 feet, in four rooms; to stand over a cellar eight feet deep, for storage and for such horticultural work as requires the protection of a relatively moist and cool place; the walls to be 16 feet high; the upper floor dropped b feet, furnishing a dry loft for the storage of grains, seeds, etc. The building should have a suitable platform along one side of which wagons may easily receive and deliver loads. The doors should open on this platform, and it should be covered with a light vertanda roof.

This building should be placed on the rise of ground south of the veterinary house, and in the vicinity of the large sycamore tree now there standing. It will be convenient to the various agricultural and horticultural experiments, and may be used for tool house, etc. It is estimated that it may be built within the limit of the law, three thousand dollars (\$3,000).

## FERTILIZERS' HOUSE.

A small rough building, about 16x20 feet, should be built for the storing and mixing of fertil izers. It should be in some inconspicuous place near the warehouse named above.

The changes in the chemical laboratory require the erection of a partition across one room about 45 feet long and one about 25 feet long enclosing the balance room. These partitions should be of wood for four or five feet in height, and for the rest of the distance to the ceiling of glazed sash, for light and ventilation. Three doors must be opened, the rooms cleaned, painted and calcimined.

## EQUIPMENT.

The requirements for chemical apparatus; for scales and other apparatus; for tools and light implements; for meteorological instruments, and for library will be found among the estimates.

#### OFFICERS AND ASSISTANTS.

Aside from the chiefs named elsewhere, the following are recommended at salaries not to exceed the sums named:

A secretary in charge of the office, as named in the plan of organization, at a salary of\$1,	500	00
Assistant agriculturist	, 500	00
Assistant horticulturist	,000,	00
Assistant chemist, first	,200	00
Assistant chemist, second	750	00
Assistant botanist	750	00

## LIBRARY.

Mention is made of the purchase of books for the Station library. This is deemed of first importance. The Station should have a working library of its own, for use and consultation in its varied kinds of work; scientific journals, English, French and German will be much needed. What has been done should be known in order that plans may be wisely laid for the conduct of new work. In the reports of the Station it will be necessary to summarize that which has been done before in similar lines.

It is believed that no more important use of the funds can be made than in buying well chosen books of reference. It is not advised that the University library should be duplicated except in some works which may be required for constant use.

By order of the Board of Direction,

S. H. PEABODY, President.

### G. E. MORROW, Secretary pro tempore.

On motion, the recommendations of the Board of Direction, as presented in said report, as to the conduct of experiments in the departments in said report named; to wit: the department of field experiments, department of stock feeding, the department of dairy feeding, and the department of horticulture were approved.

And it was further ordered that the Board of Direction be and is authorized to enter upon and conduct the said experiments and to expend thereupon during the quarter ending June 30, 1888, exclusive of salaries of regular officers and assistants and special sums otherwise appropriated, a sum of money not to exceed fifteen hundred and ninety dollars (\$1,590.00).

And it was further ordered by said Committee that the last named sum be appropriated from Agricultural Experiment fund for such purpose.

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And it was further ordered by the said Committee that all lands belonging to the University and lying south of the University main building on the north farm, or so much thereof as the Station may require, be assigned for the use of the Station and that the use of the barns belonging to the University be granted for feeding experiments.

It was further ordered by said Committee that cattle may be fed, and special crops grown upon such parts of the south farm belonging to the University as may be needed, providing, such use of the south farm shall not interfere with the University crops growing.

On motion it was further ordered by said Committee that rooms upon the upper floor of the chemical building and, if found necessary, a room for an office on the first floor of said building, be assigned for the use of said Station, and permission given to erect partitions dividing the large south room of the upper story in such building according to the plans presented, and to open necessary doors for convenient communication between the apartments; also to make connections with the water system of said building and to arrange the gas system in such a manner that the expense thereof may be kept distinct from that used for the University, the charges, alterations and repairs in said chemical building not to exceed the cost of five hundred dollars (\$500.00).

It was further ordered by the said Committee that the Board of Direction proceed to erect a building for the purposes of the Station according to the plans presented and approved by the Committee, and that the same be located west of the avenue leading south from the University main building and near the large sycamore tree as described in said report; that the cost of said building when completed shall not exceed the sum of three thousand dollars (\$3,000.00); also that said Board build house for storage of fertilizers as recommended, in some position where it shall be neither conspicuous nor offensive, at a cost not to exceed one hundred dollars (\$100.00), and that the Board of Direction be authorized to make such other and sundry repairs as may be found needful, not to exceed the cost of fifty dollars (\$50.00).

On motion it was further ordered by the Executive Committee that the sum of three thousand dollars (\$3,000) be appropriated from the Experiment Station fund to be used on the said building and repairs.

The following recommendations and nominations were presented by the Board of Direction as to officers of the Station, viz.: Prof. George E. Morrow to be agriculturist, Prof. T. J. Burrill, to be horticulturist and botanist, Prof. William McMurrie to be chemist.

On motion the committee approved the recommendations and appointed the respective persons named for the positions recommended, they to hold their respective offices until April 1, 1889, and until their successors are appointed.

And it was further ordered by the committee that a sum not to exceed one-third of the salaries of the said professors, for the time in which they shall be employed in the service of the Station, shall be transferred from the Experimen. Station fund to the treasury of the University in accordance with the estimates for said services made and reported by the Board of Direction.

Upon the nomination of the Board of Direction the following persons were appointed at the salaries named, to-wit: Thomas F. Hunt, assistant agricul'ur ist, at a salary of fifteen hundred dollars (\$1,500) per annum; George W. McChner, assistant horticulturist, at a salary of no e thousand dollars (\$1,000) per annum; and John A. Miller, assistant chemist, at a salary of twelve hundred dollars (\$1,200) per annum, such persons to hold their respective offices until the first of April, 1889, and until their successors are elected.

Upon motion it was further ordered that the Board of Direction be authorized to employ persons to fill the following positions in said Station at the salaries named, viz.: An assistant chemist at a salary of seven hundred and fifty dollars ( $\xi750$ ) per annum; an assistant botanist at a like salary. The employment not to extend beyond April 1, 1889.

On motion the following appropriations were made from the experiment fund for the purposes named, the moneys to be used from said appropriations for the respective purposes appropriated, not to exceed the sum so named for that purpose, to-wit:

For printing, including bulletin for first quarter, records. stationery and postage	\$500	00
For tables, cases and apparatus in chemical laboratory	2,700	00
For botanical apparatus	320	00
for scales and tools	200	00
For type writer	100	00
For meterological instruments	100	00
For books and periodicals	3.000	00
For incidental expenses	500	00
For salaries of officers and assistants	2,175	00
On motion the committee editors al		

On motion the committee adjourned.

S. M. MILLARD, \_\_\_\_\_ EMORY COBB, \_\_\_\_\_ Executive Committe.

Treasurer J. W. Bunn read his quarterly report, which was received and referred to the Auditing Committee.

1000		Dr.		
1888. March	13	To balance		\$9,985 58
		" interest on land contract No. 30, E. L. Baughman	** ***	596
March	31	" amount received on account University students' fees	\$1,500 00 300 00	
		" " " " " " " " " " " " " " " " " " "	25 00	
May	1	To interest on Sangamon county school bonds		$1,825 \ 00 \ 325 \ 00$
May	12	" interest on land contract No. 18, D. A. Young, assignee	\$212 20	0.00 00
•		' interest on land contract No. 18, D. A. Young, assignee	8 40	
		(, , , , , , , , , , , , , , , , , , ,		
				331 80
May	31	To amount received on account buildings and grounds "fuel and lights	\$77 00 103 70	
		mechanical department	14 95	
		" architectural department	29 45	
		** ** agricultural department	1,870 03	
		**         horticultural department           **         laboratories	$     182 65 \\     156 82 $	
		" library and apparatus	50 00	
		" music fees	22 00	
		" Minnesota lands	10 00	
		''     ''     preparatory year       ''     ''     University students' fees	197 50 744 00	
			/	3,458 10
				\$15,931 39
		Cr.		
May	31	By amount paid on account board expenses	\$133 62	
-		" salaries	10,454 79	
		oundings and grounds	23 90 164 35	
		''     fuel and lights       ''     stationery and printing	55 30	
		"      "     "	489 99	
		" mechanical department	216 60	
		architectural department	356 34	
		"     "     "     agricultural department     "     horticultural department	$\begin{array}{ccc} 624 & 66 \\ 104 & 89 \end{array}$	
		" chemical department	25	
		" military department	20 50	
		" " library and apparatus	48	
		" incidental expense	70 81	12,716 48
		" anniversary exercises	\$31 26	10,110 10
		" music fees	22 00	<b>50 00</b>
		State appropriations—		53 26
		By amount paid on account buildings and grounds	\$195 67	
		" " mechanical and architect'al shops	270 25	
		books and publications	893 86	
		cabinets.	$     131 04 \\     645 47 $	
		"     "	348 21	
		"     "	99 18	
		" fire walls and ventilation	15 60	
		" State laboratory of Natural Hist'y	1,058 17	3,157 45
		Balance		3,137 40
				\$15,931 39

JOHN W. BUNN, TREASURER, IN ACCOUNT WITH THE UNIVERSITY OF ILLINOIS.

Urbana, June 12, 1883.

JOHN W. BUNN, Treasurer.

The Business Agent presented his report, which was received and referred to the Auditing Committee:

Six Months Ending August 31, 1888.	Appropriated	Receipts also Appropriated	Expended.	Balance.
Board expenses. Salaries for instruction. {State Sularies for services. Buildings and grounds. Mechanical department. Architectural " Horticultural " Horticultural " Horticultural " Horticultural " Laboratories. Fuel and lights. Stationery and printing. Library and apparatus. Incidental expenses.	$\begin{array}{c} 1,300 \ 00 \\ 50 \ 00 \\ 200 \ 00 \\ 200 \ 00 \\ 200 \ 00 \\ 200 \ 00 \\ 50 \ 00 \\ 200 \ 00 \\ 1,000 \ 00 \\ 600 \ 00 \\ 50 \ 00 \end{array}$	14 95 29 45 1,870 08 182 65  156 82 103 70	$\begin{array}{c} 645 & 47\\ 9, 593 & 79\\ 861 & 00\\ 23 & 90\\ 216 & 60\\ 356 & 34\\ 624 & 66\\ 104 & 89\\ 20 & 50\end{array}$	$\begin{array}{c} 10,910\ 74\\ 439\ 00\\ 103\ 10\\ \end{array}$
Sundries. Furniture and fixtures. Water supply. Anniversary expenses Commencement expenses. Certificates for accredited high schools. Preparatory year Music fees. University students' fees. Minnesota lands		497 50 22 00	489 99 22 00	$150 \ 00 \\ 100 \ 00 \\ 7 \ 51$

## CURRENT APPROPRIATIONS.

## STATE APPROPRIATIONS.

	Appropri- ated.	Received.	Expended.	Balance.
Taxes on land (½ per annum).         Buildings and grounds (½ per annum).         Mechanical and architectural shops (½ per annum).         Books and publications (½ per annum).         Cabinets (½ per annum).         Expenses of instruction (½ per annum).         Apparatus and material (½ per annum).         Metallurgical laboratory (½ per annum).         Fire walls and ventilation	$\begin{array}{c} 3,000 & 00 \\ 2,000 & 00 \\ 32,000 & 00 \\ 3,000 & 00 \end{array}$	$\begin{array}{c} 2,000 \ 00 \\ 1,500 \ 00 \\ 1,500 \ 00 \\ 1,500 \ 00 \\ 1,000 \ 00 \\ 16,000 \ 00 \\ 1,500 \ 00 \\ 2,000 \ 00 \end{array}$	$\begin{array}{c} 1,986 \ 41 \\ 1,465 \ 50 \\ 908 \ 43 \\ 660 \ 13 \\ 16,000 \ 00 \\ 1,244 \ 34 \\ 1,195 \ 10 \end{array}$	34 50 591 57 339 87 255 66 804 90
Total	\$59,000 00	\$31,461 69	\$29,413 16	\$2,048 53
Illinois State Laboratory of Natural History	16,325 00	9,390 71	6,008 65	3,382 06

# The following resolution presented by Trustee Bennett was adopted:

Resolved, That the Treasurer of the Board of Trustees of the University of Illinois is hereby authorized to receive and receipt for all moneys and to endorse all orders, drafts and checks due and payable to the said Board of Trustees or to the said University of Illinois, and especially all drafts drawn by the Treasurer of the United States payable to said Board of Trustees or to said University of Illinois on account of the Agricultural Experiment Station of the said University.

The following resolution was offered by Trustee McLean, and adopted:

*Resolved.* That the President and Secretary be directed to draw three requisitions on the State Auditor for such moneys as may be due on State appropriation for the University and for the State Laboratory of Natural History for the year 1888.

The following report from the Auditing Committee was received and approved:

## Board of Trustees, University of Illinois:

Your committee respectfully report that they have examined the accounts and bills on which warrants, Nos. 451 to 675 (both inclusive) were drawn, and find the same correct as reported by the Business Agent. They have also examined the report of the Treasurer and find the same correct. We recommend that the same be placed on file.

F. M. McKAY, G. R. SHAWHAN, Auditing Committee.

On recommendation of the Faculty degrees and certificates were granted as follows: [For list, see Regent's report below.]

Adjourned to meet at 3 o'clock p. m.

## AFTERNOON SESSION.

The Board met at 3:30 p.m.

Present—Trustees Bennett, Cobb, McKay, McLean, Eisenmayer, Millard, Pullen, and Shawhan.

The Regent read his report, which was received.

## To the Trustees of the University of Illinois:

GENTLEMEN: We are come to the close of another collegiate year, of whose progress and results it is fair to say that they are the most satisfactory of any year since my connection with the University. The class about to graduate numbers 35.

The Faculty recommends that degrees be conferred as follows:

Degree of B. S. in the College of Agriculture-

Harry S Grindley.

Degree of B. S. in the College of Engineers-School of Mechanical Engineers:

> Arthur Gustave Goldschmidt, Jonathan Huntoon Samuels.

School of Civil Engineers:

Lincoln Bush, Edward E. Ellison. Warren R. Roberts, John W. Taylor.

School of Architecture:

### George R. Petty.

Degree of B. S. in the College of Natural Science-School of Chemistry:

Benjamin Bing, George B. McHugh. Jacob A. Patton, Charles P. Van Gundy.

School of Natural History:

Truman P. Carter, Effie Anne Mathers.

Degree of B. L. in College of Literature and Science-

Frederick D. Bowditch. Ralph E. Dewey, Grant Frederick, Nathan P. Goodell. George W. Myers, Raymond M. Place. Mary Lena Barnes, Ella Connet, Mary A. Eldridge, Nellie McLean.

Degree of B. A. in College of Literature and Science-

Edward W. Pickard.

Degree of M.S. in College of Natural Science-John A. Miller.

Degree of M. L. in College of Literature and Science-George M. Savage.

Degree of M. A. in College of Literature and Science-

Samuel A. Harrison.

The Faculty farther recommends that the following receive the full certificate of the University:

J. Grant Beadle, William C. Bryant. Frank L. Davis, Adolphus D. Folger, George Greaves, John V. E. Schaefer. Etta L Beach, Nellie W. Jillson. Mary C. McLellan, Ida M. Stoltey.

The following, having satisfied the conditions required by the military department of the University, have been recommended to the Governor of the State, and he has caused commissions to issue to them as Captains by brevet in the State Militia:

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Frederick D. Bowditch, Frank L. Davis, Edward E. Ellison, George B. McHugh, George W. Myers, Jacob A. Patton, Edward W. Pickard, Jonathan H. Samuels.

I am requested by the Faculty to ask the decision of the Trustees upon this question:

Does the act of the legislature, which gives authority for the issue of certificates of scholarship under the seal of the University, sanction the insertion in such certificates of any record of studies other than those which have been studied by the recipients during their attendance at the University?

Prof. McMurtrie desires leave of absence for the summer vacation.

The time has come when a competent assistant should be employed in the machine shop. The large number of students in this department at the opening of the year, made it necessary to appoint temporary aid, and we may expect as large a number next fall. I would advise that a competent person be secured for this work at asalary not less than, say, \$80 per month.

I again call attention to the fact that the largely increased number of students has increased the cost of this department much beyond that of former times. I see no way to meet this expense but to charge a small fee for material and power, and suggest that a fee of \$2.60 per term, while it would be inconsiderable to the student, would relieve what is becoming a very serious outlay. It would at least pay the expense of the added instructor.

The same reasons have made it necessary to employ more teaching force in the drawing departments. Another assistant is needed in the college of engineers, whose work shall be chiefly drawing, and who could, by a readjustment, give relief in other quarters.

Other recommendations would be made, if it were not too evident that the finances of the University will not permit such recommendations to be received.

### REPAIRS AND IMPROVEMENTS.

In most respects our buildings are in good condition, but the following items should receive attention on State account.

## Buildings and Grounds 1888-9.

1. The roofing of the main building needs renewal on the south slope of the main part. About forty squares should be relaid at an expense estimated at \$250.

2. The wood work of the greenhouse is in need of repair. The sills of the glass work are decayed, as well as many of the uprights. It is not easy to say how extensive the repairs may need to be, but it has been thought that as much as must be done can be done for \$200.

3. The heating apparatus in the chemical building needs a thorough overhauling and some extension. The boiler has been tested and needs new pipes, gaskets and repairs of furnace. Estimated at \$120.

Also the main steam pipe and branches and returns and for four new radiators, the estimate is \$235.80.

A part of this might with propriety be paid by the Experiment Station, as it is needed for warming the upper rooms.

4. For care of lawn to October 1, \$150.

5. For cleaning, etc., \$300.

Other improvements are much needed, but these seem to be imperative, and to make as great a draft upon this fund as can be permitted at this time.

From the State appropriation for books and periodicals, 1888-9, there is asked for binding \$125. From State appropriation for apparatus and material, 1888-9, for apparatus for instruction in steam testing, \$50.

For a steam indicator and fitting, \$100.

I present the following reports:

Du C II Dechode II D Decent.

The report of the Professor of Agriculture upon the farm:

UNIVERSITY, June 11, 1888.

Dr. S. H. Peabouy, LL. D., Regent?	
SIR: During the three months closing June 1st, The receipts from the farms have been	\$1,870 03 
Leaving balance in favor of farms	
Work on the farm is well advanced for the season. As a whole the prospect crops. The live stock is in good condition.	t is fair for good
Respectfully submitted, G. E	E. MORROW.
The report of the Director of the State Laboratory of Natural History.	
The report of the Board of Direction of the Agricultural Experiment Station.	

The list of Professors and Instructors for the year beginning September 1, 1888.

Respectfully submitted,

SELIM H. PEABODY, Regent.

The Board proceeded to take up the various recommendations contained in the Regent's report.

The question of certificates was referred to a special committee consisting of Trustees Bennett, McKay and McLean for report at the September meeting.

Adjourned to 9:30 p.m.

# EVENING SESSION.

The Board assembled at 9:30 p.m.

Present as above.

Trustee McKay presented the following resolution, which was adopted:

*Resolved*. That a leave of absence be granted to Prof. Wm. McMurtrie for the summer vacation, provided, it the work in his department shall need his service, he will hold himself in readiness to perform such services as the Regent may direct.

On motion of Trustee Bennett, it was ordered that the sum of two and 50-100 dollars per term be charged each student taking instruction in the mechanical shops as an incidental fee for expense of power and material.

On motion of Trustee McLean, the Regent and Executive Committee were authorized to secure for the next year the services of an assistant instructor in the shops at a salary not to exceed \$80 per month for 10 months.

The Farm Committee reported and recommended that the report on farms submitted by Professor Morrow be received and placed on file.

# On motion of Trustee Cobb the following appropriations were made from State appropriations:

Buildings and grounds— For repairs on roof of main building	355	00
Books and publications— For binding books and periodicals	125	00
Apparatus and materials— For apparatus for instruction in steam testing For steam indicator and fittings	50 100	00 00

# The report of the Board of Direction of the Experiment Station was read and on motion was approved, and ordered to be printed in the minutes:

## To the Trustees of the University of Illionis:

The Board of Direction of the Experiment Station begs leave to report as follows:

The work of the Station may be said to be fairly started. About fifty experiments are in progress in field culture, stock feeding and horticulture. The work of erecting a warehouse is well forwarded. Repairs in the chemical building are mostly completed, and the Secretary's office is in use. Purchases of apparatus and books, and of other needed material have been made.

The Board of Direction asks as to the fiscal year soon to close that authority may be granted to it to expend the unappropriated balance of the fifteen thousand dollars received or to be received from the United States Treasurer for the year ending June 30, 1888, and any balances which may be found to remain from sums already appropriated for that year, to be used for the Experiment Station for such purposes as the interests of the Station may require.

The Board of Direction of the Agricultural Experiment Station desires to undertake, with the approval of the Board of Trustees of the University, the following Experiments:

## FIELD EXPERIMENTS.

Grasses and Clovers: Experiments to determine

1. The effect of cutting at different degrees of maturity on yield and on chemical composition.

2. The effect of the mode and of the degree of field drying upon chemical composition.

Oats: An experiment to determine the effect of harvesting at varying degrees of maturity upon yield and upon chemical composition.

Oats and Wheat: An experiment to determine the shrinkage after harvesting.

Wheat: Experiments in relation to .

1. Comparison of varieties,

2. Methods of soil preparation.

3. Methods of seeding.

4. Effect of fertilizing.

The Board of Direction desires to carry on this last experiment both at the Station and at some other places in the State.

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Corn: An experiment consisting of a study of the roots at different ages.

Soil: An experiment to determine the evaporation and the temperature.

## FEEDING EXPERIMENTS.

Feeding Steers: An experiment to determine the relative value of new and old corn for autumn feeding on grass.

Feeding Pigs: An experiment to determine the relative value of new and old corn for early autumn feeding.

The Board of Direction reports that it has employed, under the authority of section 10 of the plan of organization, the following persons for the duties specified:

Miss Kate McIntyre as stenographer, at \$40 per month.

Mr. Gustaf Dahlstrom as gardener, at \$50 per month, and such needful workmen upon the experiments, and teams for the same as occasion has required.

The following statements are presented:

Exhibit A showing sums appropriated by the Trustees for specific purposes; sums expended or contracted for, and balances now appearing:

Accounts,	Appropriated	Expended.	Contracted for	Total.
Expenses of experiments exclusive of salaries	\$1,590 00 3,000 00 500 00 2,700 00 320 00 200 00 100 00 3,000 00	117 38 283 63 	$ \begin{array}{c} 100 & 00 \\ 3,000 & 00 \\ 292 & 80 \\ 875 & 00 \end{array} $	$\begin{array}{c} \$1,404 & 28\\ 3,000 & 00\\ 337 & 04\\ 2,700 & 00\\ 320 & 00\\ 100 & 00\\ 100 & 00\\ 100 & 00\\ 3,000 & 00\\ 603 & 05\\ 1,525 & 00\\ \$13,306 & 59\\ \end{array}$

## EXHIBIT A.

Exhibit B. List of warrants paid, with vouchers therefor, Nos. 1 to 73, except No. 14. Exhibit C. Estimates for the quarter which will end Sept. 30, 1888.

EXHIBIT C-ESTIMATES FOR THE QUARTER ENDING SEPT. 30, 1888.

Books and periodicals. Buildings and repairs, including building a silo. Bulletins Expenses of Board of Direction	\$75 275 125 100	00 00 00
Incidental expenses. Printing, stationery and postage. Salaries. Tools.	50 75 2,050	00 00 00
Wages and teams. Wheat culture away from University farm	850	00
Total	\$3,750	00

Respectfully submitted for the Board of Direction of the Agricultural Experiment Station,

S. H. PEABODY. President.

W. L. PILLSBURY, Secretary.

On motion of Trustee McKay the recommendations of the Board of Direction of the Experiment Station for further experiments were adopted, and the Board was authorized to proceed with them.

On motion of Trustee McLean it was ordered that authority be given to the Executive Committee of the Board of Direction of the Experiment Station to expend the unappropriated balance of the \$15,000 received, or to be received, from the U. S. Treasury for the year ending June 30, 1888, and any balances, which may be found to remain from sums already appropriated for the use of the Station for that year, to be used for the Experiment Station, for such purposes as the interests of the Station may require.

On motion of Trustee McLean the requests and estimates made by the Board of Direction of the Experiment Station for the quarter ending September 30, 1888, as found in exhibit C, were granted.

On motion of Trustee McLean it was ordered that when the Board adjourns, it adjourn to meet in Chicago at the Grand Pacific Hotel at 10 o'clock a. m. Tuesday, June 26, 1888.

The Auditing Committee submitted the following report, which was received and approved:

To the Trustees of the University of Illinois:

Your Auditing Committee report that they have examined the vouchers of the Experiment Station from No. 1 to No. 73, both inclusive, except No. 14 not presented, and find the same to be correct.

F. M. McKAY, GEO. C. EISENMAYER, Committee.

On motion of Trustee McKay the Board adjourned.

# S. M. MILLARD, President.

E. SNYDER, Secretary.

ADJOURNED MEETING, CHICAGO, JUNE 26, 1888.

The Board met in Chicago at the Grand Pacific Hotel, June 26, 1888, at 10 a. m., pursuant to adjournment.

Present, Messrs. Bennett, Cobb, Eisenmayer, McKay, McLean, Millard, Pullen and Shawhan,

Absent, Governor Oglesby, Dr. Edwards, Messrs. Dysart and Clemens.

Mr. McLean was appointed Secretary pro tempore.

The Executive Committee reported the appointment of W. L. Pillsbury as secretary of the Experiment Station, under the following proceedings:

## To the Board of Trustees of the University of Illinois:

Meeting of the Executive Committee of the Board of Trustees of the University of Illinois, held this second day of May, A. D. 1888, pursuant to a call by the chairman of the Committee.

The chairman of the Committee presented a request from the Executive Committee of the Board of Direction of the Agricultural Experiment Station of the University of Illinois, as follows:

The Executive Committee of the Board of Direction of the Agricultural Experiment Station of the University of Illinois, having duly considered the matter, unanimously recommends that Mr. W. L. Pillsbury, of Springfield, Illinois, be appointed Secretary of the Experiment Station for the year ending April 1, 1889, and hereby requests the Board of Trustees of the University to make such appointment and fix the amount of salary to be paid for the service which the person so appointed shall render.

Respectfully submitted,

SELIM H. PEABODY, E. E. CHESTER, EMORY COBB, EX. Com. of Board of Direction.

Upon reading said report it was moved that the following resolutions be adopted:

WHEREAS, The Executive Committee of the Board of Direction of the Agricultural Experiment Station of the University of Illinois, has recommended the appointment of W. L. Pillsbury, of Springfield, Illinois, to be Secretary of said Experiment Station for the year ending April 1, 1889;

Therefore resolved, By this Committee, that the said W. L. Pillsbury be, and is hereby appointed to the office of Secretary of said Experiment station, such appointment to date from the 19th day of April, 1889, to continue until the 1st day of April, 1889, and that his salary be fixed at the rate of two thousand dollars per annum, and the same to commence on the 19th day of April, 1888.

Resolved, That on and after the 1st day of July, 1888, the said W. L. Pillsbury shall perform such work as may be assigned to him by the Trustees of the University of Illinois, as Secretary of the Board of Trustees of the University.

**Resolved**, That the sum of one thousand dollars be appropriated from the Agricultural Experiment Station fund, to be used in the payment of said salary, such payment to be made monthly.

S. M. MILLARD, EMORY COBB, CHAS. BENNETT, Ex. Com. of Board of Trustees.

On motion of Mr. Eisenmayer the report of the Executive Committee was approved.

The Board then proceeded to elect W. L. Pillsbury as Recording Secretary and Corresponding Secretary, to serve as such until the next annual meeting.